

# METROPOLITAN STATE UNIVERSITY OF DENVER



## 2025-2026 UNDERGRADUATE CATALOG

# Metropolitan State University of Denver

Auraria Parkway at Speer Boulevard

[www.msudenver.edu/](http://www.msudenver.edu/)

## ***2025-2026 Undergraduate Catalog***

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USA

This catalog contains comprehensive information about Metropolitan State University of Denver, the degrees and programs it offers, and the requirements a student must satisfy before receiving a degree. Information in this catalog is subject to change. For general university information go to MSU Denver's website, [msudenver.edu](http://msudenver.edu).

The programs, policies, statements and procedures contained in this publication are subject to change or correction by the university without prior notice. Metropolitan State University of Denver reserves the right to withdraw courses; revise the academic calendar; or change curriculum, graduation procedures, requirements and policies that apply to students at any time. Changes will become effective whenever the proper authorities so determine. This publication is not intended to be a contract between the student and Metropolitan State University of Denver. However, students are bound by the policies, procedures, standards, and requirements stated herein, as long as they are in effect.

An academic year is defined as the fall, spring, and summer semesters.

*\*All career and salary data is provided for informational use only. MSU Denver cannot guarantee any salary or career data and provide it as a good faith estimate. Completion of a program with pathways data does not guarantee a specific career or salary.*

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# The University, Its Mission, and The Campus

Metropolitan State University of Denver is a comprehensive university offering bachelor's and master's degrees on the Auraria Campus in downtown Denver. Founded in 1965, MSU Denver serves about 20,000 students and educates more undergraduate Coloradans than anyone else in the state.

## Role and Mission

MSU Denver is a comprehensive, baccalaureate- and master's-degree granting urban university that offers arts and sciences, professional and business courses and programs to a diverse student population in an atmosphere of mutual respect. Excellence in teaching and learning is MSU Denver's primary objective.

MSU Denver's mission is to provide a high-quality, accessible, enriching education that prepares students for successful careers, post-graduate education, and lifelong learning in a multicultural, global, and technological society. To fulfill its mission, MSU Denver's diverse university community engages the community at large in scholarly inquiry, creative activity and the application of knowledge.

## Undergraduate Degrees and Programs

With its modified, open admissions policy, the university welcomes students from all walks of life and circumstances, including all levels of academic preparation consistent with statutory guidelines, all conditions of economic and income status, all ages, and all ethnic and cultural backgrounds. In addition to degree-seeking students, non-degree students seeking opportunities for continuing education are welcomed.

- MSU Denver is required to serve adult students. Students who are 20 years of age or older and hold a GED or high school diploma are automatically admitted to MSU Denver, irrespective of their academic record.
- MSU Denver is required to serve traditional-age students of all levels of achievement and potential. As a result, the university enrolls a rich mix of recent high school graduates and transfer students, many with excellent grades and test scores and others with more modest achievements.
- MSU Denver is required to be accessible to all. That is why, with its tuition remaining among the lowest in the state, MSU Denver is Colorado's best value in education.
- Degrees and programs are offered in in-person, online, and hybrid formats, and available formats are listed on each major program page. MSU Denver students have complete flexibility to choose the course formats they prefer and can

mix and match formats regardless of the program they are pursuing.

The university is primarily a teaching institution in which excellence in teaching and learning is accorded the highest priority. Student success, supported in a collegial atmosphere of academic freedom, is of paramount importance, and all members of the college community seek to inspire students to strive for the highest level of achievement. The university endeavors to provide students with an education that enhances the quality of their lives and enables them to be well-educated, critically thinking citizens who contribute and participate in meaningful ways in community and civic life.

At the undergraduate level, MSU Denver awards bachelor of science, bachelor of arts, bachelor of fine arts, bachelor of music and bachelor of music education degrees. Students may choose from more than 95 majors, more than 95 minors, and more than 30 certificate programs offered through four colleges: Aerospace, Computing, Engineering, and Design; Business; Health and Human Sciences; and Letters, Arts and Sciences; as well as the School of Education and the School of Hospitality. Programs range from the traditional disciplines, such as history and biology, to contemporary fields of study, such as biochemistry, athletic training, and communication design. MSU Denver offers several bachelor's degree programs unique in Colorado, including aviation management, health care management, meteorology, and integrative healthcare. Students may also design their own degree through the Individualized Degree Program.

## Graduate Degrees

MSU Denver offers advanced degrees in several graduate programs. The master's programs are professionally-oriented degrees that will help to prepare students for success and accommodate graduates' increased engagement with community needs. Students interested in the master's programs should refer to the Graduate Catalog for details.

## Students

As an urban university committed to serving the local community, MSU Denver serves students from a diverse mixture of age groups, socioeconomic classes, ethnic backgrounds, and lifestyles. The university's curriculum and philosophy reflect that diversity and enrich the urban experience.

Current undergraduate enrollment as of Fall 2024 is 16,600. The average student age is 24. MSU Denver enrolls the highest number of undergraduate students of color of all four-year colleges in the state.

About 58% of undergraduate students are enrolled full time, with 58% of students being first-generation to college. Ninety percent of undergraduate students reside in the seven-county area of the Denver metropolitan area.

## Faculty

About 575 full-time faculty teach for MSU Denver. Professors are recruited and evaluated for their ability to teach and engage students. All classes are taught by academic instructors. As a culturally diverse team of academicians, 51.6% of full-time faculty are women, and 26% represent faculty of color.

The university also brings real-world education into the classroom by hiring affiliate faculty who work in the Denver metropolitan community and use their expertise and experience in the arts, business, communication, law, politics, the sciences and technology in their teaching. For a complete list of faculty and their credentials, please visit the [Faculty page](#).

# The Campus

Metropolitan State University of Denver is located at the Auraria Higher Education Center, a 127-acre campus in downtown Denver at Auraria Parkway and Speer Boulevard. The Community College of Denver and the University of Colorado Denver share the facilities with MSU Denver. The campus includes more than one million square feet of space for classrooms, laboratories, and offices.

## Jordan Student Success Building

The Jordan Student Success Building, the first of two new MSU Denver Neighborhood buildings, opened in March 2012. The \$62-million building, funded entirely by student-approved fees, houses classrooms, administrative offices, and student services, including admissions, advising, registrar, financial aid, and the bursar's office, all in one convenient location.

## Hotel and Hospitality Learning Center

MSU Denver's Hotel and Hospitality Learning Center is one of only 11 teaching hotels on a university campus in the country. The hotel, a SpringHill Suites ® by Marriott, includes 150 hotel rooms and conference facilities. It also provides hands-on training opportunities for students in the university's School of Hospitality. The adjacent

Hospitality Learning Center boasts more than 28,000 square feet of academic space, including classrooms, specialty learning labs and faculty offices.

## Historic Ninth Street Park and Tivoli Brewery

Other administrative offices are located in restored Victorian homes in Denver's historic Ninth Street Park located on the Auraria site. The campus also features a child care center; the comprehensive, 184,000 square-foot Auraria Library designed by Helmut Jahn of CF Murphy, which won an award from the American Institute of Architects; and one of the most unusual student union facilities in the country located in the historic, Bavarian-style Tivoli Brewery Building. Excellent physical fitness facilities include a block-long physical education/events center with a weight room, game courts, dance studios, a climbing wall, and event seating for 3,000.

## Center for Visual Art on Santa Fe

The university's proximity to downtown Denver enables students and faculty to use the community as a learning laboratory and to connect classroom theory to the cultural, economic, social, and political practices of the city. The Center for Visual Art (CVA), located in the Santa Fe Art District, is the university's off-campus art gallery. In addition to showing significant contemporary art, the award-winning CVA serves as an interactive art laboratory for MSU Denver students and the larger community.

# Accreditation and Recognition

- [University Accreditation](#)
- [Program Accreditation](#)
- [University Recognition and Awards](#)

## University Accreditation

The Metropolitan State University of Denver is accredited by the Higher Learning Commission, an institutional accreditation agency recognized by the U.S. Department of Education.

## Program Accreditation

Individual academic programs within the following areas are accredited or approved by the following agencies:

Program	Accreditation/Approval Agency
Accounting*, **	Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500  Approved by the Colorado State Board of Accountancy, 1560 Broadway #1350, Denver, CO 80202
Art*	Accredited by the National Association of Schools of Art and Design, 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190-5248, 703-437-0700
Aviation and Aerospace Science**	Approved by the Federal Aviation Administration (FAA), Aviation & Space Education, 800 Independence Ave SW, Washington, DC 20591
Business Administration*	Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500
Business Intelligence*	Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500
Center for Addiction Studies*	Accredited by the National Addiction Studies Accreditation Commission, 44 Canal Center Plaza, Ste 301, Alexandria, VA 22314, 703-741-7686



Chemistry**	Approved by the American Chemical Society, 1155 Sixteenth St NW, Washington, DC 20036
Civil Engineering Technology*	Accredited by the Engineering Technology Accreditation Commission of ABET, 415 North Charles Street, Baltimore, MD 21201 Telephone: (410) 347-7700
Communication Design*	Accredited by the National Association of Schools of Art and Design, 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190-5248, 703-437-0700
Computer Engineering*	Accredited by the Engineering Technology Accreditation Commission of ABET, 415 North Charles Street, Baltimore, MD 21201 Telephone: (410) 347-7700
Computer Information Systems*	Accredited by the Computing Accreditation Commission of ABET, 415 North Charles Street, Baltimore, MD 21201 Telephone: (410) 347-7700  Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500
Computer Science*	Accredited by the Computing Accreditation Commission of ABET, 415 North Charles Street, Baltimore, MD 21201 Telephone: (410) 347-7700
Certified Addiction Counselor**	Approved by the Colorado Department of Human Services, Division of Behavioral Health, CO Department of State, 1700 Broadway, Suite 200, Denver, CO 80290, 303-894-2200
Cybersecurity	National Security Agency, Center of Academic Excellence-Defense (NSA CAE-CD), 9800 Savage Rd., Suite 6272, Fort George G. Meade, MD, 20755-6000, 301-688-6311, caepmo_uwe@uwe.nsa.gov
Dietetics*	Accreditation Council for Education in Nutrition and Dietetics (ACEND), 120 South Riverside Plaza, Suite 2190, Chicago, IL 60606-6995, 800/877-1600 ext. 5400, email: acend@eatright.org.

Economics* (B.S. Only)	Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500
Electrical Engineering Technology*	Accredited by the Engineering Technology Accreditation Commission of ABET, 415 North Charles Street, Baltimore, MD 21201 Telephone: (410) 347-7700
Entrepreneurship*	Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500
Exercise Science*	Accredited by the Commission on Accreditation of Allied Health Education Programs, Committee on Accreditation for the Exercise Sciences, 9355 - 113th St. N, #7709, Seminole, FL 33775, Phone: 727-210-2350
Finance*	Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500
Global Business Studies*	Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500
Health Care Management*	Accredited by the Association of University Programs in Health Administration, 2000 14th St North, Suite 780, Arlington, VA 22201 Phone: 202-638-1448; Fax: 202-638-3429; email: <a href="mailto:aupha@aupha.org">aupha@aupha.org</a>
Human Resource Managment*	Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 1730 Rhode Island Ave NW, Suite 810, Washington, DC 20036, 202-763-7283
Human Services**	Approved by the Council for Standards in Human Services Education, 9600 SW Oak St, Ste 565, Tigard, OR 97223, 503-253-9385  Addictions Studies Concentration: National Addiction Studies Accreditation Commission

Industrial Design*	Accredited by the National Association of Schools of Art and Design, 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190-5248, Phone: 703-437-0700
International Business*	Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500
K-12 Physical Education*	Approved by the Colorado Department of Education, 201 East Colfax Ave., Denver, CO 80203 and the Colorado Department of Higher Education, 1600 Broadway, Suite 2200, Denver, CO 80202  Accredited by National Association for Sport & Physical Education (NASPE)/Council for the Accreditation of Educator Preparation (CAEP), 1140 19th St NW, Suite 400, Washington, DC 20036
Management*	Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500
Marketing*	Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500
Mechanical Engineering Technology*	Accredited by the Engineering Technology Accreditation Commission of ABET, 415 North Charles Street, Baltimore, MD 21201 Telephone: (410) 347-7700
Music*	Accredited by the National Association of Schools of Music, 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190-5248, 703-437-0700
Nursing*	Accredited by the Commission for Collegiate Nursing Education (CCNE), 655 K Street NW, Suite 750, Washington, DC 20001, Phone: 202-887-6791  Approved by the State Board of Nursing 1560 Broadway, Suite 1350, Denver, CO 80202 Phone: 303-894-2430
Nutrition and Dietetics*	The Nutrition and Dietetics Major includes a didactic program in dietetics (DPD) accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND),

120 South Riverside Plaza, Suite 2190, Chicago, IL 60606-6995, 800/877-1600 ext. 5400, email: [acend@eatright.org](mailto:acend@eatright.org).

Operations Management\*

Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500

Professional Selling\*

Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500

Real Estate\*

Accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 S. Harbour Island Blvd., Suite 750, Tampa, FL 33602, 813-769-6500

Social Work\*

Accredited by the Council on Social Work Education, 333 John Carlyle Street, Suite 400, Alexandria, VA 22314, (703) 683-8080

Sport Management\*

Accredited by The Commission on Sport Management Accreditation (COSMA). 2236 Water Blossom Lane, Fort Collins, CO 80526 202-329-1189

Teacher Education\*

Reauthorized by the Colorado Department of Education, 1560 Broadway, Suite 1600, Denver, CO 80202

Theatre\*

Accredited by the National Association of Schools of Theatre, 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190-5248, 703-437-0700

\* Accreditation / \*\* Approval / \*\*\* Endorsed

#### **Accredited Student Services**

Counseling Center

International Association of Counseling Services, P.O. Box 9184, Alexandria, VA 22304, 703-823-9840

Health Center

Accreditation Association for Ambulatory Health Care, 5250 Old Orchard Road, Suite 200, Skokie, IL 60077, 847.853.6060, email: [info@aaahc.org](mailto:info@aaahc.org)

International Center for Supplemental Instruction (ICSI), 5000  
Holmes St., Kansas City, MO 64110-2446, 816-235-1174, email:  
icsi@umkc.edu

Student Academic Services, Supplemental Instruction Program

College Reading and Learning Association (CRLA),  
International Peer Educator Training Program Certification,  
Level 3 (IPTPC). 262 W. Main Street, Wales, WI, 53183, 414-  
908-4961 ext. 104

## University Recognition and Awards

- MSU Denver is a designated Hispanic-Serving Institution. A Hispanic-Serving Institution (HSI) is a federal designation by the U.S. Department of Education that acknowledges colleges and universities with 25% or more total undergraduate Hispanic/Latina/o/x full-time equivalent (FTE) student enrollment.
- MSU Denver accepted the 2024 Alianza Award from the non-profit Colorado Latino Leadership, Advocacy & Research Organization. The Alianza Award, CLLARO's only institutional honor, recognized the University for its enduring positive impact on Colorado's diverse communities
- The Colorado Association of Black Journalists named MSU Denver the Top Large University in 2024.
- MSU Denver was one of only six institutions in the nation to receive the inaugural SUCCESS Award from TheDream.US, the Presidents' Alliance on Higher Education and Immigration, and Immigrants Rising in 2024. The award recognizes institutions that are supporting undocumented students' access and success on their campuses and beyond.
- MSU Denver has been named the Hispanic Association of Colleges and Universities' Outstanding HACU-Member Institution for 2021. The national award recognizes and honors extraordinary support of HACU's mission and MSU Denver's important contributions to the educational success of underserved populations, particularly Latinx students. For 34 years, MSU Denver has been a supportive member of HACU, and accessibility, diversity and inclusion have been core tenets of the university's mission since its inception. The university has hosted the HACU Emerging Leaders Summit, university staff have attended the annual Capitol Forum, and MSU Denver students have participated in HACU scholarship and internship programs.
- Metropolitan State University of Denver earned another prestigious honor for its commitment to diversity, equity and inclusion when University leaders accepted a 2024 Leaders in Diversity Award from the Denver Business Journal. MSU Denver was one of 11 organizations honored at the June 20 awards ceremony, which also recognized 10 individual DEI leaders.
- MSU Denver earned a Gold Seal from the All In Campus Democracy Challenge for nonpartisan student-voter participation in the 2020 Presidential Election. Total student-voter participation at MSU Denver rose from 65.9% in 2016 (compared with a 50.4% voting rate among all higher-education institutions) to 75.4% in 2020 (compared with 66% across all institutions). This earned the University recognition in All In's gold category, which honors institutions that achieve a student-voter participation rate of 70% to 80%. The award was announced during the organization's third biennial awards ceremony Monday November 9, 2021.
- MSU Denver made the honor roll of *Washington Monthly's* 2021 America's Best Colleges for Student Voting. With the rise of youth voters, Washington Monthly sought to recognize universities whose administrations actively support student-voting organizers. To land a spot on this year's Washington Monthly honor roll, institutions had to show repeated commitment to increasing student voting. Among several qualification requirements, MSU Denver made the University's 2016 and 2018 National Study of Learning, Voting and Engagement data publicly available.
- In 2020, **Campus Compact** recognized MSU Denver with the *Richard Guarasci Award for Institutional Transformation* for its demonstrated "efforts to address issues of public concern by aligning teaching, research, practice, and values in service of the common good." More specifically, the university was granted the award "for its comprehensive, institution-wide approach to planning for institutional change, which has included a Civic Action Plan, emerging assessment, connected efforts across departments, and clarity around institutional goals. As an urban land-grant institution, MSU Denver has committed to being an institution of the city, an integral, visible part of the communities within which it exists. MSU Denver demonstrates a clear and active commitment to strengthening its

understanding of urban issues and to partnering with and serving its neighbor organizations in order to better meet the needs of the metropolitan area."

- In 2017, MSU Denver received the award for the **Highest Undergraduate Voting Rate** from All In Campus Democracy Challenge with a total of 65.3% of *undergraduate* students who voted.

# 2025-2026 Academic Calendar

- [Fall 2025 Semester](#)
- [Spring 2026 Semester](#)
- [Summer 2026 Semester](#)

*Please note: Deadlines differ proportionally for courses offered during part of a semester, including late-start and weekend courses. Students should refer to the Student Detail Schedule in the Student Hub to review drop and withdrawal deadlines for individual courses.*

## Fall 2025 Semester

Priority Registration Begins	Monday, March 31, 2025
Academic Suspension Appeal Deadline	Monday, August 11, 2025
Tuition Payment Deadline	Friday, August 15, 2025
Classes Begin (Full-Semester Classes)	Monday, August 18, 2025
Last Day to Self-Register for Full-Semester Classes	Monday, August 25, 2025
Last Day to Drop Full-Semester Classes with 100% Refund. For specific refund and withdrawal deadlines for non-full semester classes, look at your student detail schedule in the Student Hub.	Monday, August 25, 2025
Labor Day (Campus Closed)	Monday, September 1, 2025
Last Day to Drop Classes with 50% Refund (Full- Semester Classes Only) For specific refund and withdrawal deadlines for non-full semester classes, look at your student detail schedule in the Student Hub.	Wednesday, September 3, 2025
Last Day to Withdraw (Full-Semester Classes) For specific refund and withdrawal deadlines for non-full semester classes, look at your student detail schedule in the Student Hub.	Thursday, November 20, 2025
Fall Break (Campus Open, No Classes)	Monday, November 24 - Wednesday, November 26, 2025
Thanksgiving Holiday (Campus Closed)	Thursday, November 27, 2025
Thanksgiving Holiday (MSU Denver Closed)	Friday, November 28, 2025
Classes End (Full-Semester Classes)	Saturday, December 6, 2025
Final Exam Week	Monday, December 8 - Saturday, December 13, 2025
Commencement	Friday, December 12, 2025
Grades Due From Faculty at Noon	Thursday, December 18, 2025
Grades Available Online at the Student Hub	Friday, December 19, 2025
Winter Break (Campus Closed)	Thursday, December 25, 2025 - Thursday, January 1, 2026



## Spring 2026 Semester

Priority Registration Begins	Monday, October 27, 2025
Winterim Period	Monday, January 5 - Saturday January 17, 2026
Academic Suspension Appeal Deadline	Monday, January 12, 2026
Tuition Payment Deadline	Friday, January 16, 2026
Martin Luther King Jr. Day (MSU Denver Closed)	Monday, January 19, 2026
Classes Begin (Full-Semester Classes)	Tuesday, January 20, 2026
Last Day to Self-Register for Full-Semester Classes	Monday, January 26, 2026
Last Day to Drop Full-Semester Classes with 100% Refund. For specific refund and withdrawal deadlines for non-full semester classes, look at your student detail schedule in the Student Hub.	Monday, January 26, 2026
Last Day to Drop Classes with 50% Refund (Full- Semester Classes Only) For specific refund and withdrawal deadlines for non-full semester classes, look at your student detail schedule in the Student Hub.	Thursday, February 5, 2026
Spring Break (Campus Open, No Classes)	Monday, March 23 - Sunday, March 29, 2026
Last Day to Withdraw (Full-Semester Classes) For specific refund and withdrawal deadlines for non-full semester classes, look at your student detail schedule in the Student Hub.	Friday, April 24, 2026
Classes End (Full-Semester Classes)	Sunday, May 10, 2026
Final Exam Week	Monday, May 11 - Sunday, May 17, 2026
Commencement	Friday, May 15, 2026
Grades Due from Faculty at Noon	Thursday, May 21, 2026
Grades Available Online at the Student Hub	Friday, May 22, 2026

## Summer 2026 Semester

Priority Registration Begins	Monday, February 23, 2026
Memorial Day (Campus Closed)	Monday, May 25, 2026
Maymester Period	Tuesday, May 26 - Saturday, June 6, 2026

Academic Suspension Appeal Deadline	Monday, June 1, 2026
Tuition Payment Deadline	Friday, June 5, 2026
Classes Begin (Full-Semester, 8-week Classes Only)	Monday, June 8, 2026
Last Day to Self-Register for Full-Semester Classes	Friday, June 12, 2026
Last Day to Drop Full-Semester Classes with 100% Refund. For specific refund and withdrawal deadlines for non-full semester classes, look at your student detail schedule in the Student Hub.	Friday, June 12, 2026
Last Day to Drop Classes with 50% Refund (Full- Semester Classes Only) For specific refund and withdrawal deadlines for non-full semester classes, look at your student detail schedule in the Student Hub.	Tuesday, June 16, 2026
Juneteenth Holiday Observed (Campus Closed)	Friday, June 19, 2026
Independence Day Holiday Observed (Campus Closed)	Friday, July 3, 2026
Last Day to Withdraw (Full-Semester Classes) For specific refund and withdrawal deadlines for non-full semester classes, look at your student detail schedule in the Student Hub.	Monday, July 27, 2026
Classes End (Full-Semester, 8-week Classes Only)	Sunday, August 2, 2026
Grades Due from Faculty at Noon (Full- semester, 8-week Classes Only)	Thursday, August 6, 2026
Grades Available Online at the Student Hub (Full- semester, 8-week Classes Only)	Friday, August 7, 2026

# Academic Policies and Procedures

Students are responsible for full knowledge of the provisions and regulations pertaining to their program contained in this catalog and elsewhere. Students have final responsibility for completing the requirements for a degree and are urged to seek advising. Students should never assume that they have approval to deviate from a stated requirement without a properly signed statement to that effect.

For information regarding MSU Denver's academic policies, click on a link to be taken to the entry below.

- [Academic Standing Policy](#)
- [Best Grade Stands](#)
- [Catalog Selection](#)
- [Classification of Student Status](#)
- [Computing GPA](#)
- [Course Count and Limits](#)
- [Course Credit](#)
- [Course Load](#)
- [Declaring or Changing a Major or Certificate](#)
- [Degree for Students with Terminal Illness](#)
- [Fresh Start](#)
- [Grade Appeal](#)
- [Grade Change](#)
- [Grades and Notations](#)
- [Honors and Awards](#)
- [Last Date of Attendance](#)
- [Pass/Fail Option](#)
- [Posthumously Awarded Degrees](#)
- [Repeated Courses](#)

## Academic Standing Policy

### *Good Academic Standing*

A student is deemed to be in Good Academic Standing if they maintain a cumulative GPA of 2.0 or higher. Other academic standards may apply to specific programs. A student must satisfy those other academic standards to remain in Good Academic Standing with their program. See specific programs' policies to determine whether alternative or additional standards apply.

### *Academic Notice/Recovery/Suspension Standing*

#### Academic Notice Standing

A student in Good Academic standing whose cumulative GPA falls below 2.0 will be on Academic Notice standing with the university

during their next semester. A student will be removed from Academic Notice standing and updated to Good Academic standing if they achieve a cumulative GPA of a 2.0 or higher at the end of their semester on Academic Notice standing. More restrictive standards may apply to certain programs, colleges, or schools. See information on program of interest.

#### Academic Recovery Standing

A student whose cumulative GPA drops below a 2.0 by the end of their semester on Academic Notice standing will be placed on Academic Recovery standing with the university during their next semester at MSU Denver. A student will be placed on Academic Recovery standing as long as they have a cumulative GPA below 2.0, but are making academic progress toward Good Academic standing, as explained in the guidelines below. Other conditions may apply to given programs, colleges, or schools. See information on the program of interest.

A student is removed from Academic Recovery standing and is updated to Good Academic standing the semester after achieving a cumulative GPA of at least 2.0. During any semester that a student is on Academic Recovery standing, the student must make academic progress toward returning to Good Academic standing with the university by meeting the following guidelines:

- Achieve a required semester GPA of 2.2 or higher during each semester while under Academic Recovery standing.
- Are allowed to register for up to 13-credit hours in the Fall and Spring semesters and up to 7-credit hours for Summer semester while on Academic Recovery standing.
- Complete recommended actions as discussed with Student Intervention Services and the student's academic advisor (action items may include taking or repeating certain classes, using academic policies, utilizing the Tutoring Center, Writing Center, and/or other university resources).
- Demonstrate understanding the University's Academic Standing policy.

While on Academic Recovery standing, a student must meet with an academic advisor to discuss an academic success plan before they can register for the subsequent semester).

If a 2.2 semester GPA is not obtained, while on Academic Recovery standing, the student will be placed on Academic Suspension standing.

Only semesters in which the student received a grade will be counted towards the number of semesters below a cumulative 2.0 GPA.

#### Academic Suspension Standing

A student on Academic Recovery standing who is not making academic progress toward Good Academic standing will be prohibited from registering for classes at MSU Denver for three-consecutive semesters from the date of suspension (end of term).

Students on Academic Suspension standing who intend to continue taking classes during the next semester must first submit an appeal of

their academic standing to the Associate Director, Advising Systems & Intervention Services by the prescribed semester deadline. Students who do not submit an appeal by the deadline who have registered for the anticipated semester will be dropped from their courses.

The Associate Director will deliver the appeal materials to the Student Academic Review Committee, which will review the appeals and notify the student of its decision. The Student Academic Review Committee's appeal review decision is final.

Any student returning to the university after three consecutive semesters of academic suspension must reapply and will be readmitted on Academic Recovery standing with the university. For these students, all Academic Recovery standing guidelines outlined above will apply.

Contact [Student Intervention Services](#) by email at [sis@msudenver.edu](mailto:sis@msudenver.edu) or by calling 303-605-5644 for further information about the Academic Standing policy at MSU Denver.

## Best Grade Stands

A student's grades for repeated courses will be removed from GPA calculations, regardless of the original grade earned. Only the best grade and its associated credit will be calculated in the GPA and earned hours totals. Other attempts for the course will appear on the official academic record but will be annotated to indicate they do not count for academic credit or GPA calculation. This policy applies only to courses taken at MSU Denver, and it does not apply to courses designated as repeatable toward degree requirements.

To qualify for this policy, a repeated course must carry the same title, course number, and semester hours as the original course. Officially recognized course equivalencies will apply, excluding transfer course equivalencies. The determination of course equivalency will be made by the Office of the Registrar in consultation with the Office of Academic Affairs and the academic department offering the course.

A grade will not be removed from GPA calculations once a degree has been conferred if the course was required for the degree conferred. Students who have earned a degree at MSU Denver and subsequently take additional courses or work toward a second degree may use this policy for courses in which they are enrolled after the first degree is awarded.

A permanent "F" assigned as a result of academic dishonesty will not be removed from GPA calculations.

A student may be awarded financial aid funds for one retake of a passed course. All repeated courses will count towards Satisfactory Academic Progress calculations and could impact financial aid eligibility. Please see the [Office of Financial Aid and Scholarships](#) for additional information on how repeating courses may impact your financial aid eligibility. All credit hours earned for initial and repeated courses will be deducted from a student's remaining COF (College Opportunity Fund) stipend eligible hours. For details on

how repeated courses might impact Veteran Education benefits, please visit with the [Veteran and Military Benefits office](#).

## Catalog Selection for Degree and Certificate Requirements

In determining degree and certificate requirements, students are governed by the catalog in effect for the semester of acceptance to MSU Denver. Students may elect to follow any later qualifying catalog edition that is put into effect while they are continuously enrolled at MSU Denver. A qualifying catalog must contain the student's complete program of study, including, but not limited to, major, minor, concentration, and other graduation requirements. If the student's complete program of study is no longer offered, the student cannot elect to follow that catalog. All degree and certificate requirements must adhere to current policies at MSU Denver. Students who do not enroll in classes for three or more consecutive semesters (Fall, Spring, and Summer, in any order) must be readmitted to the university and are governed by the catalog in effect upon their re-acceptance. Students who are readmitted to the university may at any point elect to follow degree requirements under an earlier MSU Denver catalog, subject to the following conditions:

- The student must select a degree catalog that does not predate the current catalog by more than 10 academic years at the time of request.
- To complete a degree program under an earlier, qualifying catalog, the student must obtain authorization from the academic department offering the degree program.
- To complete a degree or certificate program under an earlier, qualifying catalog, the student must obtain authorization per the degree exception process.
- In order for the selected qualifying catalog edition to remain in effect, the student must maintain continuous enrollment at the university.

Students transferring to MSU Denver from a regionally accredited, Colorado community college may complete degree requirements under an MSU Denver catalog in effect while they were enrolled at the community college, subject to the following conditions:

- The student must select a degree catalog that does not predate the current catalog by more than three academic years.
- To complete a degree program under an earlier, qualifying catalog, the student must obtain authorization from the academic department offering the degree program.
- In order for the selected catalog edition to remain in effect, the student must maintain continuous enrollment at the community college and subsequent continuous enrollment at the university until the student completes the degree program at MSU Denver.

## Classification of Student Status

Students are classified according to the number of semester hours of credit earned: freshman status equals fewer than 30; sophomore status equals 30 or more, but fewer than 60; junior status equals 60 or more, but fewer than 90; senior status equals 90 or more.

## Computing Grade Point Average/Quality Points

The number of quality points awarded for a course is determined by multiplying the number of semester hours for that course by the quality point value of the grade received. The cumulative GPA is calculated by dividing the total number of quality points by the number of semester hours attempted.

To be eligible for a degree, a candidate must have a minimum number of quality points equal to twice the number of semester hours attempted in addition to meeting other prescribed requirements. The following notations have no effect on the GPA: AP, AU, AW, CL, EX, I, NR, P, PL, PP, S, S#, SA, SE, SN, U#, W.

## Course Count and Limits

Courses are allowed to count as meeting requirements in multiple areas. This means a course may count multiple times in a student's degree plan. The credit hours for the course fulfill the credit hours in each area that the course is listed (major, minor, General Studies, etc.), but still only count once in the 120-credit hour minimum requirement for the awarding of a degree.

To ensure a well-rounded higher education grounded in the liberal arts and sciences, student course selections cannot be confined solely to their major. Within each degree a student must take at least 33 credit hours outside of their major's most recurrent prefix in order to graduate. For the purpose of this rule courses taken in a minor, a second or double major, ancillary course work or other academic program that does not carry the student's most recurrent major prefix would count toward the 33 -credit hour total necessary to graduate.

In an interdisciplinary major, the academic prefix that comprises a majority of the credit hours in the major would be considered the most recurrent prefix. If there is not an academic prefix with a majority of credit hours, then the prefix that has the largest fraction of credit hours would be considered the most recurrent prefix for the purpose of this rule. In programs where there is a tie in the number of credit hours required per prefix, the department that owns the major for the purposes of the curriculum manual will be treated as the owner of the most recurrent prefix.

This rule means students may fulfill many degree requirements but still not have the necessary total 120 credit hours to complete a bachelor's degree. Students are encouraged to meet with professors or academic advisors to consider coursework outside of General Studies and a major such as a minor, a double major, or coursework in other interest areas, to ensure degree completion in a timely manner.

## Course Credit (Semester Hours)

Course credit is based on units designated as semester hours. One semester hour or one base contact hour equals a minimum of 750 minutes; this equation translates to a minimum of 15, 50-minute class hours per semester. Time required for class preparation is not a consideration in the calculation of course credit. A three-semester-hour course will require approximately six to nine hours of work each week outside of class. Omnibus courses involving laboratory work give one semester hour of credit for each two, three or four hours of scheduled work in the laboratory during a week, depending on the course. Internships require a minimum of 2,700 minutes for each hour of credit.

## Course Load

The average course load for a 16-week semester is 15 or 16 semester hours; 18 semester hours is the maximum load for fall and spring semesters, with a maximum of 12 semester hours for summer semester. The maximum load for a two-week Winterim or Maymester term is 3 semester hours, excluding short-term study abroad courses. During fall and spring semesters, students with cumulative MSU Denver grade point averages (GPAs) of 3.25 or higher may take 19 or 20 semester hours for the fall and spring semesters or 13 or 14 semester hours for the summer semester, and those students with GPAs of 3.50 or higher may take 21 or more semester hours for the fall and spring semesters or 15 or more semester hours for the summer semester. Students must have completed at least 15 semester hours at MSU Denver to qualify. All students should complete the Undergraduate Petition for Overload Exception form which is available from the Office of the Registrar. Note that signatures by the student's major department chair and the appropriate dean are required for students petitioning for 21 or more credit hours, or those not meeting the minimum qualifications.

## Declaring or Changing a Major or Certificate

New students indicate their intended major on the MSU Denver Application for Admission. While students may select "Exploratory" as a major at the time of admission, all degree-seeking students must declare a major before completion of 45 credits. Degree-seeking students who transfer in more than 45 credits must declare a major before registering for a second semester. Students who wish to change a major and students pursuing a certificate program must complete a Declaration/Change of Major form, which is available from the [Office of the Registrar](#).

## Degrees for Students with Terminal Illness

A student in good standing who is diagnosed with a terminal illness while attending Metropolitan State University of Denver may be awarded a degree without fulfilling all degree requirements.

The criteria for the award of a degree under these circumstances are:

- The student is in good academic standing
- The student is otherwise eligible for continued enrollment
- Documentation from the treating physician is received by the university

Any party interested in seeking a degree for a student with a terminal illness will contact the Dean of the College or School in which the student's program resides or the Dean of Students. Upon final approval of the President and/or the Board of Trustees, a diploma will be given to the student, or a person designated by the family. The name of the student may be announced at the commencement directly following the conferring of the degree.

If it is determined that the student was enrolled in their final courses sufficient to meet the university's graduation requirements, and therefore would have earned their degree had they successfully completed the remaining program requirements in their last semester of enrollment, the degree will be counted as an earned degree within university completion counts. If it is determined that the student recovers from the terminal illness, the Office of the Registrar will expunge the degree.

If it is determined that the student was not enrolled in their final courses sufficient to meet the university's graduation requirements, and therefore would not have been granted a degree if they successfully completed the last semester of enrollment, the degree will not be counted as an earned degree within university completion counts and will not be listed on the student's transcript.

In instances in which the criteria for the award of a degree have not been met, college or department faculty may present collegiate or departmental awards of recognition at ceremonies other than commencement.

## Fresh Start

Students returning from a period of absence seeking to re-enroll at MSU Denver may request that credit and grades from designated semesters previously attempted at MSU Denver not be calculated in GPA or total earned hours.

If such a "Fresh Start" is approved, all courses from designated semesters will appear on the official academic record but will be annotated to indicate they do not count for academic credit or GPA calculation.

This Fresh Start will be granted once, for a period of at least one semester, with a maximum of 54 credit hours, under the following conditions:

- The student must have not been enrolled at MSU Denver for at least one year (three consecutive semesters, including summer). This policy shall only apply to designated

semesters in which the student earned a GPA of 2.0 or below, which have not been applied to the completion of an MSU Denver degree or certificate, and which were attempted prior to the one year absence.

- The student must be in good financial standing with MSU Denver at the time of application.
- The Fresh Start policy may only be used once in a student's entire MSU Denver career and is only applicable to undergraduate students pursuing a degree at MSU Denver.
- An approved Fresh Start shall not be reversed.
- A notation will be recorded on the student's official transcript that a Fresh Start was applied.
- Students who are declared as non-degree seeking are not eligible (can be seeking a certificate, be undeclared, etc.).
- The student must re-enroll at MSU Denver and complete a minimum of 6 credit hours with a C+ or higher before the fresh start will be applied to the student's academic record.
- Fresh start students who re-enter under academic probation status are required to meet with an advisor and discuss pathways to success, including available university resources.
- If a student becomes inactive due to non-enrollment, their timeline for eligibility will start over.

## Grade Appeal

If students have reason to question the validity of a grade received in a course, they must make their request for a change before the end of the fourth week of the semester following the completion of the course (the following fall semester if the course was completed in the spring semester). It is the responsibility of the student to initiate a grade appeal within the time limit, and to follow the procedures for grade appeals specified below. All decisions of the Grade Review Committee are final.

### Student Grade Appeals

The university supports open communication as the best means to resolve concerns about grades. If a student believes that the grade they received for a course does not reflect the quality of their work, the first step is to meet with the instructor for the course on an informal basis. The following will be the only acceptable grounds for formal grade appeals:

1. The course grade was assigned on a basis other than performance in the course.
2. The instructor used standards that were different from those allowed for other students in the same class, or different from those allowed in departmental/college/school policies if specific departmental/college/school grading policies exist.

3. A substantial and unannounced departure from the instructor's previously articulated standards was used in assigning the grade.
4. A permanent "F" has been assigned and the student wishes to appeal.

Only grade appeals based on one or more of the above criteria will be considered. Outside the regular grade change procedure, only the chair of the Grade Review Committee, with proper written authorization from that committee, may initiate the grade exception process.

## Exceptions to the Grade Appeal Policy and Procedure

The Grade Appeal Procedure shall constitute the sole internal administrative remedy for a change in grade, except when a grade dispute involves an Office of Equal Opportunity discrimination complaint. If a grade dispute arises from an issue that is covered under the university's Equal Opportunity policies, which address discrimination on the basis of race, color, disability, religion, national origin, sex, sexual orientation, age or status, such as Vietnam-era disabled veteran, the student should contact the Office of Equal Opportunity. The Office of Equal Opportunity process for resolution takes precedence over the university's grade appeal process.

## Grade Appeal Procedure

The Grade Appeal Procedure shall have both an informal and a formal resolution process. The student must attempt informal resolution prior to filing a formal grade appeal.

## Informal Resolution Process

### *Step 1*

The informal resolution process must take place before the last day of the fourth week of the semester following the assignment of the grade. The student must meet with the instructor prior to meeting with the chair or proceeding to the formal appeal process.

### *Step 2*

If the instructor is not available to meet with the student or does not respond to the student's request to meet and/or the student is not satisfied with the result of the informal meeting with the instructor, the student must meet with the chair of the department to attempt to resolve the grade concern prior to filing a formal grade appeal.

During the informal resolution process, the student may meet with the dean or the dean's designee to clarify the grade appeal policy and process. The student may also access Student Conflict Resolution Services for assistance in the process. Students are encouraged to use the informal resolution process to clarify any miscommunications with the instructor or confusion about course expectations.

## Formal Resolution Process

### *Step 1: File Petition with the Dean*

After meeting with the instructor and the chair and failing to resolve the grade concerns, the student may initiate a formal resolution process. The student must file a [Petition for Grade Appeal](#) with the dean of the instructor's school by the last day of the fifth week of the semester following the course for which the grade was assigned. Deans may designate an associate or assistant dean to act in their places for the purposes of the Grade Appeal Procedure.

**Timeline:** A Petition for Grade Appeal for a grade assigned in fall term shall be filed in the spring term. A Petition for Grade Appeal for a grade assigned in spring or summer term shall be filed in the following fall term. If the dean determines that it is academically necessary for the grade appeal to be processed during a summer term, they will facilitate the process by developing an appropriate timeline and submitting a copy of the timeline to the chair and the Executive Vice President for Academic Affairs or their designee. With the exception of the deadline set for filing the Petition for Grade Appeal, the timelines for the process may be extended by written agreement of the student and dean or by the Office of Academic Affairs if good cause is shown.

**Process:** It is the student's responsibility to obtain and file the Petition for Grade Appeal form and to follow the procedural rules for the appeal process. The student is advised to keep a copy of all documents submitted. The Petition for Grade Appeal form is available through each academic dean's office and the Office of the Registrar. A separate Petition for Grade Appeal must be filed for each course in which a grade is disputed. Access to all documents submitted is restricted to those involved in the grade appeal process or otherwise having a need to know.

The student must provide the dean with a completed Petition for Grade Appeal and all material that relates to the disputed grade at the time that the formal Petition for Grade Appeal is submitted. The petition must include:

1. A statement addressing how the appeal meets one or more of the four criteria necessary for a formal grade appeal.
2. A description of what occurred during the informal resolution process.
3. Copies of all graded materials from the course that are in the student's possession.
4. Any relevant documents the student would like to be reviewed as part of the appeal process.
5. A copy of the course syllabus/class policies (if the student has a copy).

The dean will forward a copy of the Petition for Grade Appeal to the chair of the department to notify the chair that a formal procedure has been initiated. The chair will be responsible for passing materials regarding the grade appeal on to the instructor. Within 15 working days of receiving the



formal appeal, the dean will assess whether one or more of the criteria have been met in the Petition for Grade Appeal. The dean may contact the student, instructor or chair to ask questions and/or request further information or documents in the process of assessing whether the appeal meets the criteria. The dean may request that the instructor provide a written response to the student's Petition for Grade Appeal and may request any additional documentation necessary to assess the Petition for Grade Appeal at this point in the process. Additional documentation may include graded materials in the instructor's possession. If any of the material provided by the instructor is confidential, e.g., examinations that may be used in subsequent terms, such materials shall be made available for review but shall not be made part of the Petition for Grade Appeal. The instructor has five working days to provide the response and materials requested by the dean to the dean and chair. A copy of the written response will be provided for the student. In their decision, the dean may:

1. Deny the appeal and send a letter or email to inform the student, the instructor and the chair of the instructor's department within five working days.
2. Decide that one or more of the criteria may have been met, and continue the formal appeal process. If the dean has not already requested a written response to the Petition for Grade Appeal from the instructor, the dean will make that request. The instructor has five working days to provide the written response and any additional materials requested to the student, chair, and dean. The dean will contact the student, instructor and chair within 15 working days of receiving the Petition for Grade Appeal to convene a meeting of all parties. The purpose of the meeting is to seek resolution of the appeal. Minutes shall be taken at the meeting.

If the appeal is resolved through the process of the meeting, the formal appeal process will end. The dean will write a report summarizing the resolution.

If the appeal is not resolved at the meeting, the dean shall send a copy of the minutes from the meeting, with a written recommendation, to the student, the instructor and the chair within five working days after the conclusion of the meeting.

The dean will send a copy of all materials relating to the Petition for Grade Appeal to the Executive Vice President for Academic Affairs or their designee for record-keeping purposes within five working days after the conclusion of the meeting or after sending a letter stating the appeal does not meet the criteria.

## ***Step 2: File the Petition with the Grade Review Committee***

If the appeal is not resolved to the student's satisfaction at the dean's level and the student wants the formal process to continue, the

student must send a written request to the Executive Vice President for Academic Affairs or their designee within five working days of receiving either a letter stating that the appeal does not meet the criteria or the recommendation based on the meeting from the dean. The Executive Vice President for Academic Affairs or designee will inform the dean, chair and instructor that the Grade Review Committee (GRC) will review the appeal.

The members of the GRC shall review all documents submitted by the dean and meet to discuss whether to hear the appeal or not within 20 working days. The GRC will not conduct a re-evaluation of the student's work and will not change the grade of an individual assignment. The GRC will hold a hearing for the Petition for Grade Appeal only if the appeal meets one of the four criteria necessary for a formal appeal.

The GRC may decide that they will not hear the appeal because no criterion has been met, or the petition is substantially incomplete. The GRC shall send written notification of their decision not to hear the appeal within five working days to the student, instructor, chair and dean, and the formal appeal process is over.

If the appeal is heard, the GRC shall notify the student, instructor, chair and dean, and will request their presence at the hearing meeting. The purpose of the meeting is to have all parties to the grade dispute provide answers and clarifications that members of the GRC may need in order to make a sound decision on the case.

The decision of the GRC shall be in the form of a motion, duly made and seconded, and adopted by a majority of the GRC members present and voting, assuming a quorum is met. In its decision, the GRC may:

1. Deny the appeal on its merits, with the effect that the disputed grade will remain on the student's academic record.
2. Grant the appeal and change the final grade to a grade or grade equivalent that is determined appropriate by the GRC.

The GRC will inform the student, instructor, chair and dean of its decision in writing within five working days of the hearing.

The decision of the GRC is final and cannot be appealed.

If the GRC finds in favor of the student's appeal, then the chair of the GRC acquires the authority to initiate the grade exception process. The chair of the GRC has five working days to notify the instructor of the decision and to initiate the grade exception process.

The Petition for Grade Appeal and all attachments will be kept in the Office of the Vice President for Academic Affairs for a minimum period of three years.

## **Grade Review Committee Membership and Policies**

1. The GRC shall consist of eleven members as follows:

- Two members shall be elected by and from the faculty from the College of Letters, Arts and Sciences.
  - One member shall be elected by and from the faculty from the College of Health and Human Sciences.
  - One member shall be elected by and from the faculty from the College of Aerospace, Computing, Engineering, and Design.
  - One member shall be elected by and from the faculty from the College of Business.
  - One member shall be elected by and from the faculty from the School of Education.
  - One member shall be elected by and from the faculty from the School of Hospitality.
  - Two student members shall be appointed by the Student Government: The Student Advocacy Council.
  - One non-voting ex-officio member from MSU Denver Graduate Studies
  - One non-voting ex-officio member from the Office of Academic Affairs shall be appointed by the Executive Vice President for Academic Affairs. Responsibilities of this member shall include staff assistance and record keeping.
2. The term of membership on the GRC shall be two years, with terms staggered, except that the term of the student members shall be one year. Terms shall begin on the first day of classes of the fall semester.
  3. Members may serve successive terms.
  4. Elections of faculty from each school or college shall occur in the spring, and members shall take office on the first day of classes of the fall semester.
    - The representative from the Office of Academic Affairs shall convene the first meeting of the GRC in the fall, at which time the members shall elect a chair.
  5. A meeting of the GRC to consider and vote on a Petition for Grade Appeal must have a quorum of voting members.
  6. The GRC shall prepare a written summary of the committee's decisions, the rationale for its decisions and the vote tally on the appeal. The summary shall be added to all existing documentation of the appeal.
  7. All documentation in a grade appeal shall be maintained in the Office of the Executive Vice President for Academic Affairs for a three-year period.
  8. The Chair of the GRC shall provide a yearly report of appeal activities, including recommendations for amending the Student Grade Appeal Policy, to the Office of Academic Affairs by the last day in June. Copies will be sent to all academic deans.

## Definitions

1. Informal Resolution means informal discussions that lead to the resolution of a grade dispute the student may have with the instructor, the chair of a department and/or the dean of a school.

2. Grade appeal procedure means the formal resolution procedure.
3. The time limits refer to weeks, not days of weeks.
4. The end of day means 5 p.m. on the designated day (i.e., end of a working day).
5. The last day of the week means the Friday of a calendar week.
6. Week ordinarily means Monday-Friday. If, for example, classes are not in session on a Monday, the designated week still ends on Friday.
7. Working day means any day classes or examinations are scheduled, excluding Saturdays, Sundays and holidays.
8. Assigned grade means a letter grade (e.g., A, B, C, D or F), grade equivalent (e.g. S/U), or the temporary grade of I (Incomplete).

## Grade Change

Grade changes must be submitted within the first seven weeks of the semester following the completion of the class. Spring semester grades can be changed through the seventh week of the following fall semester. Faculty may submit a grade change online to the Office of the Registrar via the Faculty and Staff portal.

- a. Incomplete (I)  
The incomplete notation is composed of an "I" (noted on the student's transcript) as well as the student's default grade (A, A-, B+, B, etc.), the grade the student has earned when they leave the class out of the total points of the class (the grade the student will earn if no additional work is submitted). Incomplete work must be completed within the subsequent long semester (fall or spring) or earlier, at the discretion of the faculty member. In the event of extended extenuating circumstances, the completion date for incomplete work may be extended for an additional long semester, at the discretion of faculty member.
- b. Other grade changes  
Grades may only be changed on the basis of an error in evaluation, computation, or transcription.

Grades may NOT be changed on the basis of revised standards of evaluation, new examinations, or additional work undertaken or completed after grades are submitted to the [Office of the Registrar](#).

## Grades and Notations

Faculty must assign a grade or notation for each student enrolled in a particular course. Faculty may, at their discretion, use the plus/minus system but are not required to do so. Faculty are required to notify students of the grading system used for an individual course via the course syllabus.

Certain grades and notations may impact a student's financial aid or other benefits. Students who request a grade or notation that impacts their financial aid or benefits are encouraged to speak with a

counselor in the [Office of Financial Aid and Scholarships](#) or the benefits provider prior to submitting the request.

## Grades

Letter grades and status symbols are as follows:

A+	4.00 quality points per semester hour attempted
A	4.00 quality points per semester hour attempted
A-	3.67 quality points per semester hour attempted
B+	3.33 quality points per semester hour attempted
B	3.00 quality points per semester hour attempted
B-	2.67 quality points per semester hour attempted
C+	2.33 quality points per semester hour attempted
C	2.00 quality points per semester hour attempted
C-	1.67 quality points per semester hour attempted
D+	1.33 quality points per semester hour attempted
D	1.00 quality point per semester hour attempted
D-	0.67 quality point per semester hour attempted
F	0 quality points per semester hour attempted
(Grade with #) - Preparatory	0 quality points per semester hour attempted

## Notations

For an explanation of each notation, click on a link to be taken to the entry below.

AP - [Advanced Placement](#)

AU - [Audited Course](#)

AW - [Administrative Withdrawal](#)

CL - [College Level Examination Program](#)

EX - [Credit by Examination](#)

I - [Incomplete](#)

NR - [Not Reported](#)

P - [Pass](#)

PL - [Portfolio Assessment](#)

S - [Satisfactory](#)

SA - [Study Abroad](#)

SE - [Satisfactory - Education or Music Recital Attendance](#)

SN - [Study Abroad - No Credit](#)

U - [Unsatisfactory](#)

UE - [Unsatisfactory - Education or Music Recital Attendance](#)

W - [Withdrawal](#)

## AP - Advanced Placement

The Advanced Placement (AP) notation is assigned when a student transfers credit for an Advanced Placement Examination conducted by the College Entrance Examination Board. The examination appears on the academic record with an "AP" notation. Credit for the examination does not count toward the student's attempted hours, counts toward earned hours, and is not calculated in the GPA or quality points.

## AU - Audited Course

The Audited Course (AU) notation is assigned when a student audits a course for informational purposes only. If space is available, students who meet MSU Denver admission requirements and are formally admitted to the university may audit a class with the permission of the instructor. Academic credit is not awarded for an audited course. The cost for auditing a course is based on applicable tuition and fees. The course appears on the academic record with an "AU" notation and does not count toward the student's attempted hours. The course is not calculated in the GPA or quality points. Audit approval forms are available from the [Office of the Registrar](#).

## AW - Administrative Withdrawal

The Administrative Withdrawal (AW) notation is assigned when a student, or representative, requests to be withdrawn from a course

due to unforeseen or extenuating circumstances beyond the student's control. When the "AW" notation is assigned, no academic credit is awarded. The course remains on the student's academic record with an "AW" notation and counts toward the student's attempted hours. The course is not calculated in the student's GPA.

Students may request an administrative withdrawal from the [Office of the Registrar](#) after the withdrawal deadline posted in the [Academic Calendar](#). Deadlines differ proportionally for courses offered during part of a semester, including late-start and weekend courses. Students should refer to the [Part-of-term dates](#) published by the Office of the Registrar to review withdrawal deadlines for individual courses.

Although requests are evaluated on a case-by-case basis, examples include the death of an immediate family member, serious illness or medical emergency, or other life-altering event. The student must provide supporting documentation to substantiate the request.

Students who request an administrative withdrawal may also request a tuition refund by filing an [Undergraduate Tuition and Fees Appeal](#) through the [Office of the Bursar](#).

## CL - College Level Examination Program (CLEP)

The College Level Examination Program (CL) notation is assigned when a student transfers credit for an examination completed through [CLEP](#). Credit for the examination does not count toward the student's attempted hours, counts toward earned hours, and is not calculated in the GPA or quality points.

## EX - Departmental Credit by Examination

The Credit by Examination (EX) notation is assigned when an academic department grants a student credit for an existing MSU Denver course for which the student requests and passes an appropriate examination. Credit for the examination does not count toward the student's attempted hours, counts toward earned hours, and is not calculated in the GPA or quality points.

## I - Incomplete

The Incomplete notation indicates that a student is achieving satisfactory progress in a course but is unable to complete all class assignments due to extenuating circumstances, such as documented illness, military leave, disability, internships that fall outside traditional semester timeframes, or circumstances beyond their control. The Incomplete notation is composed of an "I" (noted on the student's transcript) and the student's default grade (A, A-, B+, B, etc.), which is the grade the student has earned at the time course grades are first entered for the course.

An Incomplete notation may be assigned only if the student meets all these minimum requirements:

- The student has participated in an academically-related activity after the 60% mark of the course's part of term.

Academically-related activity involves active participation by a student in an instructional activity related to the student's course of study as defined by the last date of attendance.

- The student has completed more than 50% coursework and/or course contact hours, as determined by the faculty member or department chair if the faculty member is not available.

Incomplete grade notations are offered at the faculty member's discretion, or at the discretion of the department chair if the faculty member is not available. Satisfying the minimum university requirements for an Incomplete notation does not guarantee that one will be awarded. Departments and programs may establish higher minimum standards for awarding Incomplete notations. Incomplete notations based upon accommodations related to a student's documented disability should be determined in consultation with the Director of the Access Center or their designee.

When an Incomplete notation is awarded, the following process applies:

- When entering final course grades, the faculty member registers the Incomplete notation, the student's default grade, and the student's last date of attendance.
- The faculty member and student submit the Incomplete Agreement Form to the Office of the Registrar. This form establishes the outstanding work that the student may/should submit within a designated timeframe.
- The faculty member and student finalize additional Incomplete notation requirements established by their department or program, if any exist.
- The maximum timeframe for a student to submit remaining coursework is the end of the subsequent full term (i.e., the end of the next Fall or Spring semester). However, faculty members may require a shorter timeframe for submission of incomplete coursework, which will be documented on the Incomplete Agreement Form.
- When all remaining course work has been submitted and evaluated, when the student indicates that they have submitted all work they will be able to within the timeframe the faculty member will enter a change of grade form.
- If the work designated on the Incomplete Agreement Form is not completed within the established timeframe, the "I" notation will convert to the default grade submitted by the faculty member.

Deadlines vary according to course's formal schedule, also known as "part of term." Students should refer to the [Part of Term](#) dates published by the Office of the Registrar to review part of term date ranges, withdrawal deadlines, and such.

Students may not graduate with an "I" on their MSU Denver academic record if:

- The course in which the "I" was assigned is required for graduation, or
- The default grade assigned for that course would result in an overall GPA less than 2.00.

The Incomplete notation may not be given for self-paced courses. If a student does not complete a self-paced course within the semester that they enrolled in the course, they must re-enroll in the course in order to complete it. Students pay tuition and fees for each semester they are enrolled in self-paced courses.

## **NR - Not Reported**

The Not Reported (NR) notation indicates that no grade was reported by the faculty by the deadline to submit grades. Student must see faculty for an explanation or assignment of grade. Courses taken through interinstitutional registration are normally assigned the "NR" notation until grades are received and posted to the academic record. Students who receive an "NR" notation on their final grade report may be severely impacted. Financial aid, enrollment status, veterans' status and probation/suspension depend on students receiving all of their grades. The course counts toward the student's attempted hours, does not count toward earned hours, and is not calculated in the GPA or quality points.

## **P - Pass**

The Pass (P) notation is assigned when a student successfully completes a course for which the [Pass/Fail Option](#) has been requested. Course credit counts toward the student's attempted and earned hours but is not calculated in the GPA or quality points.

## **PL - Portfolio Assessment**

The Portfolio Assessment (PL) notation is assigned when an academic department grants a student credit for an existing MSU Denver course for which the student submits a [prior learning portfolio](#). Course credit does not count toward the student's attempted hours, counts toward earned hours, and is not calculated in the GPA or quality points.

## **S/U - Satisfactory/Unsatisfactory**

The Satisfactory (S) notation is equivalent to a grade of "C" or higher. Course credit counts toward the student's attempted and earned hours but is not calculated in the GPA or quality points.

The Unsatisfactory (U) notation is equivalent to a grade of "F." Course credit counts toward the student's attempted hours, does not count toward earned hours, and is calculated in the GPA or quality points.

These notations are limited to internships, practica, field experience courses, and workshops.

## **SA/SN - Study Abroad/Study Abroad - No Credit**

For the Study Abroad (SA) notation, course credit counts toward the student's attempted and earned hours but is not calculated in the GPA or quality points.

For the Study Abroad - No Credit (SN) notation, course credit counts toward the student's attempted hours, does not count toward earned hours, and is not calculated in the GPA or quality points.

## **SE/UE - Satisfactory/Unsatisfactory - Education or Music Recital**

The Satisfactory Education (SE) notation is equivalent to a grade of "B" or higher. Course credit counts toward the student's attempted and earned hours but is not calculated in the GPA or quality points.

The Unsatisfactory Education (UE) notation is equivalent to a grade of "F." Course credit counts toward the student's attempted hours, does not count toward earned hours, and is calculated in the GPA and quality points.

These notations are limited to the following courses: ECE 4390, EDS 4290, EDU 4190, EDU 4590, SED 4190 and SED 4500.

## **W - Withdrawal**

The Withdrawal (W) notation is assigned when a student officially withdraws from a course via the Student Hub after the drop deadline (census date) and before the withdrawal deadline posted in the [Academic Calendar](#). Deadlines differ proportionally for courses offered during part of a semester, including late-start and weekend courses. Students should refer to the Student Detail Schedule via the Student Hub to review drop and withdrawal deadlines for individual courses. When a student withdraws from a course, no academic credit is awarded. The course remains on the student's academic record with a "W" notation and counts toward the student's attempted hours. The course is not calculated in the student's GPA or quality points. Please see the [Office of Financial Aid and Scholarships](#) for additional information on how withdrawals may impact your financial aid eligibility. Students who withdraw from a course are responsible for the full tuition and fees for that course. After the withdrawal deadline, students may not withdraw from a course and will be assigned the grade earned based on the course syllabus. A student-initiated withdrawal will appear as an "F" on the student's academic record in any case of academic misconduct resulting in a permanent "F".

## **Honors and Awards**

MSU Denver annually recognizes students who show outstanding leadership and service to the University and community, excellence in scholastic achievement, and outstanding personal character and integrity. Due to wide variation in definition and interpretation of class rank, the university does not (by policy) rank its students or graduates. Recognition of students includes: The President's Award (one senior); The Provost's Award (one senior); Special Service-Student Affairs Award (one senior); Outstanding Fall Graduate

Award (one senior); Outstanding Student Awards (one senior from each College/School).

In addition to annual awards, students with outstanding academic achievements are recognized by being named on the university's Honor Lists. The President's Honor List contains the names of students who, at the time of computation, have achieved a cumulative GPA of 3.85 or higher. The Provost's Honor List contains the names of students who, at the time of computation, have achieved a cumulative GPA of between 3.50 and 3.84, inclusively. Computation will occur initially when the student has completed between 30 and 60 credits at MSU Denver, then again between 60 and 90 credits, and finally after more than 90 credits. Honors will only be computed three times in a student's academic life at the university. Questions should be directed to the [Office of Academic Affairs](#) at 303-615-1900.

Graduation honors are awarded to students who have demonstrated superior academic ability in their baccalaureate degree while attending MSU Denver. Honors designations are determined according to the following criteria:

- **Summa Cum Laude:**
  - College of Aerospace, Computing, Engineering, and Design graduates with a cumulative GPA of no less than 3.90
  - College of Business graduates with a cumulative GPA of no less than 3.89
  - School of Education graduates with a cumulative GPA of no less than 3.93
  - College of Health and Human Sciences with a cumulative GPA of no less than 3.90
  - School of Hospitality graduates with a cumulative GPA of no less than 3.89
  - College of Letters, Arts and Sciences with a cumulative GPA of no less than 3.93.
- **Magna Cum Laude**
  - College of Aerospace, Computing, Engineering, and Design graduates with a cumulative GPA of no less than 3.80
  - College of Business graduates with a cumulative GPA of no less than 3.75
  - School of Education graduates with a cumulative GPA of no less than 3.83
  - College of Health and Human Sciences with a cumulative GPA of no less than 3.80
  - School of Hospitality graduates with a cumulative GPA of no less than 3.75
  - College of Letters, Arts and Sciences with a cumulative GPA of no less than 3.87.
- **Cum Laude**
  - All MSU graduates with a cumulative GPA of no less than 3.65.

The honors designation is calculated twice: once for the commencement ceremony; and again at the end of the final semester for the official designation. Students pursuing dual majors will have honors designation calculated for the primary major.

The required GPA for honors designation will be reviewed at least every five years.

## Commencement Ceremony

To qualify for graduation honor recognition at the commencement ceremony, a student must have the specified GPA. UCD Pooled classes and other transfer credits are not considered when determining honors. Recognition at the commencement ceremony does not guarantee final honors designation on the official record. Honors announced at the commencement ceremony will be based upon a preliminary calculation not including grades from the term of graduation.

Students who qualify for recognition at the ceremony will be sent a letter from the dean's office of the college or school in which their major is located. This letter authorizes students to purchase honor cords at the time they rent their caps and gowns.

Graduates with an Individualized Degree Program major will be identified for honors purposes within the college of school most prominent in their major.

## Official Honors Designation

Grades earned for the graduating term will affect honors. GPAs are not rounded up (for example: a GPA of 3.149 is not rounded to 3.15). The Official Honors designation will be calculated following the processing of final grades. This recalculation will take into consideration any grade changes submitted to the Registrar's Office during a student's graduating term. Only the official honors designation is added to the final transcript and diploma. A student must maintain the specified GPA by the term of graduation. UCD Pooled classes and other transfer credits are not considered when determining honors.

Honors designations are added to the student's official academic record; no other notification will be sent. For additional information regarding graduation honors, contact the [Office of Academic Affairs](#) at 303-615-1900.

## Last Date of Attendance

Faculty who report a "U," "UE," or "F" grade to a student for any reason will report the student's last date of attendance when entering grades online.

For reporting purposes, the last date of active participation in the class will be considered the last date of attendance, which must be one of the following:

1. Attending a synchronous class, lecture, recitation, or field or laboratory activity, physically or online, where there is an opportunity for interaction between the instructor and students;
2. Submitting an academic assignment;
3. Taking an assessment or an exam;



4. Participating in an interactive tutorial, webinar, or other interactive computer-assisted instruction;
5. Participating in a study group, group project, or an online discussion that is assigned by the institution;
6. Interacting with an instructor about academic matters.

Active participation does not include:

1. Living in institutional housing;
2. Participating in the school's meal plan;
3. Logging into an online course or tutorial without any further participation
4. Participating in academic counseling or advising; or
5. Participating in a student-organized study group.

If a student never participated in class, the date of the first day of class will be reported as the last date of attendance/participation. Students may be dropped due to non-participation under the [Mandatory Participation Policy](#).

## Pass/Fail Option

The pass/fail option encourages students to venture out of their major and minor fields and thereby broaden their educational experience. A student must declare interest in the pass/fail option no later than census date. For specific deadlines, see the [Academic Calendar](#). Deadlines differ proportionally for courses offered during part of semester, including late-start and weekend courses. Students should refer to the [Part-of-Term](#) dates published by the [Office of the Registrar](#) to review drop deadlines for individual courses. Students must declare interest in the pass/fail option by contacting the [Office of the Registrar](#) and completing the Request for Pass/Fail Option. Once approved, the request for the pass/fail option is irrevocable. A student who requests the option and later is declared ineligible will receive written notification from the [Office of the Registrar](#).

Students who have completed at least one MSU Denver course with at least a 2.0 cumulative GPA may choose to be evaluated for a certain course on a pass/fail basis rather than by a letter grade. Major, minor, General Studies and other courses required for a degree and courses for teacher licensure may NOT be taken on a pass/fail basis. Self-paced courses may NOT be taken under the pass/fail option. Maximum graduation credit for courses taken using the pass/fail option is 18 credit hours earned in no more than six courses and limited to one course per semester or part-of-term. Course work must be graded to determine if it is pass or fail.

The "pass" grade (P) is not computed in and will have no effect on the GPA; the "fail" grade is equivalent to the grade of "F" and is computed in and will have an effect on the student's GPA. The "pass" grade (P) is equivalent to the grade of "D-" or better. Pass/fail courses fall under the same withdrawal guidelines and deadlines as other courses in the institution, whether those guidelines and deadlines are established university-wide or by individual schools or departments.

The instructor will assign and record the pass/fail grade on the final grade list that identifies students electing and eligible for pass/fail grading. Some institutions do not accept credit in transfer for courses in which a "pass" grade is given. Therefore, students who plan to transfer or take graduate work should determine whether the institution of their choice would accept the credit before registering for courses under the pass/fail option. Additionally, the student is responsible for ensuring that the course is not a major, minor or General Studies requirement.

## Posthumously Awarded Degrees

Metropolitan State University of Denver will award a posthumous degree to a deceased student who had maintained good academic and financial standing without a significant disciplinary incident. Any party interested in seeking a posthumous degree will contact the Dean of the College or School in which the deceased student's program resided. Upon final approval of the Provost, the name of the deceased student will be announced at commencement as a Posthumous Degree and a plaque will be given to a person designated by the family.

If it is determined that the student was enrolled in their final courses sufficient to meet the university's graduation requirements, and therefore would have earned their degree had they successfully completed the last semester of enrollment, the degree will be counted as an earned degree within university completion counts.

If it is determined that the student was not enrolled in their final courses sufficient to meet the university's graduation requirements, and therefore would not have been granted a degree had they successfully completed the last semester of enrollment, the Office of the Registrar will expunge the academic record during the semester of the student's death.

## Repeated Courses

Students may enroll in an individual, MSU Denver course a maximum of two times, unless the course is designated as repeatable. The department offering the course may approve additional attempts. A course for which a student has received an administrative withdrawal (AW) does NOT count as an enrollment attempt. All other grades and notations count toward the maximum number of enrollment attempts.

A repeatable course is defined as a course taken for additional credit toward graduation requirements. Examples include field experiences, internships, music ensembles, and theater presentations. Some departments place limits on the total number of credits that students may earn in a repeatable course. If a limit applies, the maximum number of credits permitted is identified in the course notes in the catalog and class schedule.



# Admission Requirements

Metropolitan State University of Denver uses two categories to classify applicants: those who are 19 years old and younger and those who are 20 years old and over. This includes U.S. citizens, permanent residents, asylees/refugees and non-citizens. Based on the university's modified, open admission policy, each category, including International Students, follows its own admissions requirements and procedures.

MSU Denver students who have not attended the university for three consecutive semesters must submit an application for readmission. For more information, see "[Admission of Previously Enrolled Students](#)" in this catalog.

For information regarding admission to MSU Denver, click on a link to be taken to the entry below.

- [Application Deadline](#)
- [Applicants 19 Years Old or Younger](#)
- [Applicants 20 Years of Age or Older](#)
- [Application Instructions](#)
- [Admission of Previously Enrolled \(Readmit\) Students](#)
- [Admission of Non-degree-seeking Students](#)
- [Admission of International Students](#)
- [Admission Notification](#)
- [College Credit in High School](#)
- [Rescinding Admission to MSU Denver](#)
- [Transfer Services](#)
- [Tuition Classification](#)
- [Western Undergraduate Exchange \(WUE\)](#)

## Application Deadline

The application deadline is at least one to two months before the start of the semester. To find out the exact application deadline date for your intended term of enrollment, please visit [msudenver.edu/admissions](http://msudenver.edu/admissions). For the best possible selection of courses, students are advised to apply early. Refer to the [Academic Calendar](#) for important dates.

## Applicants 19 Years Old or Younger

Applicants who are 19 years old or younger on September 15 for either summer semester or fall semester, or on February 15 for spring semester, will be classified as traditional applicants. They will be considered for admission using the requirements described below. Note: to be eligible for admission, students must be at least 16 years old on the first day of the semester and must have either graduated from high school or received a General Education Development (GED) certificate.

## First-Time College Students

- Applicants will be guaranteed admission with an unweighted cumulative high school GPA of 2.0 or higher.
- Please review the university's average admitted student profile:

Mid-50% GPA Range of Students Admitted (4.0 scale - includes weighted GPA)	Mid-50% ACT Range of Students Admitted (composite score)	Mid-50% SAT Range of Students Admitted (Evidence Based Reading and Writing and Math)
2.61-3.41	18-23	1010-1200

- Applicants who have an unweighted, cumulative high school GPA below a 2.0 are strongly encouraged to submit letters of recommendation, an unofficial high school transcript, and a personal statement and must complete their application files by the stated Admissions Review Deadline.
- Applicants must request that the following credentials be sent directly to the Office of Admissions from the high school or testing agency:
  - ACT or SAT test results (optional)
  - Official high school transcript with GPA and graduation date
- This information may be submitted at the end of the sixth, seventh, or eighth semester of high school, but an official, final transcript with date of graduation is required before the start of the initial semester of enrollment. Students should request the transcript and verify that the high school record with date of graduation has been received by the Office of Admissions. Degree-seeking students will not be permitted to register for a second semester.
- Applicants who have not graduated from high school but have passed and received the Colorado General Educational Development (GED) certificate with a score of 145 or higher on all four sections, or its equivalent will be accepted. ACT or SAT test results are not required with a GED, but if taken in the last five years of the semester start date, are highly recommended for advising and course placement purposes. Official GED certificates must be received from the testing agency.

## College Transfers

- Applicants with 24 or more *transferable* semester hours completed will be offered admission. Students with fewer than 24 hours will be considered on an individual basis, based on high school GPA, ACT or SAT scores (optional) and college work completed.
- Applicants must request that the following credentials be sent directly to the Office of Admissions from the high school, testing agency and/or college or university:
  - ACT or SAT test results (optional)

- Official high school transcript with GPA or Official GED scores
- Official transcript from each college or university attended or currently attending

## Applicants 20 Years of Age or Older

Applicants who are 20 or older on September 15 for either summer semester or fall semester, or on February 15 for spring semester, will be considered for admission using the requirements described below.

### Freshmen (first-time college students)

- Applicants will be admitted to MSU Denver by indicating on the application for admission they have graduated from high school or have earned an official GED (General Educational Development) certificate or the equivalent. GEDs issued through the military will be considered on an individual basis.
- The ACT or SAT is not required for admission but, if taken within five years of the semester start date, is highly recommended for advising and course placement purposes.

### College Transfers

- Applicants 20 years of age and older will be admitted to MSU Denver, regardless of their cumulative college GPA, by indicating on the application for admission they have graduated high school or earned an official GED (General Educational Development) certificate or its equivalent.
- In place of these credentials, official college transcripts from each institution of higher education attended showing completion of 24 or more transferable semester credit hours with grades of "C-" or better will be accepted. College transfer students should request to have college transcripts sent directly to the Office of the Registrar for transfer credit evaluation. Degree-seeking applicants are required to have all college and university transcripts on file to receive a complete evaluation.
- The ACT or SAT is not required for admission but, if taken within five years of the semester start date, is highly recommended for advising and course placement purposes.

## Application Instructions

Applications for Admission are considered in the order in which they are received each semester. All credentials received by the university become the property of MSU Denver and will not be returned to the student. It is the responsibility of the applicant to notify the Office of Admissions of any changes to the application prior to the first day of classes. If changes are not reported to the Office of Admissions, the registration process could be delayed for subsequent semesters. Failure to report academic changes may result in rejection, dismissal and/or loss of credit. International applicants seeking to study on F-1

student visa should refer to the Admission of International Students section.

To apply for admission:

- Applications can be submitted online at [msudenver.edu/admissions](https://msudenver.edu/admissions) or are available from the Office of Admissions located in the Jordan Student Success Building, Room 180 at 890 Auraria Parkway, Denver, CO 80204. You may call the Office of Admissions at 303-556-3058 with any questions.
- It is the student's responsibility to request that all required official credentials be sent directly from the issuing institution or agency to the Office of Admissions. Hand-carried documents delivered in a sealed envelope will also be accepted.
- Although an applicant's college record may be summarized on one transcript, an official transcript from each institution attended is required.
- For information on obtaining records and receiving credit for Advanced Placement (AP), International Baccalaureate (IB), the College-Level Examination Program (CLEP) and military training or other training, see the [Alternative Credit Options](#) section.
- The Admissions application and all credentials received by the university will be valid for two semesters beyond the term of application. Applicants wishing to attend MSU Denver after this period must submit a new application and application credentials that were not submitted and are outstanding.
- Applicants will be notified of their application status within two to three weeks.

## Admission of Previously Enrolled (Readmit) Students

Readmit students are defined as individuals who have previously enrolled and have received a grade or grade notation at the university but have not been in attendance at MSU Denver for three consecutive semesters, including summer. Readmit students should:

- Submit a completed Application for Admission.
- Submit transcripts from institutions attended since last attending MSU Denver (if degree-seeking).  
If the student was not previously degree-seeking, then the student must submit transcripts from all institutions attended.

Readmit students who originally attended MSU Denver prior to 1998 are required to resubmit all credentials. In addition, all students who have not submitted final, official high school transcripts or an official GED report must also submit these credentials.

## Admission of Non-degree-Seeking Students

The non-degree-seeking student classification meets the needs of students who wish to take college courses, but who do not currently intend to work toward a baccalaureate degree at MSU Denver. With the exception of high school students who have completed the concurrent enrollment approval process, non-degree students must have graduated from high school or received a GED to qualify for admission. Non-degree students are not eligible for financial aid, nor will any college transcripts submitted be evaluated for transfer credit.

## Admission of International Students

Applicants who are international students (as determined by the Office of Admissions) seeking admission or to transfer need to submit the online Application for Admission. In addition, they are required to submit:

1. A minimum of an official high school transcript/diploma that is comparable to a U.S. high school transcript/diploma. Any high school credential issued in a language other than English must be accompanied by a word-for-word certified English translation. This requirement is waived if the student can transfer 24 or more college credits to MSU Denver. Students must submit official college transcripts to qualify. For non-U.S. college/university transcripts, a professional course by course translation and evaluation completed by a professional transcript evaluation service, in addition to the official transcript(s), will be required. The service agency must be a member of the National Association of Credential Evaluation Services (NACES.)
2. English language proficiency as determined by the [Office of Admissions](#).

Applicants who are current F-1 visa holders seeking to transfer or who are seeking initial F-1 student status in addition to the above, are required to submit:

1. Documents demonstrating sufficient financial support to cover the costs of attending the university for one academic year as determined by the [Office of Admissions](#).
2. Travel documents and proof of nonimmigrant status as requested by the [Office of Admissions](#).

Application deadlines for F-1 international students are typically earlier than those for other applicants. Please refer to the [Office of International Admissions](#) website for more information.

## Admission Notification

Once admitted, students will be mailed and emailed instructions regarding their admissions, course registration and other relevant information. All incoming degree seeking students new to MSU Denver are required to attend a New Student Orientation session. After orientation, first-time college students are also required to meet with an academic advisor. Depending upon a student's submission of

and performance on the ACT or SAT, placement tests may also be required and should be completed prior to attending orientation. Students denied admission may appeal the decision by submitting a letter of appeal to the Office of Admissions, along with new and compelling academic information, letters of recommendation and other supportive documentation.

## College Credit in High School

Information regarding college credit in high school can be found at <https://www.msudenver.edu/innovative-lifelong-learning/collegecreditinhighschool/>

## Rescinding Admission to MSU Denver

If MSU Denver discovers that a student knowingly omitted information, provided false information on the application for admission, or submitted fraudulent documents, the Office of Admissions may rescind the student's acceptance to the university.

### Appeal Process

The student may appeal to the Chief Enrollment Officer within five working days of the date of the decision. Such appeals shall be in writing and the student will be notified in writing of the outcome of the appeal within 15 working days. The decision of the Chief Enrollment Officer will be final.

## Transfer Services

The Office of Transfer Services offers assistance to students transferring from other institutions to MSU Denver. Specific services provided include the following:

- Assistance with admission requirements and the application process;
- Weekly visits to local community colleges in the Denver metro area;
- Visits to other Colorado community colleges once or twice annually;
- Guidance on selecting appropriate transferable courses;
- Preliminary transcript evaluation;
- Transfer student scholarship information;
- Referral assistance to academic departments;
- Resolution of transfer course issues.

Transfer counselors are available for walk-in counseling. Counselors work closely with transcript evaluators to provide students with information about transfer credits and how those credits may be applied to their degree programs. General questions regarding a transfer evaluation or preliminary evaluation should be referred to the Office of Admissions/Transfer Services, Jordan Student Success Building, Room 180, or [transferquestions@msudenver.edu](mailto:transferquestions@msudenver.edu). For

questions about Transfer Credit Evaluation, please see the [Registration and Records](#) section of the catalog.

## Tuition Classification

A student is classified as an in-state or out-of-state student for tuition purposes at the time of admission. This classification is based on information supplied by the student on the application for admission and is made in accordance with the Colorado Tuition Classification Law (Title 23, Article 7, of the Colorado revised Statutes). Once determined, a student's tuition classification status remains unchanged unless clear and convincing evidence that a change should be made is presented. If a student believes that they are entitled to in-state status, the student must submit their request, along with evidence of in-state status to the Office of Admissions by the published deadline dates. Details on university policies and procedures as they pertain to the Colorado Tuition Law, the forms and deadlines can be found at [msudenver.edu/admissions/residency](https://msudenver.edu/admissions/residency).

The tuition classification statute requires that, in order to qualify for in-state status, a student (or the parents or legal guardian of the student in the case of students under 23 years of age who are not emancipated) must have been domiciled in Colorado for one year or more immediately preceding the first day of the semester for which such classification is sought.

Domicile for tuition purposes requires two inseparable elements: (1) a permanent place of habitation in Colorado and (2) intent to remain in Colorado with no intent to be domiciled elsewhere. Some examples of connections with the state that provide objective evidence of intent are: payment of Colorado state income tax as a Colorado resident, permanent employment in Colorado, ownership of residential real estate property in Colorado, compliance with laws imposing a mandatory duty on any domiciliary of the state, such as the drivers' license law and the vehicle registration law and

registration to vote. Other factors unique to the individual can also be used to demonstrate the requisite intent.

Any questions regarding the tuition classification law should be directed to the Tuition Classification Officer with the Office of the Admissions. In order to qualify for in-state status for a particular semester, the student must prove that domicile began no later than one year prior to the first day of classes for that semester. Refer to the Academic Calendar for deadlines to submit the proper request.

## Western Undergraduate Exchange (WUE)

Through WUE, students in western states/territories (AK, AZ, CA, HI, ID, MT, NV, NM, ND, OR, SD, UT, WA, WY, American Samoa, Commonwealth of the Northern Mariana Islands, Federal States of Micronesia, Guam, Republic of the Marshall Islands, and Republic of Palau) may enroll in many two-year and four-year college programs at a reduced tuition level. At MSU Denver, WUE students pay 150 percent of the student's share of Colorado resident tuition plus mandatory fees.

WUE is open to new students who meet both MSU Denver admission and WUE program requirements. New students applying for the WUE program must submit an application for admission by the admissions application deadline and a WUE application by the published census date of the student's first semester. The student may be required to provide evidence of residency in one of the qualifying states. If the student is under 23 years of age, evidence of residency for both parent/guardian and student may be required. Students who are accepted in the program are ineligible to petition for in-state tuition during their time of attendance at MSU Denver. The WUE program is not available to current MSU Denver students.

# Alternative Credit Options/Prior Learning Assessment

The university may grant credit for prior learning, depending on the academic program, as verified by the following assessment methods:

1. National standardized tests, including:
  - o [Advanced Placement Examinations \(AP\)](#)
  - o [College-Level Examination Program \(CLEP\)](#)
  - o [DSST/DANTES](#)
  - o [International Baccalaureate \(IB\)](#)
2. [Departmental Credit by Examination](#)
3. [Portfolio Assessment](#)
4. [Credit for Military Training, Military Occupational Specialties, and Other Training Programs Evaluated by the American Council on Education \(ACE\)](#)
5. [Credit for Industry Licenses/Certificates](#)

MSU Denver accepts transfer courses awarded through Prior Learning Assessment (PLA) from other accredited Colorado institutions. All PLA assessments exceeding the requirements of the Colorado GT Pathways policy are accepted without further assessment at MSU Denver.

Transfer credit awarded for PLA remains subject to MSU Denver's official transfer credit evaluation guidelines. PLA awards are subject to the same transferability guidelines as if the full course were taken at the sending institution. Courses that MSU Denver has determined are not transferrable to MSU Denver are also not transferrable as PLA credit.

PLA credit awarded for transcribed standardized exams (AP/IB/CLEP) will require official transcripts to be sent to MSU Denver for credit evaluation.

Prior learning credit does not count toward semester hour residency requirements. Regardless of credit granted for prior learning, all students must complete the minimum semester hour residency requirements. Therefore, the maximum number of prior learning credit hours is limited by these residency requirements. Please review the semester hour residency requirements before planning to use any of these options. See [Degree and Certificate Requirements](#).

Each academic department determines the applicability of prior learning assessment to courses in the academic discipline and for the academic major and minor. Students must meet with an academic advisor in their program as well as with the Assistant Registrar, Prior Learning Assessment to determine how much, if any, credit for prior learning may apply to a particular degree program. The academic department in which the course in question resides will make the final determination on any credit granted for prior learning.

Once prior learning is assessed and credit is awarded, the total number of those credits applicable to a degree will not be reduced unless the student repeats already-awarded credit at MSU Denver or interrupts MSU Denver enrollment for three or more consecutive semesters and readmits to the university under more restrictive Prior Learning Assessment evaluation policies.

For advising assistance with CLEP examinations, departmental credit by examination, and portfolio assessment, students may contact the Assistant Registrar, Prior Learning Assessment, Registrar's Office, Student Success Building Counter 3 (890 Auraria Parkway Suite 160), 303-605-5574

## Advanced Placement Examinations

Students who have performed satisfactorily in special, college-level courses while in high school, and who have passed appropriate Advanced Placement (AP) examinations conducted by the College Entrance Examination Board may have official scores submitted directly to the [Office of the Registrar](#). This office, in consultation with the appropriate department chair, determines the amount and nature of the credit and/or advanced placement granted. Students should contact [collegeboard.com](http://collegeboard.com) or 888-225-5427 to request official AP scores; MSU Denver's AP code is 4505.

AP scores that are equivalent to a course with the Oral Communication General Studies designation will receive Oral Communication General Studies credit.

The following is the current chart for the course credit awards for Advanced Placement Exam:

### Course Credit Awards for Advanced Placement Exams

Subject Area	Exam Title	Score Required	Equivalent Course(s)	Credits Awarded	General Studies Requirement Satisfied	GT Pathways Category
Arts	Art History	3	ARTH 1600 - Art of the Ancient World	3	Arts and Humanities, Global Diversity	None
		4 or 5	ARTH 1600 - Art of the Ancient World ARTH 1700 - Art of the Medieval and Early Modern World	6	Arts and Humanities, Global Diversity	None
	2-D Art and Design	3, 4, or 5	ART 1101 - Art Studio: 2D	3	None	None
	3-D Art and Design	3, 4, or 5	ART 1501 - Art Studio: 3D	3	None	None
	Drawing	3, 4, or 5	ART 1141 - Art Studio: Drawing	3	None	None
Computer Science	Computer Science (A)	3, 4, or 5	CS 1050 - Computer Science 1	4	None	None
	Computer Sciences (AB)	3	CS 1050 - Computer Science 1	4	None	None
		4 or 5	CS 1050 - Computer Science 1 CS 2050 - Computer Science 2	8	None	None
	Computer Science Principles	3, 4, or 5	CS 1030 - Computer Science Principles	4	None	None
English	English Language and Composition	3, 4, or 5	ENG 1010 - Composing Arguments	3	Written Communication	CO1

	English Literature and Composition	3	ENG 1100 - Introduction to Literature	3	Arts and Humanities	AH2
		4 or 5	ENG 1010 - Composing Arguments ENG 1100 - Introduction to Literature	6	Written Communication, Arts and Humanities	CO1 and AH2
History	United States History	3	HIS 1210 - American History to 1865	3	Historical	HI1
		4 or 5	HIS 1210 - American History to 1865 HIS 1220 - American History since 1865	6	Historical	HI1
	European History	3	HIS 8000 (3)	3	Historical, Global Diversity	HI1
		4 or 5	HIS 1045 - Europe, Renaissance to the Present HIS 8000 (3)	6	Historical, Global Diversity	HI1
	World History	3	HIS 1030 - World History to 1500	3	Historical, Global Diversity	HI1
		4 or 5	HIS 1030 - World History to 1500 HIS 1040 - World History since 1500	6	Historical, Global Diversity	HI1
Languages	Chinese Language and Culture	3	CHI 1020 - Elementary Chinese II	5	Arts and Humanities, Global Diversity	None
		4	CHI 1020 - Elementary Chinese II CHI 8000 (3)	8	Arts and Humanities, Global Diversity	None
		5	CHI 1020 - Elementary Chinese II CHI 8000 (6)	11	Arts and Humanities, Global Diversity	None
	French Language and Culture	3	FRE 1020 - Elementary French II FRE 2110 - French Reading and Conversation	8	Arts and Humanities, Global Diversity	None

		4	FRE 1020 - Elementary French II FRE 2010 - Intermediate French I FRE 2110 - French Reading and Conversation	11	Arts and Humanities, Global Diversity	None
		5	FRE 1020 - Elementary French II FRE 2010 - Intermediate French I FRE 2020 - Intermediate French II FRE 2110 - French Reading and Conversation	14	Arts and Humanities, Global Diversity	None
	<b>French Literature and Culture</b>	3 or 4	FRE 1020 - Elementary French II FRE 2010 - Intermediate French I FRE 2110 - French Reading and Conversation	11	Arts and Humanities, Global Diversity	None
		5	FRE 1020 - Elementary French II FRE 2010 - Intermediate French I FRE 2020 - Intermediate French II FRE 2110 - French Reading and Conversation FRE 3010 - French as a Global Language	17	Arts and Humanities, Global Diversity	None
	<b>German Language and Culture</b>	3	GER 1020 - Elementary German II GER 2010 - Intermediate German I GER 2020 - Intermediate German II	11	Arts and Humanities, Global Diversity	None
		4	GER 1020 - Elementary German II GER 2010 - Intermediate German I	14	Arts and Humanities, Global Diversity	None



			GER 2020 - Intermediate German II GER 2110 - German Reading and Conversation			
		5	GER 1020 - Elementary German II GER 2010 - Intermediate German I GER 2020 - Intermediate German II GER 2110 - German Reading and Conversation GER 2120 - German Civilization	17	Arts and Humanities, Global Diversity	None
	German Literature	3	GER 1020 - Elementary German II GER 2010 - Intermediate German I GER 2020 - Intermediate German II	11	Arts and Humanities, Global Diversity	None
		4	GER 1020 - Elementary German II GER 2010 - Intermediate German I GER 2020 - Intermediate German II GER 2110 - German Reading and Conversation	14	Arts and Humanities, Global Diversity	None
		5	GER 1020 - Elementary German II GER 2010 - Intermediate German I GER 2020 - Intermediate German II GER 2110 - German Reading and Conversation GER 2120 - German Civilization	17	Arts and Humanities, Global Diversity	None
	Latin	3, 4, or 5	LAS 8000 (5)	5	Arts and Humanities, Global Diversity	None

	<b>Italian Language and Culture</b>	3	ITA 1020 - Elementary Italian II	5	Arts and Humanities, Global Diversity	None
		4	ITA 1020 - Elementary Italian II ITA 2010 - Intermediate Italian I	8	Arts and Humanities, Global Diversity	None
		5	ITA 1020 - Elementary Italian II ITA 2010 - Intermediate Italian I ITA 2020 - Intermediate Italian II	11	Arts and Humanities, Global Diversity	None
	<b>Japanese Language and Culture</b>	3	JPS 1020 - Elementary Japanese II	5	Arts and Humanities, Global Diversity	None
		4	JPS 1020 - Elementary Japanese II JPS 2010 - Intermediate Japanese I	8	Arts and Humanities, Global Diversity	None
		5	JPS 1020 - Elementary Japanese II JPS 2010 - Intermediate Japanese I JPS 2020 - Intermediate Japanese II	11	Arts and Humanities, Global Diversity	None
	<b>Spanish Language and Culture</b>	3	SPA 1020 - Elementary Spanish II SPA 2010 - Intermediate Spanish I SPA 2020 - Intermediate Spanish II	11	Arts and Humanities, Global Diversity	AH4
		4	SPA 1020 - Elementary Spanish II SPA 2010 - Intermediate Spanish I SPA 2020 - Intermediate Spanish II SPA 2110 - Spanish Reading and Communication I	14	Arts and Humanities, Global Diversity	AH4

		5	SPA 1020 - Elementary Spanish II  SPA 2010 - Intermediate Spanish I  SPA 2020 - Intermediate Spanish II  SPA 2110 - Spanish Reading and Communication I  SPA 2120 - Spanish Reading and Communication II	17	Arts and Humanities, Global Diversity	AH4
	Spanish Literature and Culture	3	SPA 1020 - Elementary Spanish II  SPA 2010 - Intermediate Spanish I  SPA 2020 - Intermediate Spanish II	11	Arts and Humanities, Global Diversity	None
		4 or 5	SPA 1020 - Elementary Spanish II  SPA 2010 - Intermediate Spanish I  SPA 2020 - Intermediate Spanish II  SPA 2110 - Spanish Reading and Communication I  SPA 2120 - Spanish Reading and Communication II	17	Arts and Humanities, Global Diversity	None
Mathematics	Pre-Calculus	3, 4, or 5	MTH 1400 - Precalculus Mathematics	4	Quantitative Literacy	MA1
	Calculus AB	3, 4, or 5	MTH 1410 - Calculus I	4	Quantitative Literacy	MA1
	Calculus BC	3	MTH 1410 - Calculus I	4	Quantitative Literacy	MA1
	Calculus BC	4 or 5	MTH 1410 - Calculus I  MTH 2410 - Calculus II	8	Quantitative Literacy	MA1
	Statistics	3, 4, or 5	MTH 1210 - Introduction to Statistics	4	Quantitative Literacy	MA1

<b>Natural and Physical Sciences</b>	<b>Biology</b>	3, 4, or 5	BIO 1080 - General Biology I BIO 1081 - General Biology II BIO 1090 - General Biology Laboratory I BIO 1091 - General Biology Laboratory II	8	Natural and Physical Sciences	SC1
	<b>Chemistry</b>	3	CHE 1800 - General Chemistry I CHE 1801 - General Chemistry I Laboratory	5	Natural and Physical Sciences	SC1
		4 or 5	CHE 1800 - General Chemistry I CHE 1801 - General Chemistry I Laboratory CHE 1810 - General Chemistry II CHE 1811 - General Chemistry II Laboratory	10	Natural and Physical Sciences	SC1
	<b>Environmental Science</b>	3, 4, or 5	ENV 1200 - Introduction to Environmental Science	3	Natural and Physical Sciences	SC2
	<b>Physics B</b>	3, 4, or 5	PHY 2010 - College Physics I PHY 2020 - College Physics II PHY 2030 - College Physics I Laboratory PHY 2040 - College Physics II Laboratory	10	Natural and Physical Sciences	None
	<b>Physics C Mechanics</b>	3, 4, or 5	PHY 2311 - General Physics I PHY 2321 - General Physics I Laboratory	5	Natural and Physical Sciences	SC1
	<b>Physics C Electricity and Magnetism</b>	3, 4, or 5	PHY 2331 - General Physics II PHY 2341 - General Physics II Laboratory	5	Natural and Physical Sciences	SC1
	<b>Physics 1</b>	3, 4, or 5	PHY 2010 - College Physics I PHY 2030 - College Physics I Laboratory	5	Natural and Physical Sciences	SC1
	<b>Physics 2</b>	3, 4, or 5	PHY 2020 - College Physics II	5	Natural and Physical Sciences	SC1

			PHY 2040 - College Physics II Laboratory			
<b>Social and Behavioral Sciences</b>	<b>African American Studies</b>	3,4,or 5	AAS 1010 - Introduction to Africana Studies	3	Social and Behavioral Sciences, ESSJ	SS3
	<b>Economics: Microeconomics</b>	3, 4, or 5	ECO 2020 - Principles of Microeconomics	3	Social and Behavioral Sciences	SS1 and SS2
	<b>Economics: Macroeconomics</b>	3, 4, or 5	ECO 2010 - Principles of Macroeconomics	3	Social and Behavioral Sciences	SS1
	<b>Human Geography</b>	3, 4, or 5	GEG 1300 - Introduction to Human Geography	3	Social and Behavioral Sciences, Global Diversity	SS1
	<b>Government and Politics: United States</b>	3, 4, or 5	PSC 1010 - American National Government	3	Social and Behavioral Sciences	SS1
	<b>Government and Politics: Comparative</b>	3, 4, or 5	PSC 1010 - American National Government	3	Social and Behavioral Sciences	SS1
	<b>Psychology</b>	3, 4, or 5	PSY 1001 - Introductory Psychology	3	Social and Behavioral Sciences	None
<b>Music</b>	<b>Music Theory</b>	3, 4, or 5	MUS 1010 - Essential Music Theory Skills	3	None	None
<b>Philosophy</b>	<b>Philosophy</b>	3, 4, or 5	PHI 1010 - The Big Questions: An Introduction to Philosophy	3	Arts and Humanities	None

## College-Level Examination Program (CLEP)

The College Level Examination Program (CLEP) consists of a series of national standardized examinations. They are designed to assess non-accredited, college-level knowledge in several subject areas. Students are advised to check with their major departments for information on specific General Studies requirements that may not be met through the use of CLEP examinations.

- Credit earned through the English composition with essay, humanities, natural sciences, social sciences/history, and college mathematics examinations may be applied only to General Studies requirements. Credit earned through the other approved examinations may be applied toward any requirements for completing the degree, unless otherwise stated.
- CLEP examinations are recorded without reference to a letter grade and are not figured into the student's GPA. Credit earned through CLEP examinations does not count toward semester hour residency requirements. See Degree and Certificate Requirements.
- In order to have CLEP examination results evaluated, the student should send a copy of the official score report to: Metropolitan State University of Denver, Office of the Registrar, Campus Box 84, P.O. Box 173362, Denver, CO 80217-3362. To request an official CLEP score report, contact collegeboard.com/clep or 800-257-9558. MSU Denver's CLEP code is 4505.
- All CLEP examinations will be subject to the statement of policy in place at the time the scores are submitted, not the policy in place at the time the examination was taken.
- Credit awarded through CLEP examinations at other colleges or universities will be re-evaluated at MSU Denver according to the MSU Denver policy in place at the time the test scores are submitted. Students are advised to have an official copy of their score(s) sent to the university in order to have that credit evaluated.
- Any exception to these policies must be approved through the Petition for Degree Exception. Information about filing an appeal through the Petition for Degree Exception is available from the Dean's Office of the College or School corresponding to the student's major.
- Failure to achieve the required score(s) listed will not be entered on the permanent record. However, a copy of the CLEP score report will be retained in the student's file.

Additional information about the content and format of CLEP examinations is available through the College Board website. Examinations may be taken through MSU Denver's Office of Assessment and Testing located in the Tivoli Student Union, Room 347, 303 615-1700. Other official testing centers can be found through the College Board website listed above.

## CLEP Examination Standards

Subject Area	CLEP Exam	Equivalent Course(s)	Minimum Score for MSU Denver Credit	MSU Denver Credit	MSU Denver General Studies	GT Pathways Category
<b>Business</b>	<b>Financial Accounting</b>	ACC 2010 - Principles of Accounting I	50	3	None	None
	<b>Information Systems</b>	CIS 2010 - Foundations of Information Systems	50	3	None	None
	<b>Introductory Business Law</b>	MGT 2210 - Legal Environment of Business I	50	3	None	None
	<b>Principles of Management</b>	MGT 8900*	50	3	None	None
	<b>Principles of Marketing</b>	MKT 8900*	50	3	None	None
<b>Composition and Literature</b>	<b>American Literature</b>	ENG 2220 - American Literature: Civil War to Present	50	3	Arts and Humanities	AH2

	<b>Analyzing and Interpreting Literature<sup>1</sup></b>	ENG 1100 - Introduction to Literature	50	3	Arts and Humanities	AH2
	<b>College Composition</b>	ENG 1010 - Composing Arguments ENG 1020 - Research and Argument Writing	50	6	Written Communication	CO1 and CO2
	<b>College Composition Modular</b>	ENG 1009 - Stretch Composing Arguments B	50	3	Written Communication	CO1
	<b>English Literature</b>	ENG 2330 - British Literature: Late 1700s to the Present	50	3	Arts and Humanities	AH2
	<b>Humanities</b>	LAS 8000	50	3	Arts and Humanities	AH1
<b>History and Social Sciences</b>	<b>American Government</b>	PSC 1010 - American National Government	50	3	Social and Behavioral Sciences	SS1
	<b>History of the United States I</b>	HIS 1210 - American History to 1865	50	3	Historical	HI1
	<b>History of the United States II</b>	HIS 1220 - American History since 1865	50	3	Historical	HI1
	<b>Human Growth and Development</b>	PSY 2210 - Psychology of Human Development	50	3	Social and Behavioral Sciences	SS3
	<b>Introduction to Educational Psychology</b>	PSY 8000	50	3	Social and Behavioral Sciences	SS3
	<b>Introductory Psychology</b>	PSY 1001 - Introductory Psychology	50	3	Social and Behavioral Sciences	SS3
	<b>Introductory Sociology</b>	SOC 1010 - People, Power, and Progress	50	3	Social and Behavioral Sciences	SS3
	<b>Principles of Macroeconomics</b>	ECO 2010 - Principles of Macroeconomics	50	3	Social and Behavioral Sciences	SS3
	<b>Principles of Microeconomics</b>	ECO 2020 - Principles of Microeconomics	50	3	Social and Behavioral Sciences	SS3
	<b>Social Science and History</b>	LAS 8000	50	3	Social and Behavioral Sciences	SS1
	<b>Western Civilization I: Ancient Near East to 1648</b>	HIS 8000	50	3	Historical, Global Diversity	HI1
	<b>Western Civilization II: 1648 to the Present</b>	HIS 8000	50	3	Historical, Global Diversity	HI1

<b>Science and Mathematics</b>	<b>Biology</b>	BIO 1030 - General Biology for Non-Majors	50	6	Natural and Physical Sciences	SC2
	<b>Chemistry</b>	CHE 1800 - General Chemistry I CHE 1810 - General Chemistry II	50	8	Natural and Physical Sciences	SC2
	<b>Natural Sciences</b>	BIO 1030 - General Biology for Non-Majors	50	6	Natural and Physical Sciences	SC2
	<b>Calculus</b>	MTH 1410 - Calculus I	50	4	Quantitative Literacy	MA1
	<b>College Algebra</b>	MTH 1110 - College Algebra for Calculus	50	4	Quantitative Literacy	MA1
	<b>College Mathematics</b>	MTH 1080 - Mathematics for Liberal Arts	50	3	Quantitative Literacy	MA1
	<b>Precalculus</b>	MTH 1400 - Precalculus Mathematics	50	4	Quantitative Literacy	MA1
<b>World Languages</b>	<b>French Language</b>	FRE 8000 (6) FRE 8001 (4)	50-58	10	None	None
	<b>French Language</b>	FRE 8000 (6) FRE 8001 (4) FRE 8002 (3)	59	13	Arts and Humanities	AH4
	<b>French Language</b>	FRE 8000 (6) FRE 8001 (4) FRE 8002 (3) FRE 8003 (3)	60 and up	16	Arts and Humanities	AH4
	<b>German Language</b>	GER 8000 (6) GER 8001 (4)	50-59	10	None	None
	<b>German Language</b>	GER 8000 (6) GER 8001 (4) GER 8002 (3)	60	13	Arts and Humanities	AH4
	<b>German Language</b>	GER 8000 (6)	61 and up	16	Arts and Humanities	AH4



		GER 8001 (4) GER 8002 (3) GER 8003 (3)				
	<b>Spanish Language</b>	SPA 8000 (6) SPA 8001 (4)	50-62	10	None	None
	<b>Spanish Language</b>	SPA 8000 (6) SPA 8001 (4) SPA 8002 (3)	63	13	Arts and Humanities	AH4
	<b>Spanish Language</b>	SPA 8000 (6) SPA 8001 (4) SPA 8002 (3) SPA 8003 (3)	64 and up	16	Arts and Humanities	AH4
	<b>Spanish with Writing</b>	SPA 8000 (6)	50-55	6	None	None
	<b>Spanish with Writing</b>	SPA 8000 (6) SPA 8001 (4)	56-64	10	None	None
	<b>Spanish with Writing</b>	SPA 8000 (6) SPA 8001 (4) SPA 8002 (3)	65-69	13	Arts and Humanities	AH4
	<b>Spanish with Writing</b>	SPA 8000 (6) SPA 8001 (4) SPA 8002 (3) SPA 8003 (3)	70 and above	16	Arts and Humanities	AH4

**Examination scores are based on standards set by NTE/ETS and in consultation with the appropriate department chairperson.**

*\*MGT8900 is equivalent to MGT3000- Organizational Management, but counts as lower division.*

*\*MKT8900 is equivalent to MKT3000- Principles of Marketing, but counts as lower division.*

## DANTES Tests (DSST)

MSU Denver awards credit for Defense Activity for Nontraditional Educational Support (DANTES) Subject Standardized Tests (DSST). Credit may be awarded if the DANTES score is at the ACE (American Council on Education) minimum and the MSU Denver Academic Department approves the credit. To have a DANTES exam evaluated, a DANTES transcript or ACE transcript showing the exams taken and scores received must be submitted to the Office of the Registrar. To request a copy of your DANTES scores, please go to the following website.

For information on test credit, please visit the Colorado Department of Higher Education.

Category	Exam Name	MSU Denver Course Number	Minimum	Credits	MSU Denver Course Name	MSU Denver General Studies	GTPathways Category
<b>Arts</b>	Art of the Western World	ART 8000	400	3	Art Elective	Arts and Humanities	AH1
<b>Behavioral Sciences</b>	General Anthropology	ANT 8000	400	3	Anthropology Electives	Social and Behavioral Sciences	SS3
	Organizational Behavior	MGT 8000	400	3	Management Elective	Social and Behavioral Sciences	SS3
	Lifespan Developmental Psychology	PSY 8000	400	3	Psychology Elective	Social and Behavioral Sciences	SS3
	Substance Abuse	HSP 8000	400	3	Human Services Elective	Social and Behavioral Sciences	SS3
	Human/Cultural Geography	GEG 1300	400	3	Introduction to Human Geography	Social and Behavioral Sciences	SS2
	Health and Human Development	PSY 8000	400	3	Psychology Elective	Social and Behavioral Sciences	SS3
<b>History</b>	A History of the Vietnam War	HIS 8000	400	3	History Elective	Historical	HI1
	The Civil War and Reconstruction	HIS 1220	400	3	American History Since 1865	Historical	HI1
	History of the Soviet Union	HIS 8000	400	3	History Elective	Historical	HI1
<b>Mathematics</b>	Math for Liberal Arts	MTH 8000	400	3	Math Electives	Quantitative Literacy	MA1
	Fundamentals of College Algebra	MTH 1110	400	3	College Algebra for Calculus	Quantitative Literacy	MA1

	Principles of Statistics	MTH 1210	400	4	Introduction to Statistics	Quantitative Literacy	MA1
<b>Natural and Physical Sciences</b>	Astronomy	AST 1040	400	3	Introduction to Astronomy - Solar System	Natural and Physical Sciences	SC2
	Environmental Science	ENV 1200	400	3	Introduction to Environmental Science	Natural and Physical Sciences	SC2
	Principles of Physical Science	PHY 8000	400	3	Physics Elective	Natural and Physical Sciences	SC2
<b>Philosophy</b>	Ethics in America	PHI 8000	400	3	Philosophy Elective	Arts and Humanities	AH3
	Introduction to World Religions	RLG 8000	400	3	Religious Studies Elective	Arts and Humanities	AH3
<b>Written Communication</b>	Principles of Advanced English Composition	ENG 1010	400	3	Composing Arguments	Written Communication	CO1

## International Baccalaureate

Students who complete the IB Diploma Program and the IB examinations are guaranteed admission to the university and are eligible to receive credit and advanced placement standing. To receive credit, a student must receive at least a score of four (4) on each IB examination and call 301-202-3025 or visit this site to request that official scores be mailed directly to the Office of Admissions from the IB organization. For specific equivalencies, see the table below. Please contact the Office of the Registrar at 303-556-3991 for more information. Students should consult with the appropriate department for further advising and with their major departments about acceptance of credits toward their majors.

IB scores that are equivalent to a course with the Oral Communication General Studies designation will receive Oral Communication General Studies credit.

Subject Area	Exam Title	Level of Exam	Subject Code	Course Code	Exam Score	MSU Denver Equivalent Course(s)	Credit Awarded	MSU Denver General Studies
<b>Arts</b>	<b>Dance</b>	Higher	DANCE	4-7H	4 to 7	Theatre 8000	3	None
	<b>Theatre Arts</b>	Higher	THE	4-7H	4 to 7	THE 1210 - Theatre Appreciation	3	Arts and Humanities
		Standard	THE	4-7S	4 to 7	THE 1210 - Theatre Appreciation	3	Arts and Humanities
	<b>Film</b>	Higher	FILM	4-7H	4 to 7	ENG 2860 - Introduction to Film and Media Studies	3	Arts and Humanities

		Standard	FILM	4-7S	4 to 7	ENG 2860 - Introduction to Film and Media Studies	3	Arts and Humanities
	Music	Higher	MUS	4-7H	4 to 7	MUS 1000 - Introduction to Music	3	Arts and Humanities
	Music Creating	Standard	MUSC	4-7S	4 to 7	MUS 1000 - Introduction to Music	3	Arts and Humanities
	Music Group Performing	Standard	MUSGP	4-7S	4 to 7	MUS 1000 - Introduction to Music	3	Arts and Humanities
	Music Solo Performing	Standard	MUSSP	4-7S	4 to 7	MUS 1000 - Introduction to Music	3	Arts and Humanities
Computer Science	Computer Science	Higher	CMPSC	4-7H	4 to 7	CIS 1010 - Introduction to Computers, CIS 8000	6	None
		Standard	CMPSC	4-7S	4 to 7	CIS 1010 - Introduction to Computers	3	None
Social and Behavioral Sciences	Social and Cultural Anthropology	Higher	ANT	4-7H	4 to 7	ANT 1310 - Introduction to Cultural Anthropology, ANT 8000	6	Social and Behavioral Sciences, Global Diversity
		Standard	ANT	4-7S	4 to 7	ANT 1310 - Introduction to Cultural Anthropology	3	Social and Behavioral Sciences, Global Diversity
	Economics	Higher	ECO	4-7H	4 to 7	ECO 2010 - Principles of Macroeconomics, ECO 8000	6	Social and Behavioral Sciences
		Standard	ECO	4-7S	4 to 7	ECO 8000	3	Social and Behavioral Sciences
	Geography	Higher	GEG	4-7H1	4 to 7	GEG 1300 - Introduction to Human Geography, GEG 1100 - Introduction to Physical Geography	6	Social and Behavioral Sciences, Global Diversity
		Standard	GEG	4-7S1	4 to 7	GEG 1300 - Introduction to Human Geography	3	Social and Behavioral Sciences, Global Diversity
	Global Politics	Higher	GPOL	4-7S	4 to 7	PSC 2240 - Global Challenges in the Twenty-First Century	3	Social and Behavioral Sciences, Global Diversity

		Standard	GPOL	4-7H	4 to 7	PSC 8000	3	Social and Behavioral Sciences, Global Diversity
	Psychology	Higher	PSY	4-7H	4 to 7	PSY 1001 - Introductory Psychology, PSY 8888	6	Social and Behavioral Sciences
		Standard	PSY	4-7S	4 to 7	PSY 1001 - Introductory Psychology, PSY 8888	6	Social and Behavioral Sciences
Visual Arts	Art Design A	Higher	ARTD	4-7H	4 to 7	ART 1101 - Art Studio: 2D, ART 8000	6	None
		Standard	ARTD	4-7S	4 to 7	ART 1101 - Art Studio: 2D	3	None
	Art Visual	Higher	ARTV	4-7H	4 to 7	ART 8000	6	None
		Standard	ARTV	4-7S	4 to 7	ART 8000	3	None
Natural and Physical Sciences	Biology	Higher	BIO	4H	4	BIO 1080 - General Biology I, BIO 1081 - General Biology II, BIO 1090 - General Biology Laboratory I, BIO 1091 - General Biology Laboratory II	8	Natural and Physical Sciences
		Higher	BIO	5-7H	5 to 7	BIO 1080 - General Biology I, BIO 1081 - General Biology II, BIO 1090 - General Biology Laboratory I, BIO 1091 - General Biology Laboratory II	8	Natural and Physical Sciences
		Standard	BIO	4-7S	5 to 7	BIO 1030 - General Biology for Non-Majors	4	Natural and Physical Sciences
	Chemistry	Higher	CHE	4-7H	4 to 7	CHE 1100 - Principles of Chemistry, CHE 1150 - Principles of Chemistry Laboratory, CHE 1010 - Chemistry and Society	8	Natural and Physical Sciences
		Standard	CHE	4-7S	4 to 7	CHE 1010 - Chemistry and Society	3	Natural and Physical Sciences
	Environmental Systems and Societies	Standard	ENV	4-7S	4 to 7	ENV 1200 - Introduction to Environmental Science	3	Natural and Physical Sciences

	Physics	Higher	PHY	4-7H	4 to 7	PHY 2010 - College Physics I, PHY 2020 - College Physics II	8	Natural and Physical Sciences
		Standard	PHY	4-7S	4 to 7	PHY 1000 - Physics of Nature	4	Natural and Physical Sciences
Foreign Language A1	French	Higher	FRE	4-7H	4 to 7	FRE 3110 - Survey of French Literature I, FRE 3320 - Cinema in French for Advanced Conversation	6	None
		Standard	FRE	4-7S	4 to 7	FRE 1010 - Elementary French I, FRE 1020 - Elementary French II	10	Oral Communication, Arts and Humanities, Global Diversity
	German	Higher	GER	4-7H	4 to 7	GER 3010 - Third-Year German Conversation, GER 3210 - Survey of German Literature I	6	None
		Standard	GER	4-7S	4 to 7	GER 1010 - Elementary German I, GER 1020 - Elementary German II	10	Oral Communication, Arts and Humanities, Global Diversity
	Spanish	Higher	SPA	4-7H	4 to 7	SPA 3110 - Advanced Conversation, SPA 3250 - Introduction to Literary Studies in Spanish	6	None
		Standard	SPA	4-7S	4 to 7	SPA 1010 - Elementary Spanish I, SPA 1020 - Elementary Spanish II	10	Oral Communication, Arts and Humanities, Global Diversity
	Japanese	Higher	JPS	4-7H	4 to 7	JPS 8000	6	None
		Standard	JPS	4-7S	4 to 7	JPS 8000	3	None
	Latin	Higher	LATN	4-7H	4 to 7	LANG 8000	6	
		Standard	LATN	4-7S	4 to 7	LANG 8000	3	
	Russian	Higher	RUSN	4-7H	4 to 7	LANG 8000	6	
		Standard	RUSN	4-7S	4 to 7	LANG 8000	3	
Foreign Language B	French	Higher	FRE B	4-5H	4 to 5	FRE 1010 - Elementary French I, FRE 1020 - Elementary French II	10	Oral Communication, Arts and Humanities, Global Diversity

		Higher	FRE B	6-7H	6 to 7	FRE 1010 - Elementary French I, FRE 1020 - Elementary French II, FRE 2010 - Intermediate French I	13	Oral Communication, Arts and Humanities, Global Diversity
		Standard	FRE B	4S	4	FRE 1010 - Elementary French I	5	Oral Communication
		Standard	FRE B	5-6S	5 to 6	FRE 1010 - Elementary French I, FRE 1020 - Elementary French II	10	Oral Communication, Arts and Humanities, Global Diversity
		Standard	FRE B	7S	7	FRE 1010 - Elementary French I, FRE 1020 - Elementary French II, FRE 2010 - Intermediate French I	13	Oral Communication, Arts and Humanities, Global Diversity
	<b>German</b>	Higher	GER B	4-7H	4 to 7	GER 2110 - German Reading and Conversation, GER 2120 - German Civilization	6	None
		Standard	GER B	4-7S	4 to 7	GER 1010 - Elementary German I, GER 1020 - Elementary German II	10	Oral Communication, Arts and Humanities, Global Diversity
	<b>Spanish</b>	Higher	SPA B	4-7H	4 to 7	SPA 2010 - Intermediate Spanish I, SPA 2020 - Intermediate Spanish II	6	None
		Standard	SPA B	4-7S	4 to 7	SPA 1010 - Elementary Spanish I, SPA 1020 - Elementary Spanish II	10	Oral Communication, Arts and Humanities, Global Diversity
<b>History</b>	<b>History of Africa</b>	Higher	HISA	4-7H	4 to 7	HIS 8000	6	Historical
		Standard	HISA	4-7S	4 to 7	HIS 8000	3	Historical
	<b>20th Century World History</b>	Standard	HISA	4-7S	4 to 7	HIS 1040 - World History since 1500	3	Historical, Global Diversity
	<b>20th Century World History- The Americas</b>	Higher	HISW A	4-7S	4 to 7	HIS 8000	6	Historical
	<b>History of Asia</b>	Higher	HISS	4-7H	4 to 7	HIS 8000	6	Historical
		Standard	HISS	4-7S	4 to 7	HIS 8000	3	Historical
	<b>20th Century World History- European</b>	Higher	HISW E	4-7	4 to 7	HIS 1045 - Europe, Renaissance to the Present, HIS 8000	6	Historical, Global Diversity

English	English Literature	Higher	ENGA-1B	4-7H	4 to 7	ENG 1100 - Introduction to Literature	3	Arts and Humanities
		Standard	ENGA-1B	4-7S	4 to 7	ENG 1100 - Introduction to Literature	3	Arts and Humanities
	English A Language and Literature	Higher	ENGA-1A and ENGA-1B	4-7H	4 to 7	ENG 1010 - Composing Arguments, ENG 1100 - Introduction to Literature	6	Written Communication, Arts and Humanities
		Standard	ENGA-1A	4-7S	4 to 7	ENG 1010 - Composing Arguments	3	Written Communication
	English Language	Higher	ENGA-1A	4-7H	4 to 7	ENG 1010 - Composing Arguments	3	Written Communication
		Standard	ENGA-1A	4-7S	4 to 7	ENG 1010 - Composing Arguments	3	Written Communication
Mathematics	Mathematics	Higher	MATH	4H	4	MTH 1400 - Precalculus Mathematics	4	Quantitative Literacy
		Higher	MATH	5-4H	5 to 7	MTH 1410 - Calculus I	4	Quantitative Literacy
		Standard	MATH	4-7S	4 to 7	MTH 1110 - College Algebra for Calculus	4	Quantitative Literacy
	Further Mathematics	Higher	MATHF	4-7H	4 to 7	MTH 2140 - Computational Matrix Algebra, MTH 2410 - Calculus II	6	Quantitative Literacy
	Mathematics Applications and Interpretations	Higher	MATHAI	4-7H	4 to 7	MTH 8000	6	Quantitative Literacy
		Standard	MATHAI	4-7S	4 to 7	MTH 8000	3	Quantitative Literacy
	Mathematics Analysis and Approaches	Higher	MATHAA	4-7H	4 to 7	MTH 8000	6	Quantitative Literacy
		Standard	MATHAA	4-7S	4 to 7	MTH 8000	3	Quantitative Literacy
	Math Methods	Standard	MATHM	4S	4	MTH 8000	3	Quantitative Literacy
		Standard	MATHM	5-7S	5 to 7	MTH 1110 - College Algebra for Calculus	4	Quantitative Literacy
	Math Studies	Standard	MATHS	4-7S	4 to 7	MTH 1080 - Mathematics for Liberal Arts	3	Quantitative Literacy
Philosophy	Philosophy	Higher	PHIL	4-7H	4 to 7	PHI 1010 - The Big Questions: An Introduction to Philosophy	3	Arts and Humanities



		Standard	PHIL	4-7S	4 to 7	PHI 1010 - The Big Questions: An Introduction to Philosophy	3	Arts and Humanities
	<b>World Religions</b>	Standard	WREL	4-7S	4 to 7	PHI 8000	3	Arts and Humanities, Global Diversity
<b>Exercise Science</b>	<b>Sports and Exercise Science</b>	None	None	None	None	None	None	None
<b>Business</b>	<b>Business Management</b>	None	None	None	None	None	None	None

# Departmental Credit by Examination

A department may grant a student credit for college courses for which the student requests and passes appropriate examinations. The non-refundable processing fee reflects actual administration costs and must be paid prior to taking the examination. Credit through departmental examination is based on knowledge equivalent to a regular course offered by the university. Omnibus-numbered courses are excluded. No record of failures on such examinations will be entered on the student's permanent record.

The following policies apply to all courses:

- Examinations cannot be taken to raise grades, to remove failures, or to remove notations that have no effect on the GPA.
- Credit by examination is not applicable toward the semester hour residency requirements. See [Degree and Certificate Requirements](#).
- Credit by examination will not be granted for courses attended as an auditor.
- Examinations for credit will be taken at a time specified by the department. The department may limit the number of times students can attempt to challenge a course in one semester or in total. See department for details.
- The hours granted for credit by exam are not included as a part of the student's semester enrollment. The credit will appear on the transcript for the semester in which the examination was taken, but the hours do not count as part of the student's total enrollment for the purposes of financial aid or any other purpose predicated on total hours of enrollment for a given semester.
- Any exception to these policies must be approved through the Petition for Degree Exception. Information about filing an appeal through the Petition for Degree Exception is available from the Dean's Office of the College or School corresponding to the student's major.

The following policies only apply to courses with a gtPathways designation:

- MSU Denver will not grant credit for a departmental examination if, prior to the semester the exam is taken, a student has completed, was enrolled in, or is enrolled in, college courses equivalent to the subject material of the exam.
- A grade equivalent to "C-" or higher must be attained on the examination in order to receive credit, but credit earned for the course will be recorded without a grade on the student's permanent record and are not considered in computing university grade point averages.

The following policies only apply to courses that do not have a gtPathways designation:

- Permission for departmental credit by examination must be obtained in advance from the instructor giving the

examination, the department chair, and the appropriate dean.

- Credit by examination cannot be obtained for a course in which a student has been enrolled at MSU Denver or at another regionally accredited college or university.
- MSU Denver will not grant credit for a departmental examination if, prior to the semester the exam is taken, a student has completed, is enrolled in, or was enrolled in, college courses equivalent to or more advanced than the subject material of the exam. This restriction includes courses designated at a higher level (i.e., 1000, 2000, 3000, 4000) within the same subject prefix (e.g., HIS, ENG).
- A grade equivalent to "B" or higher must be attained on the examination in order to receive credit, but credits earned for the course will be recorded without a grade on the student's permanent record and are not considered in computing university grade point averages.

Applications for [departmental credit by examination](#) are available at the [Office of the Registrar](#) (Student Success Building, Suite 160, #3).

## Portfolio Assessment

Students may apply for credit for college-level learning gained through experience by preparing and submitting a prior learning portfolio. Credit is awarded on the basis of a careful assessment of the prior learning portfolio by faculty in the department from which credit is sought. Portfolio assessment is available in many, but not all, academic departments. To earn credit, a student must be degree- or certificate-seeking.

The portfolio is developed with the assistance of the Assistant Registrar, Prior Learning Assessment. Portfolio assessment may be used to apply for credit for specific courses listed in the *Catalog*. Students may also apply for credit for omnibus courses through portfolio assessment with the permission of the appropriate academic department.

Students seeking Prior Learning Credit through Portfolio creation are required to take the 1-credit, EDS 2680 - Portfolio Development Workshop. Students may submit multiple portfolios (approved by major departments) thereafter.

The cost for Portfolio Submission is listed on the [Prior Learning Assessment website](#).

Advising sessions about portfolio assessment and other credit for prior learning options are held on a regular basis. For assistance and further information, contact the Prior Learning Specialist at 303-605-5574 or the [Office of the Registrar](#).

## Credit for Military Training, Military Occupational Specialties, and Other Training Programs

## Evaluated by the American Council on Education (ACE)

VA students' records must be kept for 3 years following the ending date of the last period certified to VA. Referenced law: Title 38 CFR 21.4209(f))

Military training, Military Occupational Specialties, and other educational programs that have been assessed for college credit by the [American Council on Education](#) (ACE) will be evaluated for transfer credit at MSU Denver for Veteran, Reserve, and Active Duty students.

In addition, MSU Denver offers the following package of transfer credit and waivers:

- Either 6 semester hours of lower division elective credit (MILR 8000) for all students who have served four years active duty in the U.S. military OR 3 semester hours of lower division elective credit (MILR 8000) for all students who have served two years active duty in the U.S. military.
- 6 additional semester hours of upper division elective credit (MILR 9000) for students who have either served two terms of service of four years each or attained the rank of E5 or above in the U.S. military.
- 3 credits of COMM 1010 - Presentational Speaking for all students who served at least one enlistment and achieved the rank of E5 or above in the U.S. military.
- Waiver of the Global Diversity requirement for all students who accumulate at least 112 days of foreign service in the U.S. military.

Applicable credit and waivers will be granted upon presentation of evidence of either continued active service; transfer to the Reserve component; or discharge and eligibility for applicable VA educational benefits. Students who have been discharged from active service should submit their form DD214 to the [Office of the Registrar](#) for evaluation.

To request an official military transcript, visit [jst.doded.mil](http://jst.doded.mil) and have it sent to MSU Denver. Community College of the Air Force transcripts can be requested [here](#).

Contact Assistant Registrar, Prior Learning Assessment in the Office of the Registrar at 303-605-7626 for the following:

- Guidance in optimizing the use of prior learning assessment credit to accelerate the student's path to degree or certification completion.
- Questions regarding credit awarded for military experience or other prior learning assessment options.

The evaluation of previous postsecondary education and training is mandatory and required for VA beneficiaries. For students utilizing Veterans benefits who are approved for transfer credit as a result of this evaluation, the institution will grant appropriate credit, reduce the program length proportionately, notify the student and Veterans Affairs in writing of this decision, and adjust invoicing of the VA accordingly.

## **Credit for Industry Licenses/Certificates**

Non-collegiate training such as corporate and educational programs, certifications, apprenticeships, and professional licenses may be considered for transfer credit with the approval of the academic department.

## Campus Policies

MSU Denver is located on the Auraria Campus, which is also home to the University of Colorado Denver and the Community College of Denver. The Auraria Higher Education Center (AHEC) oversees the shared services of the Auraria Campus. For information on campus policies, visit the AHEC policy website, <http://www.ahec.edu/policies>.

## Continuing Education and Noncredit Opportunities

Metropolitan State University of Denver offers several types of continuing education and non-credit opportunities. Please visit the Continuing Education and Non-Credit Offerings Catalog.

### Innovative and Lifelong Learning

- [Innovative and Lifelong Learning \(I&LL\)](#) programs offer top-quality and flexible MSU Denver credits and continuing education opportunities.

# Degree and Certificate Requirements

Students are responsible for full knowledge of the provisions and regulations pertaining to their program contained in this catalog and elsewhere. Students have final responsibility for completing the requirements for a degree and are urged to seek advising. Students should never assume that they have approval to deviate from a stated requirement without a properly signed statement to that effect. Please refer to the Academic Policies and Procedures in this catalog.

For degree requirements, click on a link to be taken to the entry below.

- [Requirements for All Bachelor Degrees](#)
- [Requirements for Extended Majors](#)
- [Requirements for a Second Degree](#)
- [Requirements for Concurrent Degrees](#)
- [Requirements for Dual Majors](#)
- [Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice \(ESSJ\) Graduation Requirement](#)
- [Senior Experience Graduation Requirement](#)

## Requirements for All Bachelor Degrees

To earn a Bachelor of Science, Bachelor of Arts, Bachelor of Music Education, Bachelor of Music, or Bachelor of Fine Arts degree, a student must satisfy the following minimum requirements, plus any others stipulated for the degree for which a student is a candidate. Please refer to the [Academic Policies and Procedures](#) in this catalog.

- Complete a minimum of 120 semester hours with a cumulative GPA of 2.0 or higher for all coursework.
- Complete at least 39 semester hours in upper-division courses (3000- and 4000-level courses).
- Complete all General Studies requirements listed for the degree and major.
- Complete a three-credit hour Ethnic Studies & Social Justice course requirement.
- Complete a three-credit hour Senior Experience course requirement. This course must be taken at MSU Denver.
- Complete one subject major consisting of not less than 30 semester hours.
- Students may not major and minor in the same discipline and are encouraged to obtain verification from an advisor if uncertainty exists.
- Complete all requirements of the student's department, school, or college.

- Achieve a cumulative GPA of 2.0 or higher in all MSU Denver courses that satisfy the requirements for the major and for all MSU Denver courses that satisfy requirements for a minor. Students should check with an advisor for special GPA program requirements.
- File an application for graduation through the [Student Hub](#) with the [Office of the Registrar](#) according to published dates in the [Academic Calendar](#).
- Academic residency (classroom credit) requirements:
  - Complete a minimum of 30 semester hours of academic credit applicable to the degree at MSU Denver.
  - Complete at least 8 upper-division (3000- and 4000-level courses) semester hours of the major.

## Requirements for Extended Majors

These majors require course work that is so extensive and in-depth that it may take more than 120 credits to complete the major.

### Credit Limitations

- No more than 30 semester hours of omnibus-numbered courses may be applied toward graduation requirements, except for music.
- No more than 30 semester hours taken by correspondence may be applied toward a bachelor's degree.
- No more than 15 semester hours of internship credit may be applied toward a bachelor's degree.
- No more than 16 semester hours in human performance and leisure activity (ESSA) courses will be counted towards a bachelor's degree for students who are not majoring in Human Performance and Sport.
- No more than 4 semester hours in varsity sports (ATH) courses will be counted towards a bachelor's degree for students who are not majoring in Human Performance and Sport.
- No more than 7 semester hours in music ensemble courses will be counted toward a bachelor's degree for students who are not majoring in music.
- No more than 12 semester hours of independent study credit may be applied toward a bachelor's degree.

## Student Bill of Rights

The General Assembly implemented the Student Bill of Rights (C.R.S. 23-1-125) to assure that students enrolled in public institutions of higher education have the following rights:

1. Students should be able to complete their associate of arts and associate of science degree programs in no more than sixty credit hours or their baccalaureate programs in no more than one hundred twenty credit hours unless there are additional degree requirements recognized by the commission;

2. a student can sign a two-year or four-year graduation agreement that formalizes a plan for that student to obtain a degree in two or four years, unless there are additional degree requirements recognized by the commission;
3. students have a right to clear and concise information concerning which courses must be completed successfully to complete their degrees;
4. students have a right to know which courses are transferable among the state public two-year and four-year institutions of higher education;
5. students, upon completion of core general education courses, regardless of the delivery method, should have those courses satisfy the core course requirements of all Colorado public institutions of higher education;
6. students have a right to know if courses from one or more public higher education institutions satisfy the students' degree requirements;
7. a student's credit for the completion of the core requirements and core courses shall not expire for ten years from the date of initial enrollment and shall be transferrable.

- Students must satisfy the Ethnic Studies & Social Justice and Senior Experience course requirements for the second degree even if these requirements were met as part of the first degree.
- Students must have a cumulative GPA of 2.0 or higher for all coursework taken after the awarding of the previous degree. Students should check with an advisor for special GPA program requirements.
- An application for graduation must be filed through the [Student Hub](#) with the [Office of the Registrar](#) according to published dates in the [Academic Calendar](#).

## Requirements for a Second Bachelor's Degree

To earn a second bachelor's degree, a student must satisfy the following minimum requirements, plus any others stipulated for the degree for which a student is a candidate.

Students should be aware that depending on the amount of curricular overlap between the first-degree program and the second-degree program, it might be difficult or impossible to fulfill the degree requirement. Students should consult with an advisor in the department of the prospective program to determine the feasibility of a second-degree.

Please refer to the [Academic Policies and Procedures](#) in this catalog; requirements for a dual major can be found under Requirements for [Dual Majors](#).

Students must comply with the following to be awarded an additional bachelor's degree:

- The first bachelor's degree must be recognized by Metropolitan State University of Denver.
- Declaration of a second bachelor's degree major must be approved by the major department. Failure to do so may result in unawareness of issues with the completion of the degree requirements.
- Students must complete all degree requirements for the major.
- Students do not need to complete a minor unless specifically required by the major.
- General Studies will be considered complete unless deficiencies exist according to the major program requirements.

## *Academic Residency Requirements*

- Students previously awarded a bachelor's degree by another accredited institution must complete a minimum of 30 credit hours at MSU Denver, with a minimum of eight semester hours in upper division courses (3000- and 4000-level courses) in the major, after the awarding of the previous degree.
- Students previously awarded a bachelor's degree by MSU Denver do not need to meet the academic residency requirements but must complete a minimum of eight semester hours in upper division courses (3000- and 4000-level courses) in the major and complete required coursework for their second degree.

## Requirements for Concurrent Degrees

Students must comply with the following to be awarded two diplomas for two concurrent baccalaureate degrees of different types (e.g., B.S. and B.M.E.):

- Declaration of concurrent degrees requires department approval(s) and must be made prior to completion of 90 hours. Both degrees must utilize the same catalog year.
- Students who declare two degrees do not need to complete a minor unless the minor is specifically required for either of the majors.
- Students must satisfy all requirements for both majors.
- Students must complete a minimum requirement of eight unique MSU Denver upper-division semester hours for each major.
- Students must complete a minimum requirement of 30 MSU Denver semester hours.
- Students must complete a minimum upper division requirement of 39 hours total.
- Students must complete university requirements for General Studies, including General Studies courses specific to each major.
- Students must satisfy only one Ethnic Studies & Social Justice Course requirement.

- Students must complete two unique Senior Experience courses.

## Requirements for Dual Majors

Students must comply with the following to be awarded one diploma for a single baccalaureate degree with dual majors (B.A., B.F.A., B.M., B.M.E., or B.S.). See advisors in each of the majors for specific degree requirements.

- Students who declare dual majors must select a primary major. A primary major is the major for which General Studies requirements will be satisfied (students who declare dual majors need not satisfy General Studies requirements for their second major).
- Students who declare dual majors do not need to complete a minor unless the minor is specifically required for either of the majors.
- Students who complete two concentrations under one major have not completed two majors.

## Certificate Requirements

Students are responsible for full knowledge of the provisions and regulations pertaining to their program contained in this catalog and elsewhere. Students have final responsibility for completing the requirements for a certificate and are urged to seek advising. Students should never assume that they have approval to deviate from a stated requirement without a properly signed statement to that effect. Please refer to the [Academic Policies and Procedures](#) in this catalog.

To earn a certificate, a student must satisfy the following minimum requirements, plus any others stipulated for the certificate. For students in a standalone certificate program to receive financial aid, the certificate must be 24 credits or more and must be approved by the U.S. Department of Education prior to students enrolling.

- Complete a minimum of 15 semester hours (or 18 hours for post-baccalaureate certificates) as recommended by the certificate program. Credit hours may not be waived from certificate programs.
- Complete all special requirements of a department, school, or college.
- Achieve at least a "C" or higher in each of the certificate courses. The courses may not be taken Pass/Fail.
- A maximum of one course substitution is permitted per certificate. Lower division courses may not replace upper division courses.
- File an application for graduation through the [Student Hub](#) with the [Office of the Registrar](#) according to published dates in the Academic Calendar.
- To meet academic residency requirements, students must complete a minimum of 60% of semester hours applicable to the certificate at MSU Denver.

## General Studies Requirements

A baccalaureate degree includes a broad-based education that prepares students for the more focused study of the academic major. The general education component of the degree equips each student with crucial intellectual skills in analysis, research, and communication, in addition to foundational skills. General education coursework offers an introduction to a broad range of studies in the natural sciences, the human condition, aesthetic experience, and global and cultural diversity.

Click [here](#) to view the complete General Studies curriculum.

## Ethnic Studies & Social Justice and Senior Experience Course Requirements

In addition to completing the General Studies requirements, a student must complete a 3-credit ESSJ course and a 3-credit Senior Experience course, or selection of courses, to be awarded a bachelor's degree from MSU Denver. The ESSJ course does not require three credits as a separate category and can be taken in the major, minor, or as an elective. The rules pertaining to those requirements and the courses that will satisfy those requirements are described below.

## Ethnic Studies & Social Justice Graduation Requirements

The Ethnic Studies & Social Justice (ESSJ) curriculum requirement is designed to equip students with the tools to challenge, understand, and contextualize the treatment of racially and ethnically marginalized groups in the United States. As a fluid and contested space, the United States has been a historically, geographically, and politically contingent region. These courses center the experiences of marginalized groups and examine the ways in which the existences and experiences of these groups have been historically shaped by oppression and systems of white supremacy. ESSJ coursework interrogates relationships between power, privilege, and oppression.

Click [here](#) to view the Ethnic Studies & Social Justice requirements and course offerings.

## Senior Year Assessment Examinations and Other Activities

In their senior year, students may be required to participate in an assessment of their education. The faculty has determined educational goals or outcomes that it wants graduates to achieve. A copy of those goals and the methods by which their achievements are measured can be obtained from the department offices.



The Senior Experience course provides a culmination of the undergraduate experience, allowing students to synthesize their learning, using critical analysis and logical thinking. Students may use the course to satisfy major or minor requirements if the course is approved for that use. Students should consult with their advisor and check prerequisites. Students must complete a Senior Experience

course at the end of the undergraduate program and must take the course or courses at MSU Denver. Senior Experience courses include "senior standing" as a prerequisite in addition to other prerequisites designated by the department. In some cases, students may need to take two courses to satisfy the requirement. See an advisor in the major for specific degree requirements.

# General Studies Requirements

A baccalaureate degree includes a broad-based education that prepares students for the more focused study of the academic major. The general education component of the degree equips each student with crucial intellectual skills in analysis, research, and communication, in addition to foundational skills. General education coursework offers an introduction to a broad range of studies in the natural sciences, the human condition, aesthetic experience, and global and cultural diversity.

For additional information regarding General Studies, click on a link to be taken to the entry below.

- [General Studies Courses by Category](#)
- [General Studies Mission](#)
- [Structure of General Studies](#)
- [Distribution and Credit Requirements](#)
- [Timing of Completion](#)
- [Rules for the General Studies Program](#)
- [Additional Rules for Specific Majors](#)
- [Transfer Credit Rules](#)
- [State-Guaranteed General Education Courses](#)

## General Studies Mission

The General Studies program provides the foundation for the Bachelor's degree. Students develop thinking, reasoning, and communication skills while discovering new ideas and expanding their views. The coursework is designed to create the opportunity for learning across different disciplines and builds experiences for students as they grow into lifelong learners.

## Structure of General Studies

The General Studies Program is structured around the following three goals:

- Develop intellectual and practical skills
- Explore essential knowledge, perspectives, and methods in Arts and Humanities, History, Social and Behavioral Sciences, and Natural and Physical Sciences
- Understand the global interconnectedness of diverse individuals, communities and societies

Each goal is supported by a set of student learning outcomes (SLOs) that are addressed by the courses in eight different categories.

## Distribution and Credit Requirements

To complete the General Studies Program, students must take approved courses that fulfill the following distribution and credit requirements:

CATEGORY	SEMESTER HOURS
Written Communication	6
Oral Communication	3
Quantitative Literacy	3
Arts and Humanities	6
Historical	3
Natural and Physical Sciences	6
Social and Behavioral Sciences	6
Global Diversity	0 or 3*
TOTAL	33 minimum

*\*Students may fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## General Policy Related to Timing of Completion

The following course categories must be completed within the first 30, college-level credits (including credits completed at MSU Denver and those transferred from other institutions):

- Written Communication (first 3 semester hours of coursework)
- Oral Communication (3 semester hours of coursework)
- Quantitative Literacy (3 semester hours of coursework)

The following course category must be completed within the first 45 or 90, college-level credits (including credits completed at MSU Denver and those transferred from other institutions):

- Written Communication remaining 3 semester hours of coursework)
- A 45-credit rule applies to students completing a CO-1 (beginning writing course) and CO-2 (intermediate writing course) requirement.
- A 90-credit rule applies to students completing a CO-2 (intermediate writing course) and CO-3 (advanced writing course) requirement.
- Lists of courses for each category can be found in the course lists section.

The following course categories must be completed within the first 90, college-level credits (including credits completed at MSU Denver and those transferred from other institutions):

- Arts and Humanities (6 semester hours of coursework)
- Historical (3 semester hours of coursework)
- Natural and Physical Sciences (6 semester hours of coursework)
- Social and Behavioral Sciences (6 semester hours of coursework)
- Global Diversity (one course designated "global" from any category will fulfill both the global diversity requirement and the appropriate credits in that category)

Students who have not completed the quantitative literacy, oral communication, and the first three credits of the written communication requirements within the first 30 semester hours will be required, through an advising hold, to complete an advising process and register for the required course(s). Students who have completed 45 semester hours and have not completed the written communication, oral communication, and quantitative literacy requirements must enroll in and successfully complete courses that fulfill these requirements. This advising and registration process will continue until the requirements have been fulfilled. Students pursuing CO-2 and CO-3 requirements will have 90 credit hours, instead of 45 credit hours, to fulfill the second 3-hours portion of their Written Communication requirements.

**Transfer Students:** New transfer students must complete the written communication, oral communication, and quantitative literacy requirements within their first two semesters at MSU Denver or by 45 total semester hours, whichever is later. Students pursuing CO-2 and CO-3 requirements will have 90 credit hours, instead of 45, to fulfill the second 3-hour portion of their Written Communication requirements. All other provisions of the policy are the same.

## Rules for the General Studies Program

To satisfy a particular general studies requirement, a course must appear on the list of approved general studies courses at the time of enrollment in the course.

- General studies courses need not be counted toward general studies requirements. They may be taken as electives or to satisfy requirements in the major or degree program.
- Students with partial credits (for example, resulting from credit transferred from institutions utilizing quarters or trimesters) may receive deviations of less than one hour in the general studies course categories requirements (written communication, oral communication, quantitative literacy, arts and humanities, historical, natural and physical sciences, social and behavioral sciences, and global diversity), provided the student completes at least 33 semester hours of general studies coursework.
- Courses taken for a pass/fail grade cannot be counted toward general studies.

- Students may use the Ethnic Studies & Social Justice (ESSJ) course to satisfy more than one requirement.
- Students seeking a second baccalaureate degree will be considered to have fulfilled MSU Denver's general studies requirements. However, departments may require that these students take additional coursework outside of the major.
- To fulfill General Studies requirements for courses taken at MSU Denver, students must achieve a grade of D- or higher in all categories, with the exception of written communication, which demands a grade of C- or higher. While these grades denote the baseline for General Studies credit, certain prerequisites or specific requirements within a student's major, minor, or certificate may necessitate higher grades.

## Additional Rules for General Studies for Specific Majors

- Nursing Majors:** Credit for biology courses of anatomy and physiology, in which the student earned a grade of "C" or better, may be substituted for the natural and physical sciences requirement for all students with a nursing major.
- Teacher Education Licensure Programs:** Students in programs currently requiring MUS 3060/ARTH 3060 may receive general studies credit in the arts and humanities category for the 2016-2017 academic year.

## General Studies Designation for Transfer Courses

The following rules apply to transfer students from two-year colleges in Colorado.

Metropolitan State University of Denver will:

- Accept courses that are part of the state's guaranteed transfer curriculum (*gtPathways*) as fulfilling MSU Denver's general studies requirements. Additional specific lower-division courses may be required for certain degree programs. Please check with a departmental advisor and/or the Office of the Registrar for more information.
- MSU Denver will accept all credit hours of acceptable course work for automatic transfer from an associate of arts or associate of science degree with designation.
- Review and accept on a course-by-course basis for general studies credit courses that do not appear on the *gtPathways* list. General studies equivalency will be determined by prefix, course title, category, and catalog description.
- If no transfer course satisfies the global diversity requirement, the student must take an approved global diversity course.

Transfer courses to meet General Studies requirements will be accepted from all other institutions under the following guidelines:

- Transferable courses equivalent to an existing General Studies course will satisfy the corresponding General Studies requirement. Equivalency will be determined by the department offering the course. Once a course has been approved by a department, it will be given the status of an approved transferable General Studies course.
- Transferable courses that are not equivalent to an existing MSU Denver course will be evaluated for General Studies designation by the department where the majority of the course content resides.
- If a transferable course is interdisciplinary, MSU Denver transfer evaluators will consult with the department(s) where the majority of the course content resides. The course will be evaluated for General Studies designation by those departments.
- If a transferable course does not clearly correspond to an MSU Denver department, the course will be evaluated for General Studies designation by the Faculty Senate General Studies Review Committee.
- For all situations not addressed above, the course will be evaluated for General Studies designation by the Faculty Senate General Studies Review Committee.
- An appeal can be made to the Associate Vice President of Curriculum, Academic Effectiveness, and Policy Development.

- Demonstrate proficiency with conventions, including spellings, grammar, mechanics, and word choice appropriate to the writing task.

## Rules

1. Students must complete a placement to assess their writing skills. Placement may be in ENG 1008 and ENG 1009, ENG 1010 with ENG 1001, or ENG 1010.
2. Students shall satisfy the Written Communication course requirement and credit will be granted if they:
  - a. pass 6 hours of approved Written Communication courses with a combination of a CO1 and CO2 or a CO2 and a CO3,
  - b. pass a CLEP or AP test approved by a Department offering an approved Written Communication course and the remaining Written Communication course, or
  - c. transfer equivalent courses.
3. To receive credit for Written Communication, the student must receive a grade of "C-" or better in each course.
4. To receive transfer credit for ENG 1020, the course must have been taken within the past 10 years.

## Courses

### CO1:

- ENG 1009 - Stretch Composing Arguments B **Credits:** 3
- ENG 1010 - Composing Arguments **Credits:** 3

### CO2:

- ENG 1020 - Research and Argument Writing **Credits:** 3
- ENG 1021 - Honors Research and Argument Writing **Credits:** 3

### CO3:

- ARTH 2600 - Reading and Writing Visual Culture **Credits:** 3
- ENG 2025 - Reading and Writing Popular Culture **Credits:** 3
- ENG 3525 - Scholarly Writing **Credits:** 3
- ENG 3526 - Writing in the Sciences **Credits:** 3
- ENG 3527 - Professional Writing **Credits:** 3
- HIS 3000 - Historical Writing and Thinking **Credits:** 3

## Oral Communication Requirement

**Description:** Students learn to perform effective and ethical oral communication that is appropriate to diverse audiences, settings, media, and goals.

Students must complete a minimum of 3 semester hours to satisfy the oral communication requirement.

## Written Communication Requirement

**Description:** Written communication is the development and expression of ideas in writing across many genres and styles. It includes understanding how writers may shape texts for their specific rhetorical situation. It includes multimodal composing and the creation of texts that combine words, images, and/or data. Written communication abilities develop through interactive and iterative experiences across the curriculum.

Students must complete a minimum of 6 semester hours to satisfy the written communication requirement.

### Student Learning Outcomes

- Exhibit a thorough understanding of audience, purpose, genre, and context that is responsive to the situation.
- Create and develop ideas within the context of the situation and the assigned task(s).
- Apply formal and informal conventions of writing, including organization, content, presentation, formatting, and stylistic choices, in particular forms and/or fields.
- Critically read, evaluate, apply, and synthesize evidence and/or sources in support of a claim.
- Use an appropriate documentation system.

## Student Learning Outcomes

- Develop a clear, purposeful message with coherent and effective content.
- Incorporate various and credible supporting material (e.g. examples, statistics, analogies, illustrations, and quotations).
- Practice effective listening strategies that enhance understanding, evaluation and engagement.
- Adapt to varied audiences, their beliefs, values, and attitudes, as well as to features of contexts, situations, and interactions.
- Perform skillful non-verbal communication (e.g. vocal variety, pace and physical behavior) appropriate to audience and context.
- Perform skillful verbal communication (e.g. clear, vivid, and/or compelling language) appropriate to audience and context.

## Courses

### Select one:

- ASL 1020 - American Sign Language II **Credits: 3**
- CHI 1010 - Elementary Chinese I **Credits: 3**
- COMM 1010 - Presentational Speaking **Credits: 3**
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**
- FRE 1010 - Elementary French I **Credits: 5**
- GER 1010 - Elementary German I **Credits: 5**
- HON 1013 - Presentational Speaking **Credits: 3**
- ITA 1010 - Elementary Italian I **Credits: 5**
- JPS 1010 - Elementary Japanese I **Credits: 3**
- PHI 1110 - Language, Logic & Persuasion **Credits: 3**
- SLHS 1620 - American Sign Language II **Credits: 3**
- SPA 1010 - Elementary Spanish I **Credits: 5**
- THE 2226 - Acting for Non-Majors: Communication in Performance **Credits: 3**

Approved equivalent transfer courses and credits awarded through AP or IB will receive the Oral Communication designation. Credits earned through CLEP scores for these courses will not be used to satisfy the oral communication requirement.

## Quantitative Literacy Requirement

**Description:** Competency in quantitative literacy represents a student's ability to use quantifiable information and mathematical analysis to make connections and draw conclusions. The main focus of each Quantitative Literacy course is the use of mathematical techniques and analysis, with problems from a broad spectrum of real-life and abstract settings requiring translation to and from mathematical forms.

Students must complete a minimum of 3 semester hours to satisfy the quantitative literacy requirement.

## Student Learning Outcomes

- Apply mathematical techniques to the analysis of quantitative problems.
- Communicate the mathematical process and results in text, graphics, and symbols.

## Rules

1. Students must complete a placement test to determine their quantitative abilities. Those students whose scores fall below the minimum benchmark must complete developmental coursework in mathematics before enrolling in any Quantitative Literacy course.
2. Students satisfy the Quantitative Literacy course requirement and credit will be granted if they:
  - a. pass a course that has been approved for General Studies Quantitative Literacy credit,
  - b. pass a CLEP, AP, or IB test approved by a department offering an approved Quantitative Literacy course,
  - c. successfully complete a math course for which a Quantitative Literacy course is a prerequisite, or
  - d. transfer an equivalent course.

## Courses

### Select one:

- MTH 1080 - Mathematics for Liberal Arts **Credits: 3**
- MTH 1081 - Mathematics for Liberal Arts with Laboratory **Credits: 3**
- MTH 1109 - College Algebra Stretch, Part II **Credits: 4**
- MTH 1110 - College Algebra for Calculus **Credits: 4**
- MTH 1111 - College Algebra for Calculus with Laboratory **Credits: 4**
- MTH 1112 - College Algebra Through Modeling **Credits: 4**
- MTH 1115 - College Algebra through Modeling with Laboratory **Credits: 4**
- MTH 1210 - Introduction to Statistics **Credits: 4**
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits: 4**
- MTH 1311 - Finite Mathematics for the Management and Social Sciences with Laboratory **Credits: 4**
- MTH 1610 - Integrated Mathematics I **Credits: 3**

## Arts and Humanities Requirement

**Description:** In Arts and Humanities courses students interpret, analyze, and create texts and other artistic works to deepen their

understanding of the various contexts that shape the human experience and explore fundamental questions of identity, value, diversity, and meaning.

Students must complete a minimum of 6 semester hours to satisfy the arts and humanities requirement.

## Student Learning Outcomes

- Describe how the context (historical, racial, ethnic, material, technological, religious, intellectual, cultural, gender, etc.) influences the creation, content, or interpretation of a text, performance, work of art, etc.
- Critically engage with a text, performance, work of art, etc. by applying social/political, epistemic, aesthetic, pragmatic, moral/ethical, or other discipline-appropriate standards.
- Implement course content or skills through the creation of an original project (essay, argument, narrative, reflection, oral presentation, performance, work of art, etc.).

## Courses

### Select two:

- AAS 3310 - Arts of Africa **Credits:** 3 (Global Diversity)
- AAS 3930 - African Authors **Credits:** 3 (Global Diversity)
- ANT 1400 - Introduction to Folklore **Credits:** 3 (Global Diversity)
- ANT 2400 - Women's Folklore and Folklife **Credits:** 3
- ANT 3386 - Religious Narratives and Culture **Credits:** 3
- ANT 3530 - Writing Systems and Scribal Traditions **Credits:** 3 (Global Diversity)
- ART 1141 - Art Studio: Drawing **Credits:** 3
- ART 3237 - Art of the International Film Poster **Credits:** 3 (Global Diversity)
- ARTE 2060 - The Arts and Creative Thinking **Credits:** 3
- ARTH 1500 - Art and Visual Literacy **Credits:** 3
- ARTH 1600 - Art of the Ancient World **Credits:** 3 (Global Diversity)
- ARTH 1700 - Art of the Medieval and Early Modern World **Credits:** 3 (Global Diversity)
- ARTH 1800 - Art of the Modern and Contemporary World **Credits:** 3 (Global Diversity)
- ARTH 3310 - Arts of Africa **Credits:** 3 (Global Diversity)
- ARTH 3434 - Michelangelo, Leonardo, and the Art of Renaissance Italy **Credits:** 3
- ARTH 3570 - Art Revolutions in the 19th Century **Credits:** 3
- ASL 1021 - Bridging Cultures on the Job **Credits:** 1
- CHI 1020 - Elementary Chinese II **Credits:** 5 (Global Diversity)
- CHI 1021 - Bridging Cultures on the Job **Credits:** 1
- CHS 2010 - Survey of Chicana/o Literature **Credits:** 3 (ESSJ)
- COMM 2010 - Gender and Communication **Credits:** 3

- COMM 2400 - Introduction to Rhetoric and Popular Culture **Credits:** 3
- DANC 1010 - Dance Appreciation **Credits:** 3
- DANC 1015 - Introduction to Dance Techniques and Forms **Credits:** 3
- DANC 3810 - Embodying Pop Culture: Dance and Identity in U.S. Popular Culture **Credits:** 3
- ENG 1100 - Introduction to Literature **Credits:** 3
- ENG 1150 - Introduction to Folklore **Credits:** 3 (Global Diversity)
- ENG 2170 - Medieval Mythologies **Credits:** 3 (Global Diversity)
- ENG 2230 - Hip-Hop as Poetry **Credits:** 3
- ENG 2270 - Monsters and Monstrosity **Credits:** 3
- ENG 2360 - Comics and Graphic Novels **Credits:** 3
- ENG 2400 - Disney Culture **Credits:** 3
- ENG 2410 - Survey of Chicana/o Literature **Credits:** 3 (ESSJ)
- ENG 2460 - Introduction to Children's Literature **Credits:** 3
- ENG 2500 - Introduction to Creative Writing **Credits:** 3
- ENG 2505 - Rhetoric of War **Credits:** 3
- ENG 2512 - Social Media and Power **Credits:** 3
- ENG 2580 - Climate Change Advocacy Writing **Credits:** 3
- ENG 2810 - Vampire Films **Credits:** 3 (Global Diversity)
- ENG 2850 - International Film **Credits:** 3 (Global Diversity)
- ENG 3465 - Anti-Racist Children's Literature **Credits:** 3 (ESSJ)
- ENG 3513 - Race Talk **Credits:** 3 (ESSJ)
- FRE 1001 - Bon Voyage - A Cross-Cultural Journey Through France and the French-Speaking World **Credits:** 3 (Global Diversity)
- FRE 1020 - Elementary French II **Credits:** 5 (Global Diversity)
- FRE 1021 - Bridging Cultures on the Job **Credits:** 1
- GER 1020 - Elementary German II **Credits:** 5 (Global Diversity)
- GER 1021 - Bridging Cultures on the Job **Credits:** 1
- GWS 2400 - Women's Folklore and Folklife **Credits:** 3
- GWS 2770 - Gender and Communication **Credits:** 3
- GWS 3270 - Beauty Cultures **Credits:** 3 (Global Diversity)
- HON 1000 - Introduction to Music **Credits:** 3
- HON 1011 - The Big Questions: An Introduction to Philosophy **Credits:** 3
- HON 2750 - History of the Self **Credits:** 3
- ITA 1020 - Elementary Italian II **Credits:** 5 (Global Diversity)
- ITA 1021 - Bridging Cultures on the Job **Credits:** 1
- JMP 1010 - Critical Thinking through 21st Century Media **Credits:** 3
- JPS 1020 - Elementary Japanese II **Credits:** 5 (Global Diversity)

- JPS 1021 - Bridging Cultures on the Job **Credits:** 1
- LING 2011 - Origins of English Words **Credits:** 3
- LING 3090 - Writing Systems and Scribal Traditions **Credits:** 3 (Global Diversity)
- MUS 1000 - Introduction to Music **Credits:** 3
- MUS 1040 - Music, Race, and Power **Credits:** 3 (ESSJ)
- MUS 1050 - History of Rock and Roll **Credits:** 3
- MUS 3000 - Musics of America **Credits:** 3 (ESSJ)
- MUS 3015 - Global Pop **Credits:** 3 (Global Diversity)
- MUS 3020 - History of Jazz **Credits:** 3 (ESSJ)
- MUS 3050 - Musics of the World **Credits:** 3 (Global Diversity)
- MUS 3099 - The Beatles: Music and Culture **Credits:** 3
- MUS 4000 - Musics of Latin America **Credits:** 3 (Global Diversity)
- PHI 1010 - The Big Questions: An Introduction to Philosophy **Credits:** 3
- PHI 1030 - Thinking about Ethics: Morality and the Good Life **Credits:** 3
- PHI 1060 - Ethics in Medicine and Science **Credits:** 3
- PHI 1080 - Philosophy of Protest **Credits:** 3
- PHI 2040 - Philosophy of Religion **Credits:** 3
- PHI 3000 - Ancient Greek and Roman Philosophy **Credits:** 3
- PHI 3010 - History of Medieval Philosophy: Islamic, Jewish, and Christian Voices **Credits:** 3 (Global Diversity)
- PHI 3020 - Early Modern Philosophy: Europe and the Americas **Credits:** 3
- PHI 3040 - Algorithms, Rationality, and Beliefs **Credits:** 3
- PHI 3360 - Business Ethics **Credits:** 3
- PHI 3370 - Computers, Ethics, and Society **Credits:** 3
- RLG 1040 - Asian Religions **Credits:** 3 (Global Diversity)
- RLG 1050 - Judaism, Christianity, Islam **Credits:** 3 (Global Diversity)
- SLHS 3000 - Foundations of Disability Studies through Media **Credits:** 3
- SPA 1020 - Elementary Spanish II **Credits:** 5 (Global Diversity)
- SPA 1021 - Bridging Cultures on the Job **Credits:** 1
- THE 1210 - Theatre Appreciation **Credits:** 3
- THE 2295 - Comedy: In-Print and On-Stage **Credits:** 3
- SPA 1009 - Culturas Vivas: Exploring the Vibrant Diversity of Spanish-Speaking Cultures **Credits:** 3 (Global Diversity)

## Historical Requirement

**Description:** Historical thinking contextualizes the present by using a wide range of sources and methods to understand how people experienced the past.

Students must complete a minimum of 3 semester hours to satisfy the historical requirement.

## Student Learning Outcomes

- Demonstrate the ability to locate sources when information is needed, and to evaluate the authenticity, validity, and reliability of resources applied to a specific purpose.
- Communicate in writing with an awareness of audience, by using language conventions appropriate to the occasion and task.
- Demonstrate historical knowledge of the United States, the world, or one of the major regions of the world.
- Demonstrate, using historical sources, how context and contingency influence change over time.
- Develop an effective historical interpretation and marshal primary and/or secondary source evidence to support it.

## Courses

### Select one:

- AAS 1130 - Survey of African History **Credits:** 3 (Global Diversity)
- AAS 1150 - Race and Social Justice in U.S. History **Credits:** 3 (ESSJ)
- ANT 1650 - Ancient Civilizations **Credits:** 3 (Global Diversity)
- CHS 1150 - Race and Social Justice in U.S. History **Credits:** 3 (ESSJ)
- ECO 1776 - Global Economic History: The Origins of Growth **Credits:** 3 (Global Diversity)
- GWS 1600 - Women in World History **Credits:** 3 (Global Diversity)
- HIS 1005 - Ancient Civilizations **Credits:** 3 (Global Diversity)
- HIS 1030 - World History to 1500 **Credits:** 3 (Global Diversity)
- HIS 1032 - Islam in History: From the Prophet to the Present **Credits:** 3 (Global Diversity)
- HIS 1035 - The Medieval World **Credits:** 3 (Global Diversity)
- HIS 1040 - World History since 1500 **Credits:** 3 (Global Diversity)
- HIS 1045 - Europe, Renaissance to the Present **Credits:** 3 (Global Diversity)
- HIS 1150 - Race and Social Justice in U.S. History **Credits:** 3 (ESSJ)
- HIS 1210 - American History to 1865 **Credits:** 3
- HIS 1220 - American History since 1865 **Credits:** 3
- HIS 1250 - China and East Asia **Credits:** 3 (Global Diversity)
- HIS 1270 - India and South Asia **Credits:** 3 (Global Diversity)
- HIS 1300 - Introduction to Latin American History **Credits:** 3 (Global Diversity)
- HIS 1600 - Women in World History **Credits:** 3 (Global Diversity)

- HIS 1700 - Nature and Society **Credits: 3** (Global Diversity)
- HIS 1940 - Survey of African History **Credits: 3** (Global Diversity)
- HON 1040 - World History since 1500 **Credits: 3** (Global Diversity)

## Natural and Physical Sciences Requirement

**Description:** The Natural and Physical Sciences involve discovering knowledge in natural or physical sciences, applying scientific thinking and reasoning, and critically thinking about the use of scientific information.

Students must complete a minimum of 6 semester hours to satisfy the natural and physical science requirement.

### Student Learning Outcomes

- Explain the foundational knowledge of a particular field of natural or physical science
- Apply principles and techniques of scientific thinking.
- Evaluate the credibility of scientific information and interpret the impact of its use or misuse in society.

### Courses

- AES 1050 - Introduction to Space **Credits: 3**
- ANT 1010 - Introduction to Biological Anthropology **Credits: 3** (Global Diversity)
- AST 1040 - Introduction to Astronomy - Solar System **Credits: 4**
- AST 1050 - Introduction to Astronomy - Stars and Galaxies **Credits: 4**
- AST 3040 - Modern Cosmology **Credits: 3**
- BIO 1000 - Human Biology for Non-Majors **Credits: 3**
- BIO 1030 - General Biology for Non-Majors **Credits: 4**
- BIO 1080 - General Biology I **Credits: 3**
- BIO 1081 - General Biology II **Credits: 3**
- BIO 1090 - General Biology Laboratory I **Credits: 1**
- BIO 1091 - General Biology Laboratory II **Credits: 1**
- CET 1040 - Introduction to Engineering **Credits: 3**
- CHE 1010 - Chemistry and Society **Credits: 3**
- CHE 1100 - Principles of Chemistry **Credits: 4**
- CHE 1150 - Principles of Chemistry Laboratory **Credits: 1**
- CHE 1800 - General Chemistry I **Credits: 4**
- CHE 1801 - General Chemistry I Laboratory **Credits: 1**
- CHE 1810 - General Chemistry II **Credits: 4**
- CHE 1811 - General Chemistry II Laboratory **Credits: 1**
- EET 1040 - Introduction to Engineering **Credits: 3**

- ENV 1200 - Introduction to Environmental Science **Credits: 3**
- ENV 3620 - Resource Use and the Environment **Credits: 3** (Global Diversity)
- GEG 1100 - Introduction to Physical Geography **Credits: 3**
- GEG 1910 - Global Water Concerns **Credits: 3** (Global Diversity)
- GEL 1010 - Physical Geology **Credits: 4**
- GEL 1020 - Geology of Colorado **Credits: 3**
- GEL 1030 - Historical Geology **Credits: 4**
- GEL 1150 - Physical Oceanography **Credits: 3**
- GIS 1220 - Digital Earth: Geospatial Technologies **Credits: 4**
- HON 1080 - General Biology I **Credits: 3**
- HON 1090 - General Biology Laboratory I **Credits: 1**
- HON 2040 - Introduction to Nutrition **Credits: 3**
- HON 2800 - Scientific Revolutions **Credits: 3**
- MET 1040 - Introduction to Engineering **Credits: 3**
- MTR 1400 - Weather and Climate **Credits: 3**
- MTR 1600 - Global Climate Change **Credits: 3** (Global Diversity)
- NUT 2040 - Introduction to Nutrition **Credits: 3**
- NUT 3110 - Food Science **Credits: 3**
- PHY 1000 - Physics of Nature **Credits: 4**
- PHY 1020 - Physics of Advanced Materials **Credits: 1**
- PHY 1250 - Physics of Aviation **Credits: 6**
- PHY 2010 - College Physics I **Credits: 4**
- PHY 2020 - College Physics II **Credits: 4**
- PHY 2030 - College Physics I Laboratory **Credits: 1**
- PHY 2040 - College Physics II Laboratory **Credits: 1**
- PHY 2200 - General Physics for Computer and Electrical Engineering **Credits: 4**
- PHY 2308 - Stretch General Physics I A **Credits: 3** (A total of 4 General Studies credits awarded after passing both PHY 2308 and PHY 2309)
- PHY 2309 - Stretch General Physics I B **Credits: 3** (A total of 4 General Studies credits awarded after passing both PHY 2308 and PHY 2309)
- PHY 2311 - General Physics I **Credits: 4**
- PHY 2321 - General Physics I Laboratory **Credits: 1**
- PHY 2331 - General Physics II **Credits: 4**
- PHY 2341 - General Physics II Laboratory **Credits: 1**
- PHY 2620 - Sound and Music **Credits: 3**
- RST 3110 - Food Science Laboratory **Credits: 1**
- SCI 2600 - Integrated Biology and Earth Science **Credits: 3**
- SCI 2610 - Integrated Physical and Chemical Sciences **Credits: 3**

## Social and Behavioral Sciences Requirement



**Description:** Courses in Social and Behavioral Science study the behavior and actions of individuals, groups, and/or institutions using scientific methods and approaches. Social and Behavioral Science also develops a student's ability to examine and influence those behaviors and actions between and among larger social, economic, political, and/or geographic contexts.

Students must complete a minimum of 6 semester hours to satisfy the social and behavioral sciences requirement.

## Student Learning Outcomes

- Describe fundamental concepts in the social and behavioral sciences.
- Examine how individuals, groups, communities, and social institutions relate or interact with each other and/or the natural world using theories and methods in the social and behavioral sciences.
- Engage with social and behavioral science tools, approaches, and skills to explore complex human, social, political, cultural, and/or global interactions and issues.

## Courses

### Select two:

- AAS 1010 - Introduction to Africana Studies **Credits:** 3 (ESSJ)
- AAS 1030 - Introduction to Social Justice and Decoloniality **Credits:** 3 (Global Diversity)
- AAS 2100 - Women of Color **Credits:** 3 (ESSJ)
- AGE 1010 - Introduction to Aging and Long-Term Care Services **Credits:** 3
- ANT 1300 - Asia in Global Perspective **Credits:** 3 (Global Diversity)
- ANT 1310 - Introduction to Cultural Anthropology **Credits:** 3 (Global Diversity)
- ANT 2330 - Cross-Cultural Communication **Credits:** 3 (ESSJ)
- ANT 2700 - Museum Studies **Credits:** 3
- ANT 3375 - Food and Culture **Credits:** 3 (Global Diversity)
- ANT 3379 - Middle Eastern Cultures **Credits:** 3 (Global Diversity)
- ANT 3395 - Transnational Genders and Sexualities **Credits:** 3 (Global Diversity)
- ANT 3640 - Holy Land Archaeology **Credits:** 3 (Global Diversity)
- ANT 3650 - 100,000 Years of War **Credits:** 3 (Global Diversity)
- ARTH 2700 - Museum Studies **Credits:** 3
- BUS 3010 - Global Business Experience **Credits:** 3 (Global Diversity)
- CET 3120 - Engineering Economy **Credits:** 3

- CHS 1000 - Introduction to Chicana/o Studies **Credits:** 3 (ESSJ)
- CHS 1030 - Introduction to Social Justice and Decoloniality **Credits:** 3 (Global Diversity)
- CHS 2100 - Women of Color **Credits:** 3 (ESSJ)
- CHS 3100 - Social Justice and Activism in the Chicana/o Community **Credits:** 3 (ESSJ)
- CJC 1010 - Introduction to the Criminal Justice System **Credits:** 3
- COMM 2020 - Introduction to Health Communication **Credits:** 3
- COMM 2200 - Introduction to Interpersonal Communication **Credits:** 3
- COMM 2300 - Introduction to Organizational Communication **Credits:** 3
- COMM 3000 - Diversity and Communication in the U.S. **Credits:** 3 (ESSJ)
- COMM 3500 - Environmental Communication **Credits:** 3 (Global Diversity)
- ECO 2010 - Principles of Macroeconomics **Credits:** 3
- ECO 2020 - Principles of Microeconomics **Credits:** 3
- ECO 3459 - Policy Debates in the History of Economic Thought **Credits:** 3
- ECO 3800 - Development Economics **Credits:** 3 (Global Diversity)
- EDS 1001 - Advancing Social Justice and Educational Equity: Challenges and Strategies **Credits:** 3 (ESSJ)
- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits:** 4
- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits:** 3 (ESSJ)
- ENG 2513 - Disability Rhetorics **Credits:** 3
- ENG 3670 - Social Change and Writing Centers **Credits:** 3
- ESS 2021 - Physical Literacy and Society **Credits:** 3
- GEG 1000 - World Regional Geography **Credits:** 3 (Global Diversity)
- GEG 1300 - Introduction to Human Geography **Credits:** 3 (Global Diversity)
- GEG 1700 - Global Sustainability **Credits:** 3 (Global Diversity)
- GEG 2020 - Geography of Colorado **Credits:** 3
- GEG 2700 - Geographies of Environmental Justice **Credits:** 3 (ESSJ)
- GEG 3230 - Latin American Geographies **Credits:** 3 (Global Diversity)
- GEG 3300 - Indigenous Geographies of North America **Credits:** 3 (ESSJ)
- GWS 1001 - Introduction to Gender, Women, and Sexualities Studies **Credits:** 3
- GWS 1030 - Introduction to Social Justice and Decoloniality **Credits:** 3 (Global Diversity)
- GWS 1200 - Sexuality, Race, and Power **Credits:** 3 (ESSJ)
- GWS 1300 - Asia in Global Perspective **Credits:** 3 (Global Diversity)

- GWS 1550 - Introduction to Transgender Studies **Credits:** 3
- GWS 2100 - Women of Color **Credits:** 3 (ESSJ)
- GWS 3395 - Transnational Genders and Sexualities **Credits:** 3 (Global Diversity)
- GWS 3930 - Theories of Love and Sex **Credits:** 3 (Global Diversity)
- HCM 2010 - Global Health Systems **Credits:** 3 (Global Diversity)
- HIS 1260 - Asia in Global Perspective **Credits:** 3 (Global Diversity)
- HIS 3705 - 100,000 Years of War **Credits:** 3 (Global Diversity)
- HIS 3706 - Holy Land Archaeology **Credits:** 3 (Global Diversity)
- HIS 3785 - Science and Technology in World History **Credits:** 3 (Global Diversity)
- HON 1003 - Introduction to Chicana/o Studies **Credits:** 3 (ESSJ)
- HON 1023 - Comparative Politics **Credits:** 3
- HON 1501 - Dynamics of Health **Credits:** 3
- HON 2110 - The Art and Science of Learning **Credits:** 3
- HON 2770 - Dynamics of Change **Credits:** 3 (Global Diversity)
- HON 2850 - Technology and Society **Credits:** 3
- HON 3101 - Social Justice and Activism in the Chicana/o Community **Credits:** 3 (ESSJ)
- HSP 1010 - Introduction to Human Services and Counseling **Credits:** 3
- HSP 1020 - Introduction to Trauma Informed Care **Credits:** 3
- IND 2810 - Technology and Design: Global Perspectives **Credits:** 3 (Global Diversity)
- IND 3000 - Design Thinking **Credits:** 3
- ITP 1500 - Dynamics of Health **Credits:** 3
- ITP 3000 - Men's Health **Credits:** 3
- ITP 3850 - Lifestyle Medicine **Credits:** 3
- JMP 1000 - Introduction to Journalism and Mass Media **Credits:** 3
- JMP 3425 - Creating Informational Media **Credits:** 3
- LANG 1260 - Asia in Global Perspective **Credits:** 3 (Global Diversity)
- LDR 1010 - Leadership and Social Change **Credits:** 3
- MKT 2010 - Marketing Around the Globe **Credits:** 3 (Global Diversity)
- NAS 1030 - Introduction to Social Justice and Decoloniality **Credits:** 3 (Global Diversity)
- NAS 3300 - Indigenous Geographies of North America **Credits:** 3 (ESSJ)
- NUT 3101 - Body Image: Concepts and Approaches **Credits:** 3
- NUT 3350 - Global Nutrition and Health **Credits:** 3 (Global Diversity)
- NUT 3375 - Food and Culture **Credits:** 3 (Global Diversity)
- PSC 1010 - American National Government **Credits:** 3
- PSC 1011 - Leadership and Social Change **Credits:** 3
- PSC 1020 - Comparative Politics **Credits:** 3
- PSC 1030 - Multicultural Politics for Non-Majors **Credits:** 3 (ESSJ)
- PSC 1300 - Asia in Global Perspective **Credits:** 3 (Global Diversity)
- PSC 2230 - Introduction to International Relations **Credits:** 3 (Global Diversity)
- PSC 3300 - Indigenous Geographies of North America **Credits:** 3 (ESSJ)
- PSC 3379 - Middle Eastern Cultures **Credits:** 3 (Global Diversity)
- PSY 1001 - Introductory Psychology **Credits:** 3
- PSY 1800 - Developmental Educational Psychology **Credits:** 3
- PUB 1000 - Principles of Public Health **Credits:** 3
- RST 3000 - Taste the World: A Global Sensory Experience **Credits:** 3 (Global Diversity)
- SLHS 1500 - Introduction to Communication Sciences and Disorders **Credits:** 3
- SLHS 2990 - Introduction to Health Communication **Credits:** 3
- SOC 1010 - People, Power, and Progress **Credits:** 3
- SOC 1020 - Globalization--The Transformation of Social Worlds **Credits:** 3 (Global Diversity)
- SOC 1080 - Love and Family in East Asia **Credits:** 3 (Global Diversity)
- SOC 1300 - Asia in Global Perspective **Credits:** 3 (Global Diversity)
- SOC 1600 - Tourism and Society **Credits:** 3 (Global Diversity)
- SOC 2010 - Social Problems **Credits:** 3
- SOC 2500 - Deviant Behavior in Society **Credits:** 3
- SWK 1010 - Introduction to Social Work **Credits:** 3
- SWK 1050 - How to Change the World **Credits:** 3
- SWK 1600 - Community Engagement and Civic Responsibility **Credits:** 3
- SWK 3110 - Social Justice and Activism in the Chicana/o Community **Credits:** 3 (ESSJ)
- THE 2218 - Prison Arts **Credits:** 3
- TTM 1600 - Tourism and Society **Credits:** 3 (Global Diversity)

## Global Diversity Requirement

**Description:** Global Diversity refers to a student's ability to critically analyze and engage complex, interconnected global systems (such as natural, physical, social, cultural, economic, or political) and their implications for individuals, groups, communities, or cultures. These courses will introduce students to various concepts toward valuing

diversity and the importance of inclusivity. Students should seek to understand how their actions affect both local and global communities. Courses in this category must contain a majority of material from one or more regions or countries outside the U.S.

Students may fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences. If a course is used to fulfill both the global diversity requirement and another general studies category, only 3 semester hours will apply to the student's degree requirements.

## Student Learning Outcomes

Students must select one course from an approved category that also meets the following student learning outcomes. This course will count in both categories.

- Describe the implications of global interconnections, including their impact on culture, societies, the environment, or the individual.
- Analyze connections between worldviews, experiences, and/or power structures of differing cultures in historical or contemporary contexts.

## Courses

### Select one:

- AAS 1030 - Introduction to Social Justice and Decoloniality **Credits:** 3 (Social and Behavioral Sciences)
- AAS 1130 - Survey of African History **Credits:** 3 (History)
- AAS 3310 - Arts of Africa **Credits:** 3 (Arts and Humanities)
- AAS 3930 - African Authors **Credits:** 3 (Arts and Humanities)
- ANT 1010 - Introduction to Biological Anthropology **Credits:** 3 (Natural and Physical Sciences)
- ANT 1300 - Asia in Global Perspective **Credits:** 3 (Social and Behavioral Sciences)
- ANT 1310 - Introduction to Cultural Anthropology **Credits:** 3 (Social and Behavioral Sciences)
- ANT 1400 - Introduction to Folklore **Credits:** 3 (Arts and Humanities)
- ANT 1650 - Ancient Civilizations **Credits:** 3 (History)
- ANT 3375 - Food and Culture **Credits:** 3 (Social and Behavioral Sciences)
- ANT 3379 - Middle Eastern Cultures **Credits:** 3 (Social and Behavioral Sciences)
- ANT 3395 - Transnational Genders and Sexualities **Credits:** 3 (Social and Behavioral Sciences)
- ANT 3530 - Writing Systems and Scribal Traditions **Credits:** 3 (Arts and Humanities)
- ANT 3640 - Holy Land Archaeology **Credits:** 3 (Social and Behavioral Sciences)

- ANT 3650 - 100,000 Years of War **Credits:** 3 (Social and Behavioral Sciences)
- ART 3237 - Art of the International Film Poster **Credits:** 3 (Arts and Humanities)
- ARTH 1600 - Art of the Ancient World **Credits:** 3 (Arts and Humanities)
- ARTH 1700 - Art of the Medieval and Early Modern World **Credits:** 3 (Arts and Humanities)
- ARTH 1800 - Art of the Modern and Contemporary World **Credits:** 3 (Arts and Humanities)
- ARTH 3310 - Arts of Africa **Credits:** 3 (Arts and Humanities)
- BUS 3010 - Global Business Experience **Credits:** 3 (Social and Behavioral Sciences)
- CHI 1020 - Elementary Chinese II **Credits:** 5 (Arts and Humanities)
- CHS 1030 - Introduction to Social Justice and Decoloniality **Credits:** 3 (Social and Behavioral Sciences)
- COMM 3500 - Environmental Communication **Credits:** 3 (Social and Behavioral Sciences)
- ECO 1776 - Global Economic History: The Origins of Growth **Credits:** 3 (Historical)
- ECO 3800 - Development Economics **Credits:** 3 (Social and Behavioral Sciences)
- ENG 1150 - Introduction to Folklore **Credits:** 3 (Arts and Humanities)
- ENG 2170 - Medieval Mythologies **Credits:** 3 (Arts and Humanities)
- ENG 2810 - Vampire Films **Credits:** 3 (Arts and Humanities)
- ENG 2850 - International Film **Credits:** 3 (Arts and Humanities)
- ENV 3620 - Resource Use and the Environment **Credits:** 3 (Natural and Physical Sciences)
- FRE 1001 - Bon Voyage - A Cross-Cultural Journey Through France and the French-Speaking World **Credits:** 3 (Arts and Humanities)
- FRE 1020 - Elementary French II **Credits:** 5 (Arts and Humanities)
- GEG 1000 - World Regional Geography **Credits:** 3 (Social and Behavioral Sciences)
- GEG 1300 - Introduction to Human Geography **Credits:** 3 (Social and Behavioral Sciences)
- GEG 1700 - Global Sustainability **Credits:** 3 (Social and Behavioral Sciences)
- GEG 1910 - Global Water Concerns **Credits:** 3 (Natural and Physical Sciences)
- GEG 3230 - Latin American Geographies **Credits:** 3 (Social and Behavioral Sciences)
- GER 1020 - Elementary German II **Credits:** 5 (Arts and Humanities)
- GWS 1030 - Introduction to Social Justice and Decoloniality **Credits:** 3 (Social and Behavioral Sciences)
- GWS 1300 - Asia in Global Perspective **Credits:** 3 (Social and Behavioral Sciences)

- GWS 1600 - Women in World History **Credits:** 3 (History)
- GWS 3270 - Beauty Cultures **Credits:** 3 (Arts and Humanities)
- GWS 3395 - Transnational Genders and Sexualities **Credits:** 3 (Social and Behavioral Sciences)
- GWS 3930 - Theories of Love and Sex **Credits:** 3 (Social and Behavioral Sciences)
- HCM 2010 - Global Health Systems **Credits:** 3 (Social and Behavioral Sciences)
- HIS 1005 - Ancient Civilizations **Credits:** 3 (History)
- HIS 1030 - World History to 1500 **Credits:** 3 (History)
- HIS 1032 - Islam in History: From the Prophet to the Present **Credits:** 3 (Historical)
- HIS 1035 - The Medieval World **Credits:** 3 (History)
- HIS 1040 - World History since 1500 **Credits:** 3 (History)
- HIS 1045 - Europe, Renaissance to the Present **Credits:** 3 (History)
- HIS 1250 - China and East Asia **Credits:** 3 (History)
- HIS 1260 - Asia in Global Perspective **Credits:** 3 (Social and Behavioral Sciences)
- HIS 1270 - India and South Asia **Credits:** 3 (History)
- HIS 1300 - Introduction to Latin American History **Credits:** 3 (History)
- HIS 1600 - Women in World History **Credits:** 3 (History)
- HIS 1700 - Nature and Society **Credits:** 3 (Historical)
- HIS 1940 - Survey of African History **Credits:** 3 (History)
- HIS 3705 - 100,000 Years of War **Credits:** 3 (Social and Behavioral Sciences)
- HIS 3706 - Holy Land Archaeology **Credits:** 3 (Social and Behavioral Sciences)
- HIS 3785 - Science and Technology in World History **Credits:** 3 (Social and Behavioral Sciences)
- HON 1040 - World History since 1500 **Credits:** 3 (History)
- HON 2770 - Dynamics of Change **Credits:** 3 (Social and Behavioral Sciences)
- IND 2810 - Technology and Design: Global Perspectives **Credits:** 3 (Social and Behavioral Sciences)
- ITA 1020 - Elementary Italian II **Credits:** 5 (Arts and Humanities)
- JPS 1020 - Elementary Japanese II **Credits:** 5 (Arts and Humanities)
- LANG 1260 - Asia in Global Perspective **Credits:** 3 (Social and Behavioral Sciences)
- LING 3090 - Writing Systems and Scribal Traditions **Credits:** 3 (Arts and Humanities)
- MKT 2010 - Marketing Around the Globe **Credits:** 3 (Social and Behavioral Sciences)
- MTR 1600 - Global Climate Change **Credits:** 3 (Natural and Physical Sciences)
- MUS 3015 - Global Pop **Credits:** 3 (Arts and Humanities)
- MUS 3050 - Musics of the World **Credits:** 3 (Arts and Humanities)
- MUS 4000 - Musics of Latin America **Credits:** 3 (Arts and Humanities)
- NAS 1030 - Introduction to Social Justice and Decoloniality **Credits:** 3 (Social and Behavioral Sciences)
- NUT 3350 - Global Nutrition and Health **Credits:** 3 (Social and Behavioral Sciences)
- NUT 3375 - Food and Culture **Credits:** 3 (Social and Behavioral Sciences)
- PHI 3010 - History of Medieval Philosophy: Islamic, Jewish, and Christian Voices **Credits:** 3 (Arts and Humanities)
- PSC 1300 - Asia in Global Perspective **Credits:** 3 (Social and Behavioral Sciences)
- PSC 2230 - Introduction to International Relations **Credits:** 3 (Social and Behavioral Sciences)
- PSC 3379 - Middle Eastern Cultures **Credits:** 3 (Social and Behavioral Sciences)
- RLG 1040 - Asian Religions **Credits:** 3 (Arts and Humanities)
- RLG 1050 - Judaism, Christianity, Islam **Credits:** 3 (Arts and Humanities)
- RST 3000 - Taste the World: A Global Sensory Experience **Credits:** 3 (Social and Behavioral Sciences)
- SOC 1020 - Globalization--The Transformation of Social Worlds **Credits:** 3 (Social and Behavioral Sciences)
- SOC 1080 - Love and Family in East Asia **Credits:** 3 (Social and Behavioral Sciences)
- SOC 1300 - Asia in Global Perspective **Credits:** 3 (Social and Behavioral Sciences)
- SOC 1600 - Tourism and Society **Credits:** 3 (Social and Behavioral Sciences)
- SPA 1009 - Culturas Vivas: Exploring the Vibrant Diversity of Spanish-Speaking Cultures **Credits:** 3 (Arts and Humanities)
- SPA 1020 - Elementary Spanish II **Credits:** 5 (Arts and Humanities)
- TTM 1600 - Tourism and Society **Credits:** 3 (Social and Behavioral Sciences)

# State-Guaranteed General Education Courses

The Colorado Commission on Higher Education has approved the following courses for inclusion in the Guaranteed Transfer (GT) Pathways program in the listed categories. For transferring students, successful completion with a minimum C- grade guarantees transfer and application of credit in this GT Pathways category. For more information on the GT Pathways program, and the most updated list of courses, go to

<http://higher.ed.colorado.gov/academics/transfers/gtpathways/curriculum.html>.

## Courses

- AAS 1010 - Introduction to Africana Studies **Credits: 3**
- AAS 1130 - Survey of African History **Credits: 3**
- AAS 1150 - Race and Social Justice in U.S. History **Credits: 3**
- AAS 2100 - Women of Color **Credits: 3**
- ANT 1010 - Introduction to Biological Anthropology **Credits: 3**
- ANT 1310 - Introduction to Cultural Anthropology **Credits: 3**
- ANT 1400 - Introduction to Folklore **Credits: 3**
- ANT 1650 - Ancient Civilizations **Credits: 3**
- ANT 2330 - Cross-Cultural Communication **Credits: 3**
- ANT 2700 - Museum Studies **Credits: 3**
- ARTH 1500 - Art and Visual Literacy **Credits: 3**
- ARTH 2600 - Reading and Writing Visual Culture **Credits: 3**
- ARTH 2700 - Museum Studies **Credits: 3**
- AST 1040 - Introduction to Astronomy - Solar System **Credits: 4**
- AST 1050 - Introduction to Astronomy - Stars and Galaxies **Credits: 4**
- CET 1040 - Introduction to Engineering **Credits: 3**
- CHE 1010 - Chemistry and Society **Credits: 3**
- CHE 1100 - Principles of Chemistry **Credits: 4**
- CHE 1150 - Principles of Chemistry Laboratory **Credits: 1**
- CHE 1800 - General Chemistry I **Credits: 4**
- CHE 1801 - General Chemistry I Laboratory **Credits: 1**
- CHE 1810 - General Chemistry II **Credits: 4**
- CHE 1811 - General Chemistry II Laboratory **Credits: 1**
- CHS 1000 - Introduction to Chicana/o Studies **Credits: 3**
- CHS 1150 - Race and Social Justice in U.S. History **Credits: 3**
- CHS 2010 - Survey of Chicana/o Literature **Credits: 3**
- CHS 2100 - Women of Color **Credits: 3**
- CJC 1010 - Introduction to the Criminal Justice System **Credits: 3**
- COMM 2200 - Introduction to Interpersonal Communication **Credits: 3**
- COMM 2300 - Introduction to Organizational Communication **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- EDS 1001 - Advancing Social Justice and Educational Equity: Challenges and Strategies **Credits: 3**
- ENG 1009 - Stretch Composing Arguments B **Credits: 3**
- ENG 1010 - Composing Arguments **Credits: 3**
- ENG 1020 - Research and Argument Writing **Credits: 3**
- ENG 1021 - Honors Research and Argument Writing **Credits: 3**
- ENG 1100 - Introduction to Literature **Credits: 3**
- ENG 1150 - Introduction to Folklore **Credits: 3**
- ENG 2025 - Reading and Writing Popular Culture **Credits: 3**
- ENG 2270 - Monsters and Monstrosity **Credits: 3**
- ENG 2410 - Survey of Chicana/o Literature **Credits: 3**
- ENG 2460 - Introduction to Children's Literature **Credits: 3**
- ENG 2500 - Introduction to Creative Writing **Credits: 3**
- ENG 2513 - Disability Rhetorics **Credits: 3**
- ENG 2850 - International Film **Credits: 3**
- ENG 3525 - Scholarly Writing **Credits: 3**
- ENG 3526 - Writing in the Sciences **Credits: 3**
- ENG 3527 - Professional Writing **Credits: 3**
- ENV 1200 - Introduction to Environmental Science **Credits: 3**
- GEG 1000 - World Regional Geography **Credits: 3**
- GEG 1100 - Introduction to Physical Geography **Credits: 3**
- GEG 1300 - Introduction to Human Geography **Credits: 3**
- GEG 1700 - Global Sustainability **Credits: 3**
- GEG 1910 - Global Water Concerns **Credits: 3**
- GEG 2020 - Geography of Colorado **Credits: 3**
- GEG 2700 - Geographies of Environmental Justice **Credits: 3**
- GEL 1010 - Physical Geology **Credits: 4**
- GEL 1020 - Geology of Colorado **Credits: 3**
- GEL 1150 - Physical Oceanography **Credits: 3**
- GEL 1030 - Historical Geology **Credits: 4**
- GWS 1001 - Introduction to Gender, Women, and Sexualities Studies **Credits: 3**
- GWS 1200 - Sexuality, Race, and Power **Credits: 3**
- GWS 1300 - Asia in Global Perspective **Credits: 3**
- GWS 1550 - Introduction to Transgender Studies **Credits: 3**
- GWS 1600 - Women in World History **Credits: 3**
- GWS 2100 - Women of Color **Credits: 3**
- GWS 2400 - Women's Folklore and Folklife **Credits: 3**
- HIS 1005 - Ancient Civilizations **Credits: 3**
- HIS 1030 - World History to 1500 **Credits: 3**

- HIS 1032 - Islam in History: From the Prophet to the Present **Credits: 3**
- HIS 1035 - The Medieval World **Credits: 3**
- HIS 1040 - World History since 1500 **Credits: 3**
- HIS 1045 - Europe, Renaissance to the Present **Credits: 3**
- HIS 1150 - Race and Social Justice in U.S. History **Credits: 3**
- HIS 1210 - American History to 1865 **Credits: 3**
- HIS 1220 - American History since 1865 **Credits: 3**
- HIS 1250 - China and East Asia **Credits: 3**
- HIS 1260 - Asia in Global Perspective **Credits: 3**
- HIS 1270 - India and South Asia **Credits: 3**
- HIS 1300 - Introduction to Latin American History **Credits: 3**
- HIS 1600 - Women in World History **Credits: 3**
- HIS 1700 - Nature and Society **Credits: 3**
- HIS 1940 - Survey of African History **Credits: 3**
- HIS 3000 - Historical Writing and Thinking **Credits: 3**
- HON 1000 - Introduction to Music **Credits: 3**
- HON 1003 - Introduction to Chicana/o Studies **Credits: 3**
- HON 1011 - The Big Questions: An Introduction to Philosophy **Credits: 3**
- HON 1023 - Comparative Politics **Credits: 3**
- HON 1040 - World History since 1500 **Credits: 3**
- HON 2040 - Introduction to Nutrition **Credits: 3**
- HSP 1010 - Introduction to Human Services and Counseling **Credits: 3**
- IND 2810 - Technology and Design: Global Perspectives **Credits: 3**
- JMP 1000 - Introduction to Journalism and Mass Media **Credits: 3**
- LANG 1260 - Asia in Global Perspective **Credits: 3**
- MET 1040 - Introduction to Engineering **Credits: 3**
- MTH 1080 - Mathematics for Liberal Arts **Credits: 3**
- MTH 1081 - Mathematics for Liberal Arts with Laboratory **Credits: 3**
- MTH 1109 - College Algebra Stretch, Part II **Credits: 4**
- MTH 1110 - College Algebra for Calculus **Credits: 4**
- MTH 1111 - College Algebra for Calculus with Laboratory **Credits: 4**
- MTH 1112 - College Algebra Through Modeling **Credits: 4**
- MTH 1115 - College Algebra through Modeling with Laboratory **Credits: 4**
- MTH 1120 - College Trigonometry **Credits: 3**
- MTH 1210 - Introduction to Statistics **Credits: 4**
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits: 4**
- MTH 1311 - Finite Mathematics for the Management and Social Sciences with Laboratory **Credits: 4**
- MTH 1320 - Calculus for the Management and Social Sciences **Credits: 3**
- MTH 1400 - Precalculus Mathematics **Credits: 4**
- MTH 1410 - Calculus I **Credits: 4**
- MTH 1610 - Integrated Mathematics I **Credits: 3**
- MTR 1400 - Weather and Climate **Credits: 3**
- MTR 1600 - Global Climate Change **Credits: 3**
- MUS 1000 - Introduction to Music **Credits: 3**
- MUS 1040 - Music, Race, and Power **Credits: 3**
- MUS 1050 - History of Rock and Roll **Credits: 3**
- NUT 2040 - Introduction to Nutrition **Credits: 3**
- PHI 1010 - The Big Questions: An Introduction to Philosophy **Credits: 3**
- PHI 1030 - Thinking about Ethics: Morality and the Good Life **Credits: 3**
- PHI 1060 - Ethics in Medicine and Science **Credits: 3**
- PHI 2040 - Philosophy of Religion **Credits: 3**
- PHY 1000 - Physics of Nature **Credits: 4**
- PHY 1250 - Physics of Aviation **Credits: 6**
- PHY 2010 - College Physics I **Credits: 4**
- PHY 2020 - College Physics II **Credits: 4**
- PHY 2030 - College Physics I Laboratory **Credits: 1**
- PHY 2040 - College Physics II Laboratory **Credits: 1**
- PHY 2311 - General Physics I **Credits: 4**
- PHY 2321 - General Physics I Laboratory **Credits: 1**
- PHY 2331 - General Physics II **Credits: 4**
- PHY 2341 - General Physics II Laboratory **Credits: 1**
- PSC 1010 - American National Government **Credits: 3**
- PSC 1020 - Comparative Politics **Credits: 3**
- PSC 1030 - Multicultural Politics for Non-Majors **Credits: 3**
- PSC 1300 - Asia in Global Perspective **Credits: 3**
- PSC 2230 - Introduction to International Relations **Credits: 3**
- PSY 1001 - Introductory Psychology **Credits: 3**
- PSY 1800 - Developmental Educational Psychology **Credits: 3**
- PHY 2309 - Stretch General Physics I B **Credits: 3**
- PHY 2620 - Sound and Music **Credits: 3**
- PUB 1000 - Principles of Public Health **Credits: 3**
- RLG 1040 - Asian Religions **Credits: 3**
- RLG 1050 - Judaism, Christianity, Islam **Credits: 3**
- SCI 2600 - Integrated Biology and Earth Science **Credits: 3**
- SCI 2610 - Integrated Physical and Chemical Sciences **Credits: 3**
- SOC 1010 - People, Power, and Progress **Credits: 3**
- SOC 1020 - Globalization--The Transformation of Social Worlds **Credits: 3**
- SOC 1080 - Love and Family in East Asia **Credits: 3**
- SOC 1300 - Asia in Global Perspective **Credits: 3**
- SOC 2010 - Social Problems **Credits: 3**
- SOC 2500 - Deviant Behavior in Society **Credits: 3**
- SLHS 1500 - Introduction to Communication Sciences and Disorders **Credits: 3**

- SWK 1010 - Introduction to Social Work **Credits:** 3
- SWK 1050 - How to Change the World **Credits:** 3
- SWK 1600 - Community Engagement and Civic Responsibility **Credits:** 3
- THE 1210 - Theatre Appreciation **Credits:** 3
- THE 3213 - Staging Cultures: Theatre, Drama, and Multiculturalism **Credits:** 3
- THE 2295 - Comedy: In-Print and On-Stage **Credits:** 3

# Ethnic Studies & Social Justice Requirement

Ethnic Studies & Social Justice courses can satisfy both the Ethnic Studies & Social Justice requirement and any other program requirements satisfied by that course.

Ethnic Studies is rooted in a social justice approach to studying historically marginalized communities of color. The Ethnic Studies & Social Justice (ESSJ) curriculum requirement is designed to equip students with the tools to challenge, understand, and contextualize the treatment of racially and ethnically marginalized groups in the United States. As a fluid and contested space, the United States has been a historically, geographically, and politically contingent region. These courses center the experiences of marginalized groups and examine the ways in which the existences and experiences of these groups have been historically shaped by oppression and systems of white supremacy. ESSJ coursework interrogates relationships between power, privilege, and oppression. Students explore how power and privilege in the past and present maintain oppression. Additionally, course content examines the resilience, activism, and advocacy of racially and ethnically marginalized groups to counter oppression and systems of white supremacy. Students learn to recognize key moments of liberation and those movements that advance social justice for racially and ethnically marginalized groups. Course content and materials may also examine and interrogate the oppression of other groups whose marginalized identities have been racialized and who have been thus oppressed as racial or ethnic minorities.

At the conclusion of an ESSJ course, students will be able to:

1. Define and understand key critical theories and concepts that inform discussions of racism and colonialism as they overlap with other systems of power as historically situated in the U.S.
2. Define and apply concepts of social justice within specific curriculum and course content to demonstrate the impact of racial and ethnic inequality in the U.S.
3. Identify and evaluate unequal power relationships between and/or among, one or more marginalized groups in the U.S.
4. Recognize and describe ways in which power and privilege are held and upheld by dominant groups in relation to marginalized groups and/or individuals.
5. Analyze the effects of institutional oppression on marginalized groups in the U.S.

In 2023 MSU Denver replaced the multicultural graduation requirement with the ESSJ graduation requirement. Courses that carry ESSJ designation can be used to fulfill the multicultural requirement for students on an earlier catalog. To satisfy the ESSJ requirement, a course must appear on the list of approved ESSJ courses at the time of the enrollment in the course.

## Ethnic Studies & Social Justice Courses (3 Semester Hours)

Select from the following courses:

- AAS 1010 - Introduction to Africana Studies **Credits: 3** (Social and Behavioral Sciences)
- AAS 1150 - Race and Social Justice in U.S. History **Credits: 3** (Historical)
- AAS 2100 - Women of Color **Credits: 3** (Social and Behavioral Sciences)
- AAS 2200 - Politics and Black People **Credits: 3**
- AAS 3220 - Prejudice and Discrimination **Credits: 3**
- AAS 3240 - African American Literature **Credits: 4**
- AAS 3300 - The Black Community **Credits: 3**
- AAS 3440 - American Slavery **Credits: 3**
- AAS 3570 - African American History I **Credits: 3**
- AAS 3580 - African American History II **Credits: 3**
- AAS 3700 - Psychology of Group Prejudice **Credits: 3**
- ANT 2330 - Cross-Cultural Communication **Credits: 3** (Social and Behavioral Sciences)
- ANT 3335 - Asian American Experiences **Credits: 3**
- CHS 1000 - Introduction to Chicana/o Studies **Credits: 3** (Social and Behavioral Sciences)
- CHS 1150 - Race and Social Justice in U.S. History **Credits: 3** (Historical)
- CHS 2010 - Survey of Chicana/o Literature **Credits: 3** (Arts and Humanities)
- CHS 2100 - Women of Color **Credits: 3** (Social and Behavioral Sciences)
- CHS 3020 - Chicana/o History, 1836 to the Present **Credits: 3**
- CHS 3100 - Social Justice and Activism in the Chicana/o Community **Credits: 3** (Social and Behavioral Sciences)
- CHS 3200 - Chicanos and the Law **Credits: 3**
- CJC 3720 - Chicanos and the Law **Credits: 3**
- COMM 3000 - Diversity and Communication in the U.S. **Credits: 3** (Social and Behavioral Sciences)
- ECE 3860 - Cultural Socialization of Children **Credits: 3**
- ECO 3600 - Economics of Social Justice **Credits: 3**
- EDS 1001 - Advancing Social Justice and Educational Equity: Challenges and Strategies **Credits: 3** (Social and Behavioral Sciences)
- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits: 3** (Social and Behavioral Sciences)
- EDU 1111 - Education within Diverse Communities **Credits: 3**
- ENG 2410 - Survey of Chicana/o Literature **Credits: 3** (Arts and Humanities)
- ENG 3240 - African American Literature **Credits: 4**
- ENG 3465 - Anti-Racist Children's Literature **Credits: 3** (Arts and Humanities)
- ENG 3513 - Race Talk **Credits: 3** (Arts and Humanities)
- ENG 3770 - Multicultural Cinema **Credits: 3**
- GEG 2700 - Geographies of Environmental Justice **Credits: 3** (Social and Behavioral Sciences)



- GEG 3300 - Indigenous Geographies of North America **Credits: 3**
- GWS 1200 - Sexuality, Race, and Power **Credits: 3** (Social and Behavioral Sciences)
- GWS 2100 - Women of Color **Credits: 3** (Social and Behavioral Sciences)
- GWS 3170 - Social Justice, Self, and Citizenship: A Service Learning Course **Credits: 3**
- GWS 3650 - Economics of Social Justice **Credits: 3**
- GWS 3700 - Psychology of Group Prejudice **Credits: 3**
- HIS 1150 - Race and Social Justice in U.S. History **Credits: 3** (Historical)
- HIS 3420 - American West **Credits: 3**
- HIS 3426 - Colorado Water and the American West **Credits: 3**
- HIS 3440 - American Slavery **Credits: 3**
- HIS 3463 - Getting Schooled: A History of American Education **Credits: 3**
- HIS 3490 - Native American History **Credits: 3**
- HIS 3560 - Chicana/o History, 1836 to the Present **Credits: 3**
- HIS 3570 - African American History I **Credits: 3**
- HIS 3580 - African American History II **Credits: 3**
- HIS 3660 - American Protest: The History of Social Movements from the Cold War to the Twenty-First Century **Credits: 3**
- HON 1003 - Introduction to Chicana/o Studies **Credits: 3** (Social and Behavioral Sciences)
- HON 3101 - Social Justice and Activism in the Chicana/o Community **Credits: 3** (Social and Behavioral Sciences)
- ITP 3810 - Men Across Cultures **Credits: 3**
- MKT 3750 - Ethnic Representations in Marketing **Credits: 3**
- MUS 1040 - Music, Race, and Power **Credits: 3** (Arts and Humanities)
- MUS 3000 - Musics of America **Credits: 3** (Arts and Humanities)
- MUS 3020 - History of Jazz **Credits: 3** (Arts and Humanities)
- MUS 4010 - From Blues to Hip Hop: African American Musical Heritage **Credits: 3**
- NAS 1000 - Introduction to Native American Studies **Credits: 3**
- NAS 2700 - Geographies of Environmental Justice **Credits: 3** (Social and Behavioral Sciences)
- NAS 3200 - Native American Politics **Credits: 3**
- NAS 3300 - Indigenous Geographies of North America **Credits: 3**

- PHI 3340 - Philosophy of Race **Credits: 3**
- PSC 1030 - Multicultural Politics for Non-Majors **Credits: 3** (Social and Behavioral Sciences)
- PSC 2200 - Politics and Black People **Credits: 3**
- PSC 3200 - Native American Politics **Credits: 3**
- PSC 3300 - Indigenous Geographies of North America **Credits: 3**
- PSY 3030 - Multicultural Psychology **Credits: 3**
- PSY 3170 - Social Justice: Self and Citizenship: A Service Learning Course **Credits: 3**
- PSY 3700 - Psychology of Group Prejudice **Credits: 3**
- RLG 1090 - Religion, Justice, and Liberation Movements **Credits: 3**
- SED 2200 - Social Justice and Disability Issues for Educators **Credits: 3**
- SOC 1040 - Introduction to Social Gerontology **Credits: 3**
- SOC 3140 - The Black Community **Credits: 3**
- SOC 3200 - Asian American Experiences **Credits: 3**
- SOC 3220 - Prejudice and Discrimination **Credits: 3**
- SWK 3110 - Social Justice and Activism in the Chicana/o Community **Credits: 3** (Social and Behavioral Sciences)
- SWK 3140 - The Black Community **Credits: 3**

## Transferability of Ethnic Studies & Social Justice Credits

Transfer credits to meet the ESSJ requirement will be accepted under the following guidelines:

- Transferable courses equivalent to an existing ESSJ course will satisfy the MSU Denver ESSJ requirement. Equivalency will be determined by the department offering the course. Once a course has been approved by a department, it will be given the status of an approved transferable ESSJ course.
- The Ethnic Studies & Social Justice Curriculum Review Committee (previously the Multicultural Review Committee) will evaluate courses that do not have a university equivalent course to determine if the course meets MSU Denver criteria for the ESSJ course requirement.
- Students with partial credits (for example, resulting from credit transferred from institutions utilizing quarters or trimesters) may receive deviations of less than one hour in the ESSJ Requirement.
- An appeal can be made to the Associate Vice President of Curriculum, Academic Effectiveness, and Policy Development.

# Senior Experience Graduation Requirements

The Senior Experience course provides a culmination of the undergraduate experience, allowing students to synthesize their learning, using critical analysis and logical thinking. Students may use the course to satisfy major or minor requirements if the course is approved for that use. Students should consult with their advisor and check prerequisites. Students must complete a Senior Experience course at the end of the undergraduate program and must take the course or courses at MSU Denver. Senior Experience courses include “senior standing” as a prerequisite in addition to other prerequisites designated by the department. In some cases, students may need to take two courses to satisfy the requirement. See an advisor in the major for specific degree requirements.

## Senior Experience Courses

The following courses are approved to satisfy the Senior Experience requirement. Students should review the requirements of their specific degree program to see which Senior Experience course is required for that program. If uncertainty exists as to which Senior Experience course is appropriate, the student should consult the department offering the student's degree program.

- AAS 4850 - Research Seminar in Africana Studies **Credits: 3**
- AES 4210 - Airport Planning and Management II **Credits: 3**
- AES 4910 - Aviation and Aerospace Strategic Planning **Credits: 3**
- AES 4930 - Professional Flight Standards Seminar **Credits: 3**
- AMS 4700 - Team Project Experience **Credits: 3**
- AMS 4940 - Capstone: Advanced Manufacturing Project Planning and Process Development **Credits: 3**
- AMS 4950 - Professional Internship **Credits: 1-15**
- ANT 4100 - Biological Anthropology Research Design **Credits: 3**
- ANT 4251 - Advanced Ethnographic Field Experience **Credits: 3**
- ANT 4710 - Advanced Archaeological Research **Credits: 3**
- ART 4701 - Studio Art Senior Experience: Exhibition and Thesis **Credits: 3**
- ART 4703 - Student Teaching and Seminar: Elementary K-6 **Credits: 6**
- ART 4710 - Art Senior Experience **Credits: 3**
- BIO 4230 - Issues in Conservation Biology **Credits: 3**
- BIO 4271 - Parasitology **Credits: 4**
- BIO 4300 - Neurobiology **Credits: 3**
- BIO 4510 - Microbial Ecology **Credits: 4**
- BIO 4540 - Plant Ecology **Credits: 4**
- BIO 4550 - Animal Ecology **Credits: 4**
- BIO 4820 - Developmental Biology **Credits: 4**
- BIO 4850 - Evolution **Credits: 3**
- BVG 4850 - Applied Brewing Operations **Credits: 3**
- CDES 4600 - Communication Design Portfolio Development **Credits: 3**
- CDES 4721 - Communication Design Senior Experience: Exhibition and Thesis **Credits: 3**
- CET 4100 - Capstone: Design Project I **Credits: 1**
- CET 4110 - Capstone: Design Project II **Credits: 2**
- CHE 4300 - Advanced Inorganic Chemistry **Credits: 4**
- CHE 4390 - Advanced Biochemistry Laboratory **Credits: 3**
- CHE 4950 - Senior Experience in Chemistry **Credits: 3**
- CHE 4960 - Senior Experience in Biochemistry **Credits: 3**
- CHS 4850 - Research Experience in Chicana/o Studies **Credits: 3**
- CIS 4050 - Systems Analysis and Design **Credits: 3**
- CIS 4920 - Health Care Information Systems Internship **Credits: 3**
- CJC 4700 - Capstone Seminar in Criminal Justice and Criminology **Credits: 3**
- CLD 4225 - CLD Residency II **Credits: 3-9**
- COMM 4420 - Freedom of Speech **Credits: 3**
- COMM 4910 - Applied Communication Research Project **Credits: 3**
- COMM 4920 - Senior Seminar **Credits: 3**
- COMM 4930 - Senior Communication Internship **Credits: 3-6**
- CEE 4700 - Senior Design I **Credits: 1**
- CEE 4800 - Senior Design II **Credits: 2**
- CPM 4950 - Professional Internship **Credits: 1-15**
- CS 4360 - Senior Experience in Computer Science **Credits: 4**
- CYB 4990 - Capstone Seminar in Cybersecurity **Credits: 3**
- DANC 4990 - Dance Senior Experience **Credits: 3**
- DSML 4360 - Senior Experience in Data Science and Machine Learning **Credits: 4**
- ECO 3459 - Policy Debates in the History of Economic Thought **Credits: 3**
- ECO 4800 - Economic Policy Analysis **Credits: 3**
- ECE 4350 - Senior Experience in Early Childhood Education **Credits: 6**
- ECE 4390 - Student Teaching and Seminar: Early Childhood (Preschool through Third Grade) **Credits: 6,12**
- ECE 4395 - Student Teaching and Seminar: Early Childhood Special Education (Preschool through Third Grade) **Credits: 6 or 12**
- ECE 4425 - Early Childhood Residency II **Credits: 9**
- EDS 4010 - Action Research within Communities of Practice **Credits: 3**
- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 **Credits: 6,12**
- EDU 4115 - Residency I **Credits: 3-7**
- EDU 4116 - CLD Residency I **Credits: 3-7**

- EDU 4190 - Elementary Student Teaching and Seminar: K-6 **Credits: 6,12**
- EDU 4225 - Residency II **Credits: 9**
- EDU 4226 - CLD Residency II **Credits: 9**
- EET 4100 - Senior Project I **Credits: 1**
- EET 4110 - Senior Project II **Credits: 2**
- ENG 4500 - Senior Project **Credits: 4**
- ENG 4520 - Creative Writing Capstone **Credits: 4**
- ENG 4540 - Professional Writing and Rhetoric Capstone **Credits: 4**
- ENG 4640 - Teaching English, 7-12 **Credits: 3**
- ENG 4660 - Teaching Literature and Language K-6 **Credits: 3**
- ENV 4960 - Global Environmental Challenges **Credits: 3**
- ENV 4970 - Environmental Field Studies **Credits: 3**
- ESS 4950 - Community Coaching for Health **Credits: 3**
- EVE 4611 - Senior Design Project I **Credits: 1**
- EVE 4612 - Senior Design Project II **Credits: 2**
- EXS 4880 - Internship in Exercise Science **Credits: 10**
- FER 4610 - Disaster Planning and Control **Credits: 3**
- FRE 4520 - Modern French Theater **Credits: 3**
- FRE 4530 - The French Novel **Credits: 3**
- GEG 4975 - Geography Capstone **Credits: 3**
- GEL 4970 - Undergraduate Research in Geology **Credits: 3**
- GIS 4890 - Advanced GIS Project **Credits: 3**
- GIS 4910 - Satellite Image Processing and Analysis **Credits: 3**
- GIS 4920 - Advanced Directed Study in Geospatial Sciences **Credits: 3**
- GWS 4750 - Feminist Research and Activism **Credits: 3**
- HCM 4161 - Disaster Planning and Control **Credits: 3**
- HCM 4510 - Health Care Management Practicum **Credits: 6**
- HCM 4610 - Health Professions Internship **Credits: 3**
- HCM 4920 - Health Care Information Systems Internship **Credits: 3**
- HIS 4010 - Methods of Teaching Social Science: Secondary School **Credits: 3**
- HIS 4820 - Senior Seminar **Credits: 3**
- HLDR 4500 - Applied Leadership in Hospitality **Credits: 3**
- HLDR 4800 - Applied Hospitality and Tourism Concept Development **Credits: 3**
- HSP 4025 - Peer Health Education- Field Experience **Credits: 3**
- HSP 4780 - Human Services Internship II **Credits: 8**
- HSP 4840 - Human Services Internship **Credits: 5-20**
- HSP 4880 - Addiction Studies Internship **Credits: 5 or 15**
- HTE 4000 - Hospitality Field Experience **Credits: 3**
- HTL 4500 - Applied Hotel Management **Credits: 3**
- IND 4960 - Professional Internship **Credits: 3**
- ITP 4900 - Theories and Application of Knowledge for Integrative Health **Credits: 3**
- ITP 4950 - Community Coaching for Health **Credits: 3**
- ITP 4999 - Applied Learning with Lifestyle Medicine **Credits: 3**
- JMP 4500 - Ethical and Legal Issues in Journalism **Credits: 3**
- JMP 4790 - Senior Seminar **Credits: 3**
- LING 4060 - Modern Language Theory **Credits: 4**
- MET 4100 - Senior Project I **Credits: 1**
- MET 4110 - Senior Project II **Credits: 2**
- MGT 4420 - Entrepreneurial Business Planning **Credits: 3**
- MGT 4430 - Operationalizing a Small Business **Credits: 3**
- MGT 4700 - Global Management **Credits: 3**
- MGT 4830 - Workforce Social Justice **Credits: 3**
- MGT 4950 - Strategic Management **Credits: 3**
- MKT 4250 - Advanced Selling **Credits: 3**
- MTH 4210 - Probability Theory **Credits: 4**
- MTH 4410 - Real Analysis I **Credits: 4**
- MTH 4480 - Numerical Analysis I **Credits: 4**
- MTL 4630 - Teaching Secondary Mathematics **Credits: 4**
- MTR 4600 - Meteorology Research Seminar **Credits: 3**
- MUS 4740 - Senior Recital Performance **Credits: 3**
- MUS 4790 - Senior Recital Project **Credits: 1**
- MUS 4800 - Seminar in Music Repertoire **Credits: 2**
- MUS 4899 - Commercial Music Capstone **Credits: 3**
- MUS 4950 - Senior Project **Credits: 3**
- NUR 4860 - Nursing Capstone: Culmination of the Magnet Journey **Credits: 3**
- NURA 4850 - Nursing Senior Experience **Credits: 5**
- NURS 4850 - Nursing Senior Experience **Credits: 5**
- NUT 4720 - Nutrition Capstone **Credits: 3**
- PHI 4100 - Senior Seminar **Credits: 3**
- PHY 4611 - Computational Physics **Credits: 3**
- PHY 4711 - Senior Physics Laboratory **Credits: 2**
- PHY 4921 - Physics Senior Seminar **Credits: 1**
- PSC 4020 - Democracy **Credits: 3**
- PSY 4320 - Advanced Psychological Research Methods **Credits: 3**
- PSY 4330 - Psychology in the "Real World": Thinking Like a Psychologist **Credits: 3**
- PSY 4510 - History and Systems of Psychology **Credits: 3**
- PSY 4650 - Advanced Internship in Psychology **Credits: 3**
- PSY 4700 - Senior Experience in Human Development and Family Studies **Credits: 3**
- PUB 4020 - Peer Health Education- Field Experience **Credits: 3**
- RECR 4890 - Internship in Recreation, Parks, or Therapeutic Recreation **Credits: 10-14**
- RST 4100 - Applied Foodservice Operations **Credits: 4**
- RST 4500 - Concept Development for Restaurants **Credits: 3**
- SED 4440 - K-12 Practicum in Special Education **Credits: 3 or 6**

- SED 4490 - Special Education Student Teaching and Seminar **Credits:** 6 or 12
- SLHS 4300 - Senior Experience in Speech, Language, Hearing Sciences **Credits:** 3
- SLHS 4350 - Speech-Language Pathology Assistant Methods **Credits:** 7
- SM 4860 - Seminar in Sport Management **Credits:** 3
- SOC 4600 - Advanced Survey Research **Credits:** 3
- SOC 4710 - Advanced Qualitative Methods **Credits:** 3
- SPA 4200 - Spanish-American Essay: 19th and 20th Centuries **Credits:** 3
- SPA 4310 - History of the Spanish Language **Credits:** 3
- SSE 4610 - Senior Design Project **Credits:** 3
- SWK 4500 - Field Experience I **Credits:** 3
- SWK 4510 - Field Experience II **Credits:** 3
- THE 4230 - Stage Directing **Credits:** 3
- TTM 4800 - Inbound Tourism **Credits:** 3

# Enrollment

- [Testing Services](#)
- [New Student Orientation](#)
- [Academic Advising](#)

## Testing Services

The Office of Testing Services provides testing services that help students determine placement in General Studies courses for their first year at MSU Denver. All first-time students and transfer students who need to take General Studies courses in Written Communication and Quantitative Literacy are required to complete the writing and mathematics Accuplacer placement examinations prior to enrollment, unless they meet at least one of the following exemptions for each examination:

- If the student has ACT or SAT scores within the past five years, some assessment tests may be waived if the following scores are met or exceeded: an ACT subscore at or above 18 in English (SAT Evidence-Based Reading and Writing of 470) and 19 or 20 in Math (SAT math of 460 or 480).
- Students with Advanced Placement, International Baccalaureate, or College Level Examination Program test results may be exempt from certain placement tests. Students should contact the Transfer Services office at 303-556-3774 for more information.
- Transfer students who have completed the equivalent of the General Studies requirements in Written Communication and Quantitative Literacy are exempt from the placement examinations. Students should contact the Transfer Services office at 303-556-3774 for more information.

For additional information, see the Testing Services website, [msudenver.edu/testing](https://msudenver.edu/testing), or call 303-615-1700.

Degree-seeking students whose records indicate that they require remedial coursework have at their disposal Supplemental Academic

Instruction (SAI) options offered through MSU Denver or basic skills courses offered through the Community College of Denver and other community colleges in the region. Students are responsible for completing remedial coursework within the first 30 semester hours at MSU Denver. The Office of Testing Services is located in the Tivoli Student Union, Room 347.

## New Student Orientation

Orientation is a required step for incoming degree-seeking students at MSU Denver. There are various options to complete orientation requirements including virtual and in-person sessions.

During orientation, incoming students have the opportunity to interact with current MSU Denver students and staff while they receive valuable information about academic advising, campus resources, and financial aid. Our virtual and in-person orientation programs include advising and registration support for the first semester of courses. Orientation Leaders also share some of their own tips for college survival, including how to utilize campus resources and how to get involved in campus activities.

For further information about orientation, visit the website, [msudenver.edu/orientation](https://msudenver.edu/orientation), call 303-615-0770, or email [orientation@msudenver.edu](mailto:orientation@msudenver.edu). The Orientation office is located in the Jordan Student Success Building, Suite 217.

## Academic Advising

At MSU Denver, students are provided multiple sources of academic advising support from faculty and professional advisors. Services available to students include assistance with course selection, schedule planning, and registration techniques; help with long-term degree planning; and ongoing developmental advising, including assistance with the major/minor selection process, adjustment to college, and more. For additional information on advising, visit [msudenver.edu/advising](https://msudenver.edu/advising).

# Financial Aid and Scholarships

The Metropolitan State University of Denver financial aid program provides assistance and advice to students who would be unable to pursue their education at the university without such help. Scholarships, grants, loans, and part-time employment are available singly or in various combinations to meet the difference between what the student and the student's family could reasonably be expected to provide and the expected cost of attending MSU Denver.

For information on financial aid and scholarships, click on a link to be taken to the entry below.

- [Eligibility and Need](#)
- [Application Procedures](#)
- [Financial Aid Programs](#)
- [Grants](#)
- [Scholarships](#)
- [Loans](#)
- [Work-Study](#)
- [Financial Aid Package](#)
- [Award Notification](#)
- [Repayment Policy](#)

## Eligibility and Need

To qualify for financial aid, a student must submit a FAFSA; be a U.S. citizen or eligible noncitizen (students who do not meet the citizenship eligibility requirements but are designated as an ASSET student may submit a CASFA); be degree seeking in an eligible program and be enrolled at least half-time for most type of financial aid; be making satisfactory academic progress; and cannot be in default or in an overpayment on a federal education loan or owe a repayment on a federal grant.

## Application Procedures

Students must complete the Free Application for Federal Student Aid (FAFSA) at [studentaid.gov](http://studentaid.gov) or if designated as a Colorado Asset Student, the Colorado Application for State Financial Aid (CASFA) at [cdhe.colorado.gov](http://cdhe.colorado.gov). MSU Denver's Title IV School Code is: 001360.

Students should complete and submit the FAFSA or Renewal FAFSA to the federal processor as early as possible (after October 1st of each year) and submit all requested documents to the MSU Denver Office of Financial Aid by March 1st.

Detailed information concerning application procedures is provided on our website, [msudenver.edu/financial-aid](http://msudenver.edu/financial-aid).

## Financial Aid Programs

The amount of funds made available to students depends on the maximum award allowed by regulation of each program, the student's established financial need, duration of the student's enrollment, and funds allocated to the university by the state and federal government.

## Grants

Grants are gift money from the federal or state government or the institution and do not have to be repaid.

**Federal Pell Grants** are federal grant funds awarded to undergraduate students who have high financial need determined by the submission of a FAFSA and who have not yet received a bachelor's degree. The amount of the award varies and is based upon the Department of Education's need analysis formula and the number of hours for which the student is enrolled.

**Federal Supplemental Educational Opportunity Grants (FSEOG)** are federal grant funds awarded to undergraduate students who have exceptional financial need as determined by the submission of a FAFSA and have not yet received a bachelor's degree. The amount of FSEOG awards varies from year to year depending on the funding amounts and number of students who meet eligibility requirements.

**Colorado State Grant (CSG)** is a state grant fund awarded to Colorado residents with demonstrated financial need who are pursuing an undergraduate degree. Eligible students cannot have a prior bachelor's degree, must establish eligibility by completing a FAFSA or CASFA, are enrolled at least half-time (at least six credit hours) at MSU Denver and must meet all other financial aid eligibility requirements.

## Scholarships

**Most scholarships require a student to be enrolled at least half-time, be degree-seeking, be making satisfactory academic progress, and not be in default on a federal education loan or owe a repayment on a federal or state grant to receive a scholarship.**

Students should refer to the MSU Denver scholarship website, [msudenver.edu/financial-aid/scholarships](http://msudenver.edu/financial-aid/scholarships), for information regarding a comprehensive list of scholarships including access to free online scholarship searches.

**Presidential Scholarships:** MSU Denver's Office of Financial Aid and Scholarships offers Presidential Academic Achievement Scholarship awards to both incoming, continuing and transfer students. These scholarships are awarded on a first-come, first-served basis until funds are exhausted. Due to limited funding, it is recommended that students complete a FAFSA or CASFA as soon as the application becomes available and complete any remaining financial aid documents requested as soon as possible. Students who have a completed financial aid file and a most recent GPA of 3.25 or better will be considered, there is no additional application required.

**Foundation Scholarships:** The MSU Denver Foundation offers numerous scholarship opportunities for both incoming and continuing students. By submitting the Metropolitan State University of Denver Scholarship Application by March 1st "Priority Consideration Deadline" each year, you will automatically be considered for all MSU Denver Foundation scholarships for which you are eligible for the next academic year. While a FAFSA or a CASFA is not required, it is highly recommended that students complete one of these applications to maximize scholarship opportunities. The MSU Denver Scholarship Application is available for online submission at [msudenver.academicworks.com](https://msudenver.academicworks.com).

**Athletic Scholarships:** MSU Denver has a limited number of athletic scholarships. For additional information, contact the MSU Denver Intercollegiate Athletics Office (303-615-0888).

Receipt of a scholarship may affect a student's financial aid award because students receiving federal and/or state aid are limited in the maximum amount and type of aid that can be received. A student whose full need has been met by other types of financial aid prior to receipt of a scholarship will have that aid reduced by the amount of the scholarship. If the student's full eligibility has not been met, the scholarship will be allowed to satisfy the unmet need. Each student's situation is treated individually. All scholarships are based on the student's continued eligibility and available funding. Scholarships are awarded based upon Fall and Spring enrollment, if a student does not return for Spring semester that funding may be reallocated to another student.

## Loans

**Federal Direct Subsidized Student Loans:** Offered to undergraduate students who are enrolled at least half-time (six or more credit hours) and demonstrate financial need as determined by the FAFSA submission. Offered amounts are determined by a student's financial need, dependency status, and year in school. Interest does not begin to accrue until six months after the student graduates or ceases to be enrolled in school at least half-time (six credit hours per semester). Interest rates vary from year to year but are fixed for the lifetime of the loan.

**Federal Direct Unsubsidized Student Loans:** Offered to graduate and undergraduate students who have submitted and meet eligibility requirements as determined by the FAFSA and are enrolled at least half-time (six credit hours for undergraduates or three hours for a graduate student). Offered amounts depend on academic career level (graduate or undergraduate). For undergraduate unsubsidized loans, amounts offered also depend on dependency status and year in school. Interest accrues while students are in school and during the six-month grace period after a student graduates or ceases to be enrolled at least half-time.

Federal Perkins Loans are long-term federal loans that are awarded based on the student's need and MSU Denver's available funds. Federal Perkins Loans can range from \$100 to \$1,500 per semester. Repayment of the loan begins nine months after the student graduates or ceases to be enrolled in at least six credit hours each semester. The interest rate is 5 percent and interest begins to accrue at repayment.

All first-time borrowers at MSU Denver are required to perform a Perkins Loan Entrance Interview over the Web before loan funds can be released to them.

**Subsidized Federal Stafford Loans:** are based on the student's need as determined by the MSU Denver Office of Financial Aid. Interest does not begin to accrue until six months after the student graduates or ceases to be enrolled in school at least half time (six credit hours per semester).

**Unsubsidized Federal Stafford Loans:** These loans have many of the same terms and conditions as the Federal Stafford Loan. The main difference is that the students are responsible for the interest that accrues while they are in school and during the six-month grace period after they graduate or cease to be enrolled in at least six credit hours.

**Federal PLUS Loans:** PLUS loans are available to parents of dependent students and graduate students who have a completed FAFSA on file. Applicants apply for PLUS loans on [studentaid.gov](https://studentaid.gov) and will need to meet credit requirements for these loans. These loans are not guaranteed and can be denied through the application process.

Please refer to the MSU Denver Financial Aid website, [msudenver.edu/financial-aid](https://msudenver.edu/financial-aid), for more detailed information regarding loans.

## Work-Study

Work Study provides employment opportunities for students to assist with educational costs. Award amounts may vary from year to year depending on available funding. Work-study funds are paid to students for hours worked at an MSU Denver approved work-study position. Students must be offered work study as part of their financial aid package and be enrolled at least half-time per semester. The maximum hours a student may work is 30 hours per week while classes are in session and 40 hours per week between semesters. The majority of all work-study awards are need-based, however, there are a limited number of funds made available to students who do not demonstrate need as determined by the FAFSA. Students must submit a FAFSA to be considered for work study. Funding is limited for the work-study program and not all eligible students may receive a work-study award.

## The Financial Aid Package

Once student eligibility is determined, an aid package is developed based on the availability of funds, the demonstrated need, and the eligibility of the applicant. To facilitate financial aid packaging requirements, applicants must obtain all requested information and forms from designated sources and submit them to the MSU Denver Office of Financial Aid before the established deadline.

## Award Notification

After the Office of Financial Aid has determined the type and amount of aid for which a student qualifies (aid package), the student is emailed an Award Notification.

## Disbursement Procedures:

- Awards are based on full-time enrollment. If a student is enrolled for less than 12 credit hours each semester, the award may be reduced/prorated. The final award adjustment occurs on census date (about the 12th day of school each fall and spring semester and the 8th day of the summer semester).
- Grants, Scholarships and Student Loans: All financial aid awards (with the exception of out-of-state loan checks, consortium checks and some scholarship funds) are disbursed into the student's account. The Bursar's Office deducts any outstanding balance owed, including current tuition and fees, and issues a check for the remaining funds. This check is either mailed to the student or the student can pick it up at the Cashier's Office. This check can be used to purchase books and pay other educationally related expenses.

- Parent Loans: Any excess of Federal Parent PLUS funds is either sent to the parent borrower or to the student, whoever the parent indicated on the PLUS application.
- Work Study: Work-study earnings are paid biweekly and are treated as wages earned. Outstanding balances owed to MSU Denver are not deducted from these earnings; however, students are strongly advised to pay any outstanding balance as soon as a work-study check is received.

Please refer to the MSU Denver website, [msudenver.edu](https://msudenver.edu), for information regarding proration of aid disbursements.

## Repayment Policy

Students who receive financial aid and withdraw officially or unofficially from MSU Denver prior to completion of a term may be required to repay a portion or all of their financial aid and scholarship funds. Required financial aid repayments must be made to MSU Denver's Bursar's Office. Please go to MSU Denver's website, [msudenver.edu/financial-aid](https://msudenver.edu/financial-aid), and click on the undergraduate student financial aid section or the graduate student financial aid section as applicable for more specific information.



# General University Policies

## Contents

- [Academic Considerations for Students who Nurse after Childbirth](#)
- [Children in Classrooms and Workplaces Policy](#)
- [Health Insurance Requirement](#)
- [Immunizations](#)

Additional university policies pertaining to Amorous Relationships, Discrimination, Equal Opportunity, Harassment, Sexual Harassment, and Violence, along with other university Policies, can be found in the Metropolitan State University of Denver Policy Library (<https://www.msudenver.edu/policy/policy-library/>).

Additional university policies pertaining to Email, Computing, Security, and Electronic Communications, along with other university policies, can be found in the Metropolitan State University of Denver Policy Library (<https://www.msudenver.edu/policy/policy-library/>).

## Academic Considerations for Students who Nurse after Childbirth

It is recognized that some women will choose to nurse after childbirth, and Metropolitan State University of Denver is committed to creating a supportive environment for nursing mothers that includes lactation facilities on campus. A summary of the on-campus lactation facilities listed by building and an explanation of how to access these spaces is provided at the end of this policy. The locations can also be found at this URL: [https://www.ahcc.edu/files/general/Lactation\\_Room\\_Map.pdf](https://www.ahcc.edu/files/general/Lactation_Room_Map.pdf). Note that refrigeration services are generally not available and that students should plan accordingly.

Students who choose to nurse after childbirth are responsible for considering the following recommendations when selecting classes during the semester(s) in which expressing (pumping) milk will occur.

- Schedule classes that meet for no more than two hours at a time.
- Schedule classes that are not back-to-back to ensure ample time between classes for pumping to occur.
- Allow enough time between your work schedule and classes to ensure ample time for pumping prior to the beginning of class.
- Consider on-line courses if this mode of instruction fits better with your pumping needs.
- Be aware that there is a higher percentage of summer semester courses (compared with fall and spring semester

courses) that are longer in length, and that certain summer semester courses may not be suitable choices.

The university supports a mother's choice to nurse; however, the requirements associated with each mother's circumstance can vary significantly. It is the student's responsibility to make the right course selection using the above guidelines in order to avoid missing class time and interrupting the learning process.

In general, the university and its faculty expect that students choosing to nurse will plan ahead as is outlined in this document so that the ongoing academic mission of the institution is not interrupted. A critical component for successful learning is class attendance, and in some classes, active course participation is also an important factor. For this reason, students who are expecting to nurse after childbirth are responsible for designing their class schedule in a manner that does not interfere with the allotted instruction time for any of their registered courses.

For any anticipated unique exceptions in which class instruction time may be impacted by a need to pump, a student is required (before registering for such a course) to schedule a meeting with the course instructor and the appropriate associate/assistant dean. At this meeting it will be determined if it is advisable for the student to register for the course in question. This will be determined by an assessment of the anticipated time away from class to pump and the implications to the educational requirements of the course. Any such exceptions agreed upon must be put in writing by the faculty member teaching the course and provided to the student and the Dean's Office within one week following such a meeting. There are no course penalties associated with agreed upon times for lactation between faculty and student. However, in all cases the faculty member will maintain the same course standards required of all students registered for the course and as outlined in the course syllabus.

### MSU Denver PRIMARY Lactation Room Locations and Access Instructions

Building	Room Number/Address	How to Access Lactation Space
Student Success Building (SSB)	Room 321	Access to the lactation room in the Student Success Bldg requires women to obtain a key from <b>Human Resources in room 309</b> . Women may check out a key for one semester and renew as needed.
Science (SI)	Room 2088	Access to the lactation room in the Science Building requires that women check out a key from the <b>Institute for Women's Studies and Services at 1059 Ninth Street Park</b> . Women may check out a key for one semester and renew as needed.

		*Location has a refrigerator, sink and power outlets.
<b>Gender Institute for Teaching and Advocacy</b>	<b>Boulder Creek Room 132</b>	Access to the lactation room in the <b>Gender Institute for Teaching and Advocacy</b> is on a walk-in basis 9 a.m. to 4 p.m. Monday-Friday. Individuals need only to check in with a staff member in the reception area.  *Location has sinks, microwave and refrigerators. Minimal, temporary storage for breast milk and/or pumps.

		Arrangements must be made in advance before first use of room.
<b>King Center (KC)</b>	<b>Political Science Department, Room 498</b>	Access to the lactation space room in the <b>King Center</b> can be gained by meeting with the Political Science Department office manager (room 498) to arrange for such use. Arrangements must be made in advance before first use of room.

MSU Denver SECONDARY Lactation Room Locations and Access Instructions

<b>Building</b>	<b>Inquire at this Location</b>  <b>Within the Building</b>	<b>How to Access Lactation Space</b>
<b>Plaza Building (PL)</b>	<b>Health Center at Auraria, Room 150</b>	Access to the lactation space room in the <b>Plaza Building</b> can be gained by meeting with Health Center personnel (room 150) to arrange for such use. Arrangements must be made in advance before first use of room.
<b>Central Classroom (CN)</b>	<b>Social Work Department, Room 201</b>	Access to the lactation space room in <b>Central Classroom</b> can be gained by meeting with the Social Work Department (SWK) personnel (room 201) to arrange for such use. Arrangements must be made in advance before first use of room.
<b>Administration Building (AD)</b>	<b>West Campus, School of Business Dean's Office Room 540</b>	Access to the lactation space room in the <b>Administration Building</b> can be gained by meeting with the School of Business personnel in the Dean's Office (room 540) to arrange for such use. Arrangements must be made in advance before first use of room.
<b>Arts Building (AR)</b>	<b>Art Department, Room 187C</b>	Access to the lactation space room in the <b>Arts Building</b> can be gained by meeting with the Art Department office manager (room 187C) to arrange for such use.

## Children in Classrooms and Workplaces Policy

Metropolitan State University of Denver has an obligation to its students, faculty, staff, and visitors to conduct its operations and maintain its facilities in a manner consistent with its mission as an institution of higher education. For reasons that include safety of children, and assuring professional and efficient performance of academic pursuits and campus operations, the university cannot routinely accommodate children in campus workplaces or classrooms.

Presence in classrooms is restricted to enrolled students or visitors with a legitimate purpose, who may be adults or minors. Instructors of record are responsible for ensuring that individuals who attend their classes are properly enrolled or have been invited for the purpose of making special announcements, guest lecturing, or other authorized reasons. Instructors have the responsibility to ensure that the classroom is conducive to student learning and may address disruptive or distracting situations as appropriate.

Instructors have the discretion to make infrequent exceptions due to temporary, unforeseen emergencies. In these cases, children must remain in the classroom and are not allowed to sit in the hallway or be unsupervised in any location on campus. Regular repeated visits by children or others without a legitimate purpose are not permitted. Unless properly supervised, and with pre-approval, children are not permitted in labs, shops, construction/repair sites, or other areas where potential hazards exist. Children brought on campus must be directly supervised at all times by their parent or guardian. Leaving children unattended is a violation of the MSU Denver Student Code of Conduct.

### Definitions

1. Children: Minors under the age of 18.
2. Minors Enrolled as Students: Enrolled students under the age of 18 have the rights and privileges of any other student in the classroom and on campus grounds.

## Health Insurance Requirement

MSU Denver students taking nine (9) or more credit hours in the Fall or Spring are **required to have health insurance** that complies with the university requirement. To learn about the health insurance requirement, please view a brief video at:

<https://healthcenter1.com/domestic-health-insurance-requirement/>

#### **Students can meet the requirement by fulfilling option A or B:**

**Option One:** Students can accept automatic enrollment in the university sponsored Student Health Insurance Plan (SHIP). Enrollment is automatic when a student registers for nine or more credit hours in the Fall or Spring semester.

**Option Two:** Students insured by an outside federally compliant health plan can submit an online health insurance waiver form by the published semester deadline to opt-out of the university sponsored SHIP.

Additional details regarding both options can be found by going to:

<https://healthcenter1.com/opt-out-waiver-instructions/>

The Student Health Insurance Plan (SHIP) is designed specifically for MSU Denver students (regardless of immigration status) **taking nine (9) or more credit hours in the Fall or Spring semesters**. This comprehensive plan is designed to comply with any federal requirement, save students money and time, and provide convenient access to quality medical care on and off campus. SHIP provides twelve (12) months of insurance coverage for students taking nine (9) or more credit hours in both the Fall and Spring semesters.

#### **SHIP OFFERS STUDENTS EXCLUSIVE BENEFITS & SAVINGS AT THE HEALTH CENTER AT AURARIA:**

100% coverage for all medical services;

- \$0 office visits, procedures and supplies
- \$20 maximum cost per prescription
- NO deductible, NO co-insurance, NO co-payments

For students with outside health insurance, who are taking nine or more credit hours, an electronic waiver form is required each Fall and Spring semester. Students who initially register for nine or more credit hours, but subsequently drop below nine credit hours before the waiver compliance deadline, will automatically have the insurance charge removed from their tuition bill and will not be covered by the University-offered health insurance for the current semester. Student taking less than nine (9) credit hours are not permitted to voluntarily participate in the University-offered student health insurance plan.

If a semester premium is not paid in full, any submitted claims during that semester will be denied. For additional insurance information go to: <https://msudenver.edu/healthcenter/msudenverplans/>

## **Immunizations**

Colorado State law requires any student enrolled for one or more credit hours in higher education to comply with the State's immunization policy. This policy also applies to active military students, graduate students, students taking on-line only classes and those studying abroad.

The immunization requirement is in place to ensure the health and safety of all constituents on the Auraria campus and the university is required by state law to enforce this requirement in the interest of public health.

Students must comply with the State of Colorado's Immunization Policy requirements for higher education by submitting documentation of their previous immunizations, specifically providing proof of 2 doses of combined MMR vaccine (measles/mumps/rubella.) or proof of having received two doses of measles vaccine, two doses of mumps vaccine and two doses of rubella vaccine. This documentation must be submitted during the first semester of attendance by the immunization deadline to the Auraria Immunizations Office. The summer/fall deadline is October 1 and the spring deadline is March 1.

Students living in on-campus housing must provide proof of Meningococcal Meningitis Immunization within the most recent 5 years. Those who have not received this immunization have two options:

1. Complete the [Auraria Immunization Compliance Form](#) and indicate in the Meningococcal Waiver section that you have reviewed and understand the risks of contracting meningococcal meningitis and do not intend to receive the vaccine.
2. Schedule a vaccination. Vaccination is available at The Health Center at Auraria or with your healthcare provider. Health insurance covers 100% of routine vaccines. Call 303-615-9997 to schedule and/or verify insurance eligibility."

**Students who do not comply with this requirement will not be able to eligible to register for future semesters. Non-compliant students will have an immunization "hold" put on their account if they have not submitted their immunization documentation by the published deadline during their first semester of attendance.**

For additional information go to:

<https://healthcenter1.com/immunization-requirement/>.

# Graduation

The [Office of the Registrar](#) is located in the Student Success Building, suite 160 (#3). They are responsible for making approved degree exceptions to students' degree progress reports, performing final degree checks, preparing for the fall and spring commencement ceremonies, conferring degrees and certificates, and distributing diplomas.

For more information on graduation, click on a link to be taken to the entry below.

- [Degree Progress Report](#)
- [Graduation Procedures](#)
- [Graduation Checklist](#)
- [Diplomas and Transcripts](#)
- [Commencement Ceremony](#)

## Degree Progress Report

The Degree Progress Report is an advising tool that should be used by students and their advisors throughout the student's academic career at MSU Denver. Degree Progress Reports can be viewed by logging on to the Student Hub, or printed/viewed in the student's Major department.

## Graduation Procedures

Students who anticipate completing all degree requirements within the next two semesters should review the following sections of this catalog: Requirements for All Bachelor Degrees, Academic Policies and Procedures, Graduation, Diplomas and Commencement, Honors and Awards.

Students should review their Degree Progress Report throughout their attendance by logging on to the Student Hub. Students should review their Degree Progress report with a faculty advisor. If any degree exceptions are needed, the department will submit a degree exception. Once degree exceptions are made, students will be notified through their MSU Denver email account.

All students formally declare their degree/certificate candidacy by submitting an Application for Graduation via the Student Hub prior to their anticipated semester of graduation, but no later than the deadline stipulated in the [Academic Calendar](#). Students who miss the deadline to apply for graduation must apply for a subsequent semester.

After submitting the Application for Graduation, students will have their academic records reviewed for completion of all degree requirements. All degree applicants will be notified of their graduation status and any discrepancies that exist via their student email. Students will be given a deadline by which to explain these discrepancies to the Office of the Registrar. Students will not be eligible to remain a graduation candidate if they do not comply with

this deadline. As graduation candidates, students will receive information about the final steps in the graduation process and the commencement ceremony. Students should ensure that their current address is on file. If students need to make a change or update to a recently submitted Graduation Application, they must submit a Graduation Application Addendum form, which can be obtained from the Office of the Registrar.

## Graduation Checklist

- Review the Requirements for your degree/certificate program.
- Review the Academic Policies and Procedures (pertaining to your Degree Progress Report, graduation, diplomas and commencement, and honors and awards).
- Review your Degree Progress Report. It is recommended to review this with your major department.
- If necessary, correct any discrepancies with your Degree Progress Report in consultation with your major department advisor.
- File an online Application for Graduation by the deadline listed in the [Academic Calendar](#).
- Ensure correct address is on file with the Office of the Registrar.

For a complete graduation checklist and details refer to the [Office of the Registrar Graduation website](#).

## Diplomas and Transcripts

Diplomas are mailed approximately six weeks after the semester ends. Students must update their mailing address if there has been a change.

Official transcripts with the posted degree will be available approximately four weeks after the semester ends. Students may request transcripts as early as the middle of their last semester and indicate that it is to be held until the degree is posted. Transcripts may be requested in person at the Office of the Registrar, SSB 160, by fax at 303-556-3999, or via the [Office of the Registrar's](#) website under transcripts.

## Commencement Ceremony

Commencement ceremonies are held at the end of the fall and spring semesters. Candidates are encouraged to attend one of the two ceremonies. The commencement program lists candidates, degrees, and degree honors, if any. Although no commencement ceremony is held in the summer, students may still graduate at this time. Summer graduates are asked to attend the fall commencement ceremony. Their names, degrees and honors, if any, will appear only in the fall commencement program. Check [MSU Denver's website](#) for complete, up-to-date information about the commencement ceremony.

To qualify for graduation honor recognition at the commencement ceremony, a student must have the specified GPA and must have completed a minimum of 50 semester hours of academic credit at MSU Denver by the end of the term of graduation. Transfer credits and courses not registered at MSU Denver are not considered when determining honors. Recognition at the commencement ceremony does not guarantee final honors designation on the official record. Honors announced at the commencement ceremony will be based upon a preliminary calculation not including grades from the term of graduation.

Students who qualify for recognition at the ceremony will be sent a letter from the Dean's Office of the College or School in which their major is located. This letter authorizes students to receive honor cords at the time they rent their caps and gowns.

Candidates with an Individualized Degree Program major will be identified for honors purposes within the College or School most prominent in their major.

# Online Learning

At MSU Denver, we adapt to your educational needs based on your ever-changing life. Online learning is a cornerstone of our mission to serve you where you are, how you want to learn, and when you are available. Join our learning community of resourceful, committed, and passionate students who are actively engaged with the university, faculty, and each other.

## Delivery Formats Include In-Person, Hybrid, and Online

Degrees and programs are offered in in-person, online, and hybrid formats, and available formats are listed on each major program page. MSU Denver students have complete flexibility to choose the course formats they prefer, and can mix and match formats regardless of the program they are pursuing.

- **In-person:** all required courses are available on-campus.
- **Hybrid:** 50% or more of the required courses are available online.
- **Online:** all required courses are available online.

## Comprehensive Support for Online Students

MSU Denver Online has dedicated support staff for online students. Our Online Student Services Manager connects online students with virtual student services (so you don't have to come to campus), and resources for your distance learning success, health and well-being.

## Course Delivery Formats

### *Delivery Methods with In-Person Option or Requirement*

**In-Person:** Instructional activities are facilitated in-person at scheduled times, either on-campus or at other physical locations.

**Hybrid In-Person:** Instructional activities are facilitated through scheduled in-person sessions and either A) asynchronous online instruction, or B) scheduled meetings using live virtual meeting technology.

**Dual Mode: In-Person:** Instructional activities are facilitated in-person. The section is combined with an online section, creating a learning environment with in-person and online learners. Students are not able to switch between learning experiences during the semester.

**Hyflex:** Instructional activities are facilitated through: A) In-person class meetings; B) asynchronous online instruction; and C) online instruction using live virtual meeting technology. Students have the flexibility to choose between in-person, asynchronous, and live virtual instruction throughout the course.

**SyncFlex:** Instructional activities are facilitated in-person and online using live virtual meeting technology. Students have the flexibility to choose between in-person and live virtual instruction each class session.

**Field Experience, Practicum, Internship, etc.:** Experiential, hands-on learning that takes place in a location pertinent to the learning outcomes of the course.

### *Delivery Methods with Online Requirements*

**Asynchronous Online:** Instructional activities are facilitated online with no required scheduled meeting times. Assignments and assessments take place on a specific schedule. There are no location-specific requirements.

**Synchronous Online:** Instructional activities are facilitated online at scheduled times through live virtual meeting technology. There are no location-specific requirements.

**Dual Mode: Online:** Instructional activities are facilitated online. The section is combined with an in-person section, creating a learning environment with online and in-person learners. Students are not able to switch between learning experiences during the semester.

**Hybrid Online:** Instructional activities are facilitated online through both asynchronous online instruction and at scheduled times through live virtual meeting technology. There are no location-specific requirements.

**Self-Paced Asynchronous Online:** Instructional activities are facilitated online with no scheduled meeting time and no location-specific requirements. Students choose the pace of their progress within the course with few or no established due dates.

**Study Abroad:** Instructional activities are facilitated in another country and guided by faculty.

## Online Learning Expectations

Whether fully online or hybrid, online learning requires students to effectively manage their time, plan ahead, communicate openly and timely, present themselves professionally, and to fully understand the expectations of the course. Online and hybrid course delivery options require students to be active in Canvas multiple times a week (e.g., discussion boards, presentations, assignments, peer interactions, course material, etc.), to read all emails and announcements (as they are not reinforced in face to face class), and complete all required material in the weekly modules.

Though students don't have a physical class, students still need to schedule time to complete course assignments and learning objectives. Online does not mean less time or less rigorous. Students should schedule the equivalent time of a face-to-face class (approx. 3 hours) each week in order to learn the course material through participation in discussion and completion of the learning modules in addition to reading, homework, and assignment time required.

# Open Educational Resources (OER)

Open Educational Resources (OER) are teaching and learning materials in the public domain or licensed to give everyone free and ongoing permission to retain, reuse, revise, remix, and redistribute the materials. Open textbooks are a type of OER, and a large selection of open textbooks can be found at <https://open.umn.edu/opentextbooks>. Many MSU Denver faculty utilize open textbooks and other OER in courses to enhance the student experience and decrease course material costs. Courses with no materials cost (for textbooks, online homework systems, etc.) may be marked with a no-cost for materials designation in the course schedule, and courses with a total materials cost of \$40 or less may be marked as low-cost for materials.

# Registration and Records

All continuing students in good standing and all applicants accepted to MSU Denver are eligible to register each semester.

Students are responsible for ensuring that their address and phone number on file with the university are correct and up-to-date. Address changes may be made through the [Student Hub](#).

Information on the registration procedure, registration dates, and student responsibilities and obligations related to registration is available at the [Student Hub](#).

For additional information regarding registration and records, click on a link to be taken to the entry below.

- [Changes in Registration](#)
- [College Opportunity Fund \(COF\)](#)
- [Emergency Withdrawal](#)
- [Falsified Transcripts and Diplomas](#)
- [Full-time and Half-time Status](#)
- [Legitimate Academic Interest to Attend a Course](#)
- [Mandatory Participation Verification](#)
- [Military Leave for Students Active or Inactive Duty](#)
- [Official Transcripts \(Official Academic Record\)](#)
- [Preferred Name](#)
- [Priority Registration](#)
- [Selective Service Registration Certification](#)
- [Special Registration \(CU Denver Pooled and CCD Interinstitutional\)](#)
- [Transfer Credit Evaluation](#)
- [Waitlist](#)

## Changes in Registration

Enrolled students may adjust their schedules by dropping and/or adding classes. Students must drop classes before the drop deadline (census date). It is the student's responsibility to follow proper drop or withdrawal procedures in the event that they do not attend a class. Students who do not officially drop their classes will be assessed tuition and fees.

Drop, refund and withdrawal deadlines are located on the Student Detail Schedule via the [Student Hub](#).

Students who reduce their course load after the drop deadline and before the withdrawal deadline will receive a "W" notation for each course from which they have withdrawn. Refer to the withdrawal notation policy in the university catalog under [Academic Policies and Procedures](#).

**ALL STUDENTS ARE RESPONSIBLE FOR ALL REGISTRATION TRANSACTIONS.** Students are also responsible for following all drop and withdrawal deadlines.

# College Opportunity Fund (COF)

Every eligible Colorado resident who will be a student must apply for the College Opportunity Fund (COF) in order to authorize payment of the state's contribution toward tuition at any public college or university in the State of Colorado, including Metropolitan State University of Denver.

These funds, called "stipends," will be applied to a student's college account each semester and are available for up to 145 credit hours of eligible college-level, undergraduate study. The actual value of the stipend will be determined by the Colorado Legislature each year. Students must apply online for the stipend [here](#). Students must authorize the use of the stipend each semester during registration in the [Student Hub](#).

The COF application requires students to submit their legal name, date of birth, Social Security Number, and Driver's License Number only once in a student's lifetime. The application must be completed before the stipend can be credited to a student's tuition and fee bill.

Students who do not apply for and/or authorize COF will not be eligible for the stipend and will be responsible for paying the total in-state tuition - both the student's share and the state's share.

Eligibility: In-state, undergraduate students will be eligible for the stipend, up to 145 credit hours of eligible college-level, undergraduate study, regardless of age, income or financial aid status. If a student goes over the 145-lifetime-credit hour cap, the student may apply for an institutional one-time, waiver for (3) consecutive terms.

For more information, visit the [university's Q&A section on COF](#).

## Emergency Withdrawal

Students who must withdraw during a semester due to unforeseen or extenuating circumstances, including state or national emergency, should see the Office of the Registrar. The Office of the Registrar will make the final determination for administrative withdrawal on a case-by-case basis according to the administrative withdrawal policy. Students who request an administrative withdrawal may also request a tuition refund by filing a Tuition and Fees Appeal through the Office of the Bursar.

Office of the Registrar, Student Success Building, Suite 160 (#3), 303-556-3991, [Regquery@msudenver.edu](mailto:Regquery@msudenver.edu).

Office of the Bursar, Student Success Building, Suite 150, 303-615-0070, [bursar@msudenver.edu](mailto:bursar@msudenver.edu).

## Falsified Transcripts and Diplomas

Altering, modifying, tampering with, or in any way falsifying an official Metropolitan State University of Denver transcript or diploma is a crime. The university has implemented multiple measures to



detect such conduct. To protect the integrity and value of an MSU Denver degree, the Attorney General will vigorously prosecute, through the criminal justice system, those who commit these crimes.

In addition, students found responsible for falsifying an official MSU Denver transcript or diploma will face a university judicial hearing and appropriate sanctions may be imposed, including suspension, dismissal, and loss of credit, which could affect the student's permanent record.

## Definition of Full-time and Half-time Status

The following number of semester hours required for undergraduate students to meet full-time and half-time status for fall, spring, and summer semesters:

FALL, SPRING, and SUMMER		
Full-time	12 or more semester hours	appear on the class roster.
Three-quarter-time	9-11 semester hours	Students who demonstrate that they did participate in an academically related activity and were inadvertently dropped, have the option to request reinstatement into the course(s) with instructor(s) permission.
Half-time	6-8 semester hours	
Less than Half-time	5 hours or less	

To complete a degree in four years or eight semesters, students may need to take at least 15 semester hours per semester. For financial aid purposes, 12 semester hours is the full-time standard for the summer semester. To be eligible for health insurance coverage, students must be enrolled in nine or more credit hours in the fall or spring semester.

## Legitimate Academic Interest to Attend a Course

To attend a class, students must have a legitimate academic interest (e.g., be officially registered, waitlisted, auditing a course, enrolled through CU Denver pooled program, etc.). Individuals may not attend a class if they do not have a legitimate academic interest. Officially registered means that students have been accepted for admission by the university, and that the Course Reference Number (CRN) for the class is entered on the student's registration record. The deadline to register for a full-semester class is the census date, specified on the [Academic Calendar](#). There are pro-rated deadlines for all other courses outside of the full-term courses. Undergraduate students who qualify for the College Opportunity Fund (COF) and register after the census date will not be eligible to receive the COF stipend.

## Mandatory Participation Verification

To comply with Title IV regulations for federal financial aid, MSU Denver must determine if a student earned and maintained eligibility for their financial aid funds. Financial aid eligibility is determined based on a student's participation in an academically related activity during the first two weeks of full-term courses. For shorter-term courses like Winterim, Maymester, and Parts of Term, participation will be collected on the published Census Date for that term or course.

### Beginning of Term Verification

On the Census Date for all terms and parts of term, Faculty will be required to indicate if a student failed to begin participation in the course. Participation means that a student engages in an academically related activity (see below).

When Faculty submits information that the student has not participated, the student will be administratively dropped by the Registrar's office from the course. Financial aid will be prorated or canceled. This may require the student to repay all or a portion of the financial aid already released to them. The student will no longer appear on the class roster.

Students who demonstrate that they did participate in an academically related activity and were inadvertently dropped, have the option to request reinstatement into the course(s) with instructor(s) permission.

Note: an administrative drop from a course or courses may also impact eligibility for other programs such as Veterans Education Benefits, students attending MSU Denver on F-1 Visa, etc.

**Participation** will be defined by the faculty, and will be listed in the syllabus for each course.

Per federal guidelines, faculty and students are encouraged to consult the latest federal definitions for [Last Date of Attendance](#) to establish a clear understanding of participation requirements.

### Grades and Last Date of Participation

When submitting final grades, for any students receiving a failing grade (F grade), Faculty will be required to indicate if the student completed the class, did not attend at all, or has not participated in an academically related activity since a specific date. For students who have not participated in an academically related activity since a specific date, entry of a last date of participation will be required.

## Military Leave for Students Active or Inactive Duty

Members of the State or National Guard, Reserve, or active United States Military, who are called to active or inactive duty (e.g. drill, annual training) will not be academically penalized for that service. When a military student is notified of being called to duty, the student must notify all instructors and Veteran and Military Student Services.

Students activated may have different options, depending on the time of semester the student is called to duty and length of duty. In consultation with the student's faculty member, options may include:

- Completion of any missed work without penalty to their grade provided that satisfactory academic progress is being made,
- Drop
- Withdrawal
- Administrative Withdrawal
- Incomplete

The student is required to present proof of training schedule, official orders or letter from the service member's unit to Veteran and Military Student Services. Veteran and Military Student Services will then contact each instructor and obtain the requirements for course completion. The requirements will be sent to the student and kept on file.

Veteran and Military Student Services, Tivoli 215, 303-615-0440,  
[veterans@msudenver.edu](mailto:veterans@msudenver.edu).

## Official Transcripts (Official Academic Record)

The official transcript is a certified copy of the student's permanent academic record. It contains the official signature of the Registrar and the official seal of the university. Students may order transcripts by creating an account with our transcript vendor, Parchment. More information can be found on the [Office of the Registrar webpage](#). Requests may be delayed, depending on end-of-term grading and the posting of degrees. Transcripts must be requested by the student. The following information will be needed to create an account/request:

- Student's full, legal name as recorded while attending MSU Denver
- Student's identification number, if known
- Birth date
- Last four (4) digits of student's Social Security Number (if student does not have a social security number, enter 0000)
- Last term of attendance, if known

## Preferred Name

MSU Denver is aware that many of its students use a first name other than their legal name. As part of being a welcoming and inclusive campus, MSU Denver will implement changes to increase the use of the preferred first name. However, a student's legal first name will continue to be necessary in certain records and communications; therefore, both the legal first name and preferred name (if desired) will be stored within primary information systems. A student can add/update a preferred first name in their [Student Hub](#).

## Priority Registration

Priority registration is designed to enhance the university's ability to help students achieve graduation status. The priority registration system allows students who have earned a certain amount of credits to register prior to other students who are further from graduation. Only passing grades and transfer credit are included in this calculation.

Priority registration also accommodates students with special circumstances that impact their ability to access the classes they need to maintain satisfactory progress toward the completion of their degree.

Priority registration is structured as follows:

1. Graduate students, NCAA, students with disabilities requiring accommodations approved with the Access Center, honors students, Veteran students who received VA benefits, and tuition assistance or scholarship programs stipulating priority registration.
2. Seniors
3. Juniors
4. Sophomores
5. Freshmen
6. Non-degree-seeking students
7. Newly admitted students

## Selective Service Registration Certification

The proof of Selective Service Registration is still required for men born after December 31, 1959 for certain federal employment (such as roles in the executive branch of the federal government and the U.S. Postal Service), state employment, certain security clearance levels for contractors, job training under the Workforce Innovation and Opportunity Act (WIOA), and immigrant men residing in the U.S. who failed to register when they were at least 18 but not yet 26 years old (unless they entered the U.S. after the age 26). Full information for each state can be reviewed here:  
<https://www.sss.gov/register/state-commonwealth-legislation/>.

## Special Registration

### Interinstitutional Registration

Interinstitutional registration applies to MSU Denver students taking courses at the Community College of Denver (CCD) and to CCD students taking courses at MSU Denver. Interinstitutional application deadlines are published in the [Academic Calendar](#). During any semester, a student may not be registered interinstitutionally for more than 50% of the total number of hours carried for that term.

#### For MSU Denver students:

MSU Denver students may register interinstitutionally for a maximum of 9 credits (6 credits in Summer) and may not register for more interinstitutional credits than they are taking at MSU Denver.

MSU Denver students wishing to enroll at CCD must complete the [Interinstitutional Application](#).

MSU Denver students are restricted from registering for:

- Certain Colorado Community College (CCC) Online classes at CCD
- Remedial classes through the interinstitutional registration process

Interinstitutional courses will not satisfy academic residence requirements for a degree from MSU Denver. Only courses transferable to MSU Denver will apply toward a degree.

#### **For CCD students:**

CCD students must be degree-seeking. Courses taken at MSU Denver must be transferrable to CCD and apply toward their degree.

CCD students may not place their names on waitlists for closed classes at MSU Denver.

CCD students are restricted from registering for CU Denver Pooled Courses.

Interinstitutional students enrolled at MSU Denver will be charged all extra fees such as additional class fees, etc.

#### **Community College of Denver (CCD) - Basic Skills Courses**

The Community College of Denver offers college Basic Skills Classes available to MSU Denver students needing additional preparation in the area of mathematics.

CCD basic skills courses will not apply toward MSU Denver degree requirements or GPA.

MSU Denver students registering, withdrawing or dropping CCD basic skills courses are expected to comply with all MSU Denver policies and deadlines.

- Prior to registering for any preparatory CCD classes, students must consult with their MSU Denver academic advisor to determine appropriateness of the class(es).
- Students taking CCD courses are required to take the Accuplacer test and to place into the appropriate courses based on their test results.
- Classes will be posted on your MSU Denver academic record and will include semester hours and the grade/notation earned. CCD will also post the course, semester hours and grade earned on the CCD academic record.
- Tuition and fees for these classes will be paid to MSU Denver.

## **Transfer Credit Evaluation**

Transfer credits are accepted under the following guidelines:

- Credit must have been earned at an institution of higher education holding full regional accreditation unless there is a current Articulation Agreement or Memorandum of Understanding (MOU) between that institution and MSU Denver on file with the Office of Academic Affairs.
- Grades earned must be a "C-" or better. Courses with "D," "F" or similar grades are not transferable. Also, courses graded with C.E.U.s (Continuing Education Units) will not be accepted. A summary of transfer credit from each institution is indicated on the MSU Denver academic record. Neither transfer course grades nor previous grade point averages are indicated or affect the MSU Denver grade point average.
- Course content must be similar to that of MSU Denver courses.
- No preparatory, remedial, or developmental courses are applicable toward an MSU Denver degree.
- MSU Denver will accept all applicable credits earned within ten years of transfer. Credits earned more than ten years earlier will be evaluated on a course-by-course basis.
- Once transfer credits are evaluated, the total number of these credits applicable to a degree will not be reduced unless the student repeats already-awarded transfer credit at MSU Denver or interrupts MSU Denver enrollment for three or more consecutive semesters and readmits to the university under more restrictive transfer credit evaluation policies.
- If a student repeats a course, including transferred courses, the credit for only one of the course attempts counts towards degree requirements, with the exception of repeatable courses.
- In accordance with policies established by the Colorado Commission on Higher Education regarding students transferring between Colorado public institutions, MSU Denver has instituted procedures for resolving transfer credit disputes. Questions regarding these procedures may be directed to the Transfer Services at 303-556-3774.
- Students who have previously earned a baccalaureate degree from an accredited college or university have the following:
  - A transfer credit block of 90 credit hours and senior standing.
  - Satisfaction of MSU Denver's minimum General Studies requirements.\*
- Students who have earned a Degree with Designation accompanying an Associate of Arts or Associate of Science degree from a College public college of university have the following:
  - Guaranteed admission to MSU Denver.
  - Junior standing at MSU Denver, provided all courses included in the degree carry a grade of "C-" or better and, based on the course-by-course evaluation, otherwise meet minimum MSU Denver transfer credit standards.

- Satisfaction of MSU Denver's minimum General Studies requirements.\*
- No more than 60 remaining credits to meet the graduation requirements in the corresponding baccalaureate degree program outlined in the DWD agreement.
- Students may need to complete MSU Denver lower-division requirements.
- Students may need to complete courses labeled as general studies courses for their specific major, minor, certificate, or university requirement.
- Students who have earned an Associate of Arts or Associate of Science degree from a Colorado public college or university have the following:
  - Guaranteed admission to MSU Denver.
  - Junior standing at MSU Denver, provided all courses included in the degree carry a grade of "C-" or better and, based on the course-by-course evaluation, otherwise meet minimum MSU Denver transfer credit standards.
  - Satisfaction of MSU Denver's minimum General Studies requirements.\*
  - The Bachelor's degree completed in 60 hours unless additional courses are required for specialized accreditation or licensure as outlined in the Statewide Transfer articulation agreement
  - Students may need to complete MSU Denver lower-division requirements.
  - Students may need to complete courses labeled at general studies courses for their specific major, minor, certificate, or university requirement.
- Students who have completed the Colorado gtPathways core curriculum from a Colorado public college or university have the following:
  - Satisfaction of MSU Denver's minimum General Studies requirements.\*
  - Students may need to complete MSU Denver lower-division requirements.
  - Students may need to complete courses labeled as general studies courses for their specific major, minor, certificate, or university requirement.
- Students may need to meet additional university requirements, such as an Ethnic Studies & Social Justice (ESSJ) course, Senior Experience, etc.
- \*Metropolitan State University of Denver's General Studies include the following degree requirements:
  - Written Communication
  - Quantitative Literacy
  - Arts and Humanities
  - Oral Communication
  - Historical
  - Natural and Physical Sciences
  - Social and Behavioral Sciences
  - Global Diversity

## Waitlist

When a course is full, a waitlist is created to facilitate registration for open spaces that may occur. Course waitlists are available from the start of registration through the first week of class but vary by department. The waitlist will record the time and date that the student placed his/her name on the waitlist and students will be notified of an opening via their college-issued email account. Please refer to the Registrar's Office Waitlist Procedures for waitlisting procedures. The student will receive an email notification once an opening is available that is time-sensitive. This means that:

1. The student must check their msudenver.edu email account daily while on a waitlist.
2. The student needs to check with the department regarding specific waitlist policies.
3. Once the student has been enrolled, if they decide they do not want to remain in the course, they will be responsible for dropping themselves by the prescribed deadlines from the course.
4. Students will be responsible for tuition and fee charges associated with courses enrolled from a waitlist if they do not drop themselves by the [prescribed deadlines](#).

# Student Code of Conduct

- View the Policy for the [Student Code of Conduct](#)

## Student Rights and Responsibilities

- [Policies and Procedures](#)
- [Definition of a Student](#)
- [Academic Integrity](#)
- [Academic Rights](#)
- [Academic Responsibilities](#)
- [Crime Awareness and Campus Safety](#)
- [Equal Opportunity and American Disabilities Act](#)
- [FERPA](#)
- [Freedom of Speech](#)
- [Petitions for Degree Exception](#)
- [Respect for Rights of Others](#)
- [Student Code of Conduct](#)
- [Student Complaint Policy](#)
- [University-Wide Student Attendance Policy](#)

## Policies and Procedures

Generally, the policies and procedures contained in this university catalog must be followed by students currently enrolled for the fall 2025 and the spring and summer 2026 semesters. The procedures and policies contained in this section are subject to change as the university deems necessary. If you have a concern, please check with the appropriate office.

## Definition of a Student

The term *student* includes persons admitted to or enrolled at the university, and those who may not be currently enrolled but who have a continuing relationship with the university. All students will adhere to the Student Code of Conduct as included in the Student Rights and Responsibilities section of the *Catalog*.

Student academic records are protected under the [Family Education Rights and Privacy Act \(FERPA\)](#). Academic record protection begins no later than the time a student has begun attending class at the University. Attendance includes, but is not limited to:

- a. Physical attendance or attendance utilizing any electronic technologies in order to facilitate participation.
- b. The period during which a person is working under a work-study program.

More information regarding educational records can be found below and on the [Office of the Registrar's website](#).

# Petitions for Degree Exception

Students requesting Degree Exceptions should contact their academic department. Valid reasons for variances must accompany all petitions, and the petitions must be reviewed by the department chair and appropriate dean.

The following shall not be waived for any student for any reason:

- A minimum requirement of 120 semester hours for graduation with a Bachelor's degree.
- A minimum requirement of 40 semester hours of upper-division courses (3000- and 4000-level courses) for graduation with a Bachelor's degree.
- A minimum requirement of 30 semester hours for the major.
- A minimum requirement of 18 semester hours for the minor.
- A minimum requirement of 30 semester hours at MSU Denver prior to the term of graduation.
- A minimum required cumulative GPA of 2.00 in the major, the minor, or the program (as applicable and denoted in the Catalog).
- The following components of a degree: the major, the minor, General Studies, ESSJ graduation requirement, Senior Experience requirement, or emphasis (as applicable and denoted in the Catalog).
- Lower-division credit earned at another institution shall not be granted upper-division credit.
- The specified minimum credit hours required for a certificate program.

For all other situations not listed above, students should consult with academic departments regarding exception options.

## Academic Integrity

As students, faculty, staff, and administrators of Metropolitan State University of Denver, it is our responsibility to uphold and maintain an academic environment that furthers scholarly inquiry, creative activity, and the application of knowledge. We will not tolerate academic dishonesty. We will demonstrate honesty and integrity in all activities related to our learning and scholarship. We will not plagiarize, fabricate information or data, cheat on tests or exams, steal academic material, or submit work to more than one class without full disclosure.

## Academic Rights

Students have the right to:

- Be informed of course expectations and requirements.
- Be evaluated fairly on the basis of academic performance.
- Participate in free and open discussion, inquiry, and expression, both in the classroom and in conference.



- Receive competent instruction and advisement.
- Expect protection against professors' improper disclosure of students' personal information, views, beliefs, and political associations when such information has become known as a result of professors' instructions, advisement, or counsel.
- Expect protection, through established procedures, against prejudicial or capricious evaluation.
- Assess the value of a course to make suggestions as to its direction and to evaluate both the instructor and the instruction they have received.
- Have input in university policy-making, which may include, but shall not be limited to, course scheduling distribution of night and day classes, calendar arrangements, library policy and development, grading systems, course development, and curriculum.
- Expect instructors to conduct themselves professionally in the classroom in accordance with university policies and directives.
- Expect instructors to maintain office hours as required by university policy.
- Expect reasonable academic assistance from the appropriate department.
- Be informed of academic standards expected of them in the classroom through a syllabus and/ or course outline. Academic standards shall include, but not be limited to, classroom civility, class attendance requirements, objectives to be achieved, and the grading criteria that will be applied to a particular course of study.

## Academic Responsibilities

Students have the responsibility to:

1. Inquire about course or degree requirements if they do not understand them or are in doubt about them.
2. Maintain the standards of academic performance established for individual courses and for programs of study.
3. Learn the content of any course of study.
4. Act in accordance with commonly accepted standards of academic conduct. If disruptive behavior occurs in a classroom, an instructor has authority to ask the student to leave the classroom for one class session and then report it to the Dean of Students Office. Should such disorderly or disruptive conduct persist, the instructor should report the matter to Auraria Campus Police, the Dean of Students Office, and the appropriate Department Chair and Dean's office.
5. Maintain academic ethics and academic honesty.
6. Pay the tuition and fees and be officially registered in order to attend a class.
7. Initiate an investigation by contacting the department chair if they believe their academic rights have been violated.

## Crime Awareness and Campus Security

In 1990, Congress enacted the Crime Awareness and Campus Security Act, which requires all post-secondary institutions participating in Title IV student financial aid programs to disclose campus crime statistics and security information. This information is available [on the website](#).

## Equal Opportunity and Americans with Disabilities Act

Metropolitan State University of Denver is an equal opportunity employer; applications from minorities and women are particularly invited. Metropolitan State University of Denver does not discriminate on the basis of race, color, creed, national origin, sex, age, sexual orientation or disability in admissions or access to, or treatment or employment in, its educational programs or activities. Inquiries concerning the University grievance procedures may be directed to the designated MSU Denver officials. Inquiries concerning Title VI and Title IX may be referred to the MSU Denver Office of Equal Opportunity, Campus Box 63, P.O. Box 173362, Denver, CO 80217-3362, 303-615-0036. Inquiries concerning the Americans with Disabilities Act (ADA) or 504 may be referred to the Director of Total Rewards in the Human Resources Department, MSU Denver, Campus Box 67, P.O. Box 173362, Denver, CO 80217-3362, 303-605-5321; the Executive Director, Office of Equal Opportunity, Title IX Coordinator, & ADA Coordinator, 303-615-0036; the Director, Access Center, MSU Denver, Campus Box 56, P.O. Box 173361, Denver, CO 80217-3361, 303-615-1204. Otherwise, all inquiries may be referred to the Office for Civil Rights, U.S. Department of Education, 1244 Speer Boulevard, Denver, CO 80204, 303-844-3723.

## Family Educational Rights and Privacy Act

### Student Rights

Metropolitan State University of Denver maintains educational records for each student who has enrolled at the university. A copy of the university's policy on student educational records may be obtained from the Office of the Registrar, Student Success Building, Suite 160. Under the Family Educational Rights and Privacy Act of 1974 (FERPA), 20 USC 1232g, and the implementing regulations published at 34 CFR part 99, each eligible student has the right to:

1. Inspect and review his/her educational records;
2. Request the amendment of the student's education records to ensure that they are not inaccurate, misleading or otherwise in violation of the student's privacy or other rights;

3. Consent to disclosures of personally identifiable information contained in the student's educational records, except to the extent that FERPA authorizes disclosure without consent (see Nondisclosure and Exceptions); and
4. File a complaint under 34 CFR 99.64, concerning alleged failures by the university to comply with the requirements of FERPA, with the Family Compliance Office, U.S. Department of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202-4605.

## Procedure for Inspecting and Reviewing Educational Records

Students may inspect and review their education records upon a written request submitted to the Registrar, Student Success Building, Suite 160 (#3), or by mail to Campus Box 84, P.O. Box 173362, Denver, Colorado 80217-3362.

1. The request shall identify as precisely as possible the record or records the student wishes to inspect.
2. The record custodian or an appropriate staff person shall make the arrangements for access as promptly as possible and notify the student of the time and place where the records may be inspected. Access must be given within 45 days from the receipt of the request.
3. When a record contains information about more than one student, the student may inspect and review only the records that relate to that student.

## Procedure for Amending Educational Records

A student may make a written request to amend a record.

1. In the request, the student should identify the part of the record to be changed and specify why the student believes it is inaccurate, misleading, or in violation of the student's privacy or other rights.
2. Metropolitan State University of Denver shall comply with the request or notify the student that the university will not comply with the request and advise the student of the student's right to a hearing to challenge the information believed to be inaccurate, misleading or in violation of the student's rights.
3. Upon written request, Metropolitan State University of Denver will arrange for a hearing, and notify the student, reasonably in advance, of the date, place, and time of the hearing.
4. The hearing will be conducted by a hearing officer who is a disinterested party, but who may be an official of the institution. The student shall be afforded a full and fair opportunity to present evidence relevant to the issues raised in the original request to amend the student's education records. The student may be assisted by one or more individuals, including an attorney.
5. Metropolitan State University of Denver will prepare a written decision based solely on the evidence presented at

the hearing. The decision will include a summary of the evidence presented and the reasons for the decision.

6. If Metropolitan State University of Denver decides that the challenged information is not inaccurate, misleading, or in violation of the student's right of privacy or other right, it will notify the student that the student has a right to place in the record a statement commenting on the challenged information and/or a statement setting forth reasons for disagreeing with the decision.
7. The statement will be maintained as part of the student's education records as long as the contested portion is maintained. If Metropolitan State University of Denver decides that the information is inaccurate, misleading, or in violation of the student's rights, it will amend the record and notify the student, in writing, that the record has been amended.

## Nondisclosure and Exceptions

Pursuant to FERPA, the university will not disclose a student's education records without the written consent of the student except to university officials with legitimate educational interests, to officials at other institutions in which the student seeks to enroll; in connection with providing financial aid to the student; to accrediting agencies in carrying out their functions; to authorized representatives in connection with an audit or evaluation of Federal- or State-supported education programs, or the enforcement of or compliance with Federal legal requirements that relate to those programs; in compliance with a judicial order or subpoena; to other outside providers who may be subject to a contractual obligation to maintain confidentiality of student information (e.g. Auraria Higher Education, National Student Clearinghouse, or legal and debt collection services); may release educational records to parents of dependent children in accordance with IRS code of 1986; and in connection with a health or safety emergency involving the student. However, the university may release directory information without the prior written consent of the student unless an enrolled student has notified the university's Office of the Registrar in writing that any or all types of directory information shall not be disclosed without the consent of the student. A request for nondisclosure will remain in effect until the student is no longer enrolled or cancels the request for nondisclosure.

A school official is a person employed by the university in an administrative, supervisory, academic, research, or support staff position, including Auraria law enforcement personnel; or a person elected to the Board of Trustees; or a person employed by or under contract to the university to perform a special task, such as attorney, auditor or consultant; or a student or other person serving on an official university committee or assisting a school official in performing the official's professional duties and responsibilities. A legitimate educational interest is the need of a school official to review educational records to fulfill that official's professional duties and responsibilities.

Other than Directory Information, which may be released to the general public, the university will not release educational records without a student's written consent, signed, and dated by the student.

## Directory Information

Metropolitan State University of Denver has designated the following categories of personally identifiable information on students as directory information under section 438(a)(5)(B) of FERPA:

- Dates of attendance at the university
- Date of birth
- Degrees and awards received
- Enrollment status
- Last educational institution attended
- Major and minor fields of study
- Participation in officially recognized activities and sports
- Physical and email addresses
- Student classification
- Student Identification Number (only provided in certain circumstances with special approval)
- Student name
- Telephone number
- Weight and height of members of athletic teams

## Freedom of Speech

Students shall have the right to assemble, to select speakers and guests, and to discuss issues of their choice. An invitation to a speaker shall not imply endorsement of the speaker's views by either the student organization or the university.

Information about student views, beliefs, and political associations shall not be used to the detriment of students and their institutional standing.

The right of peaceful protest is granted within the university community. The university retains the right to assure the safety of individuals, the protection of property, and the continuity of the educational process.

The student press shall be free of censorship and shall provide editorial freedom. The editors and managers shall not be arbitrarily suspended because of student, faculty, administration, alumni, or community disapproval of editorial policy or content.

All student communications shall explicitly state on the editorial page or in broadcast that the opinions expressed are not necessarily those of the university and/or members of the university.

## Respect for Rights of Others

The student assumes certain obligations of performance and behavior while attending MSU Denver. Based on this premise, reasonable policies, procedures and regulations have been developed to guarantee each student's opportunity to learn and to protect the fundamental rights of others. MSU Denver students neither gain nor lose any of the rights and responsibilities of other citizens by virtue of their student status.

As members of an academic community, students are expected to conduct themselves in a mature and responsible manner. Students should try at all times to promote a sense of cooperation and civility within the university and work to build an atmosphere that will be most conducive to the goals of higher education within the institution.

Students, while within university facilities or while participating in university sponsored activities (on-campus and/or off-campus), are expected to comply with university rules and regulations and with the regulations of off-campus sites.

## Student Code of Conduct

Students are required to follow the [Code of Conduct](#) available in this Catalog.

## Student Complaint Policy

Students are encouraged to first address concerns and conflicts directly with the relevant faculty or department/program staff. If resolution at this level is not possible, see [MSU Denver's Student Complaint Policy](#).

## University-Wide Student Attendance Policy

Regular attendance at class sessions affords students maximum educational benefit through engagement with their instructors, peers, and course material. While instructors may or may not include attendance in grade-related assessments in their courses, students are expected to attend all sessions of the courses in which they are registered that require real-time attendance, such as courses delivered through in-person, synchronous online, and hybrid modalities.

Instructors and/or departments are responsible for establishing course- and/or section-specific attendance policies related to the evaluation of students' academic performance. Only the primary instructor(s) assigned to a course, in accordance with any departmental policies, can grant an excuse for student absence. Whenever an attendance policy or evaluation criteria applies, it must be presented in the course syllabus or the section's learning management system materials.

Students are responsible for knowing the attendance policies for all course sections in which they are enrolled, as well as university-level policies related to attendance and participation. Students should contact instructors as soon as possible ahead of anticipated absences and after unanticipated absences.

Except where prohibited by policies related to established degree requirements, program accreditation or licensure, or government regulations, course attendance policies must accommodate or excuse student absences related to:



1. The cancellation of class sessions in accordance with the University Closure Policy.
2. Disabilities or conditions documented in accommodation notifications by the Access Center.
3. Required military service for students on active status, as documented by armed services authorities.
4. Required appearance for jury selection/duty or other court service, as documented by legal authorities or government entities.
5. Religious or spiritual holidays and observances; it is the responsibility of the student to communicate anticipated absences resulting from sincerely held religious or spiritual traditions as far in advance as possible.
6. Participation in intercollegiate athletic events, as documented by MSU Denver Athletics; it is the responsibility of the student and representatives of MSU Denver Athletics to communicate anticipated absences as far in advance as possible.
7. Competitions, conferences, or workshops organized or recognized by MSU Denver in which student participation is expected or required; it is the responsibility of the student and representatives of the sponsoring or supervising MSU Denver entity to communicate anticipated absences as far in advance as possible.

# Student Resources

MSU Denver offers a variety of resources to help students as they pursue their academic goals. Commonly accessed resources are included below as links to the services. Most services are available at no additional cost to the student. Students are encouraged to visit each resource listed to understand the benefits associated with each, and for details on how to access applicable services.

- [Academic Advising](#)
- [Access Center](#) - Student disability accommodation and support services
- [Alternative Credit](#) - Turn work and significant experience into college credit
- [Auraria Immunizations](#) - Coordination of the State mandated immunization requirement and additional immunization services.
- [Auraria Recovery Community](#) - A peer-led community of students who are currently in or seeking recovery from substance use and/or other process addictions. All pathways to recovery are welcome!
- [Brother 2 Brother](#) - A mentoring program focused on academic success and social support for African-American men.
- [C2Hub Scholarship Support](#) - Fosters a community of scholars through leadership activities, proactive coaching, scholar events, and professional development.
- [Campus Recreation](#) - A place to build community through healthy living outlets such as working out, group fitness classes, personal training, sports leagues, open recreation, outdoor pursuits and leadership programs.
- [CARE Team](#) - Provides assessment and case management support for students who are struggling or who may be displaying behaviors of concern.
- [Center for Advanced STEM Education](#) - Assists STEM majors through academic, financial, and peer mentor supports.
- [Center for Equity and Student Achievement \(CESA\)](#)
- [Civic Engagement Program](#) - Offering educationally meaningful service opportunities that positively impact the community and provide opportunities for students to develop as engaged citizens.
- [Classroom to Career Hub](#) - Provides relevant and impactful career development for the full student body.
- [College Assistance Migrant Program \(CAMP\)](#) - Designed to meet the academic, financial, and social needs of migrant/seasonal farmworkers and their children in pursuing higher education.
- [Counseling Center](#) - Individual and group therapy, crisis intervention and outreach to students.
- [Dean of Students Office](#) - The hub for student support and referrals. Manages/addresses student conduct matters, offers student conflict resolution services, and supports students and the community with other needs.
- [EPIC Scholars Program](#) - Supports independent students transitioning from foster care, kinship care, adoption, or group homes.
- [Exploratory Advising](#)
- [Fraternities and Sororities](#)
- [Gender Institute for Teaching and Advocacy \(GITA\)](#) - Holistically supports students affected by sexism and other intersecting oppressions through academics, advocacy, and services, which include academic advising, scholarship assistance, advocacy and problem solving, wellness and lactation rooms, a snack stop, and space for community organizing.
- [Health Center at Auraria](#) - Medical and Mental Health services for students
- [Healthy Pursuits](#) - Free Group Fit and Mind Body Fitness Classes
- [Honors Program](#)
- [Immigrant Services](#) - Refugee, immigrant students, ASSET, DACA, and English Language Learner support.
- [Immunization Program](#)
- [Individualized Degree Program](#) - Create your own major and minor
- [International Studies](#) - Study abroad opportunities, Exchange Programs, Fulbright Student Award, Erasmus Scholarships.
- [Internships](#) - Support for students in finding paid or unpaid internship opportunities and gaining academic credit for the experience.
- [LGBTQ Student Resource Center](#)
- [Meritus Scholars](#) - Lifelong learning for older adults
- [Met Media](#) - Student newspaper, radio, arts/literary magazine, and news broadcasts
- [MSU Denver Student Insurance](#) - Manages the Student Health Insurance Plan
- [Orientation](#) - Provides in-person and online programming to support students in successfully starting and engaging in their college experience.
- [Pathways to Possible](#)
- [Peer Mentoring](#) - Provides peer-to-peer support to help students navigate their career path and connect to campus resources.
- [Phoenix Center at Auraria](#) - Interpersonal violence prevention, awareness, and support
- [Registrar's Office](#)
- [Rowdy's Corner](#) (formerly Roadrunner Food Pantry) - Provides food resources and community referrals for current MSU Denver students.
- [Roadrunners Give Back Volunteer Program](#)
- [Service Learning Program](#) - Classroom learning combined with community-based service. This is a great way to gain real world experience through classwork.

- [Student Care Center](#) - The hub for student support and referrals. Services include non-clinical case management, student emergency fund, DREAMer emergency fund, roadrunner food pantry, Epic Scholars program, public benefit assistance and Single Stop.
- [Student Conflict Resolution Services](#) - Provides mediation, conflict coaching, group dynamics services, and the Dialogues Program.
- [Student Emergency Fund](#) - An application process for students experiencing a financial crisis/emergency.
- [Student Advocacy Council](#)
- [Student Health Insurance](#)
- [Student Organizations](#)
- [Student Travel and Professional Development Funding](#) - Grant funding available for students to travel to professional conferences and meetings.
- [Supplemental Instruction](#) - A voluntary program that offers free, regularly scheduled study sessions for traditionally difficult course.
- [TRiO Student Support Services](#) - Support for first-generation, low-income students, and students with disabilities
- [Tutoring](#) - Provides individualized support to students in overcoming academic obstacles or barriers.
- [Testing Services](#) - Offers placement testing for the student body to assist advisers in determining the selection of appropriate courses.
- [Transfer and Adult Student Success](#) - We support transfer, adult, and re-engaged students by: connecting students to programs and resources based on student needs and interests; building community with other students, staff and faculty; and fostering an environment for academic, professional, and personal success.
- [Undergraduate Research and Creative Scholarship Program](#) - Resource for students wanting to engage in research activities, presenting and grant opportunities
- [Veterans Education Benefits](#)
- [Veteran/Military Student Center](#)
- [Writing Center](#) - One on one writing tutoring and support for all students

# Tuition and Fees

## Registration Contract

Each time you Add/Drop classes you are electronically agreeing to the terms of the Metropolitan State University of Denver [Financial Responsibility and Promissory Note Agreement](#). By doing so you acknowledge that you understand Metropolitan State University of Denver is advancing value to you in the form of educational services; that your right to Add/Drop classes is expressly conditioned upon your agreement to pay the university pursuant to the Agreement; that you have read, understand, and agree to pay the university pursuant to the Agreement.

As a student, you will pay all tuition, fees, fines, and other costs imposed by the university. If any of those charges remain unpaid, you agree to reimburse us the fees of any collection agency, which may be based on a percentage at a maximum of 40% of the debt, and all costs and expenses, including, but not limited to, reasonable attorneys' fees, collection agency fees, and court costs we incur in such collection efforts.

When you register for classes, space in those classes is reserved for you. Decisions about how many class sections to offer and other commitments of instructional resources are made based on the enrollment data provided after the registration process is complete. Other students may be closed out of a preferred section if the last available space is reserved for you.

In exchange for the university's commitment of resources on your behalf, you assume a responsibility to:

- Pay the fees assessed for those classes.
- Drop your courses via the online [Student Hub](#) portal prior to the start of the term if you are unable to attend, so that the class spaces may be released and made available to other students.

The university will not automatically cancel your registration for nonpayment. Therefore, if you decide not to attend Metropolitan State University of Denver, it is imperative that you drop any courses you are registered in.

If you do not drop your courses through the [Student Hub](#), your name will appear on the class rosters, and you will remain responsible for full tuition and fees until such time as you drop your courses. If you are still on the final rosters for the term, you will receive grades of "F" for the courses in which you were registered.

Please keep your part of the registration contract. If your plans change and you cannot attend, you must drop your courses prior to the refund deadline for the term in order to allow other students access to your class spaces. Drop dates and deadlines can be found on the [Student Hub](#) on your Student Detail Schedule.

## Students' Financial Responsibility

## Student Account and Billing Statement

MSU Denver communicates all student account information via electronic services using online secured portals via the **Student Hub** and may send important notices via the student's MSU Denver e-mail account. Students are expected to review their account history available on the Student Hub prior to and after registering for classes and before the tuition payment deadlines each semester. A Student's failure to review their student account or receive any billing statement is not valid grounds for waiving service charges or removing registration, diploma or transcript holds. *You will not receive a paper billing statement.*

The IRS Tax Form 1098-T, which reports tuition and related expenses, will also be available electronically. Notification for the 1098-T tax document will be sent to Students' MSU Denver-issued email address on record. It is the student's responsibility to review their Student Hub account status and their student e-mail account at least weekly.

**It is important for you to understand your financial responsibilities when registering for classes at MSU Denver.**

- Full payment of tuition and fees is due by that semester's payment deadline. Any unpaid balance as of payment deadline will incur a 4% service charge. Please see the [Current Term Policies](#) for specific Semester information.
- You are responsible for verifying the balance of tuition and fees. You may access your account using the [Student Hub](#). Log into the [Student Hub](#) portal and select My Services/Registration. E-mail is the official means of communication at MSU Denver. **DO NOT WAIT FOR A BILL!**
- Financial aid students that have not received an award by payment deadline, must pay in full or their unpaid balance will incur a 4% service charge.
- Changes in registration that result in additional tuition and fees not paid by payment deadline, may incur a 4% service charge.
- **IT IS THE STUDENT'S RESPONSIBILITY TO DROP THEIR CLASSES BY THE PUBLISHED DROP DEADLINES IF THEY DO NOT PLAN TO ATTEND.** Failure to do so will result in charges incurred on the student's account.
- Your courses will not be dropped for non-payment.
- Specific refund dates for classes, can be found on your Student Detail Schedule on the [Student Hub](#).

**If you do not fulfill your financial obligations by published deadlines:**

- A 4% service charge will be assessed on any unpaid balance as of payment deadline.
- A 1.5% service charge will be assessed to any unpaid balance on the **7th working day of each month thereafter.**

- Accounts not paid in full by the last day to drop classes are considered past due. A balance due hold will be placed on accounts with balances greater than \$200.00.
- Balance due holds prevent registration for classes in both the current and future semesters.
- Accounts with past due balances at the conclusion of the semester are considered delinquent.
- Delinquent accounts will be turned over to a collections agency in accordance with Colorado law; collection costs will be added to your account balance. The collection agency may report delinquent accounts to the national credit bureau.
- Students whose accounts have been sent to a collection agency must pay balance in full before registration for any subsequent semester classes will be allowed.
- Students with balance due holds may be prevented from applying for graduation.
- A pre-payment hold will be placed on all accounts with bankruptcy discharged adjustments. Students are required to pre-pay their first semester's registration after having a balance discharged through bankruptcy.
- Students unable to meet their financial obligations should immediately contact the Office of Cashiering to discuss payment options.

## Third-party Sponsorships

MSU Denver plays a major role in educating Denver's workforce. As a business-friendly university, MSU Denver offers a convenient way for businesses and public sector organizations to subsidize the cost of attendance.

To participate in this program:

1. Print the [Employer Sponsor Authorization](#)
2. Have a human resource officer or other authorized representative from your company complete the form.
3. Mail form to:

Metropolitan State University of Denver  
Office of the Bursar

Campus Box 92  
P.O. Box 173362  
Denver, CO 80217-3362

Third-party Sponsor Authorization Forms must be turned into the Office of the Bursar by **Payment Deadline**. Sponsored students are responsible for all service charges incurred due to late submission of required documents. Sponsored students are also responsible for all charges not covered by their sponsorship as well as any payments refused, or deemed non-collectable, by their sponsor. Third-party sponsors will not be billed for tuition and fees until after the last date to add/drop classes. If you have financial aid, your award will be applied to your tuition and fees first and refunds from third-party sponsors will not be issued until after payment has been received.

## Tuition and Fee Appeal Process

The [Tuition and Fee Appeal](#) process is available to students who may warrant an exception to institutional Drop/Refund policies due to extenuating circumstances such as severe medical illness, an employment situation beyond their control or the death of an immediate family member during the Semester. The University will not accept appeals for charges incurred more than 1 year prior to the application for appeal. Additional information can be obtained at the Office of the Bursar (SSB 150, 303-615-0070) or by visiting the Bursar's website.

Tuition and Fees Appeal Forms can be hand-delivered or mailed to:

Metropolitan State University of Denver  
Office of the Bursar  
Campus Box 92  
P.O. Box 173362  
Denver, CO 80217-3362

Tuition and Fees Appeal Forms can also be faxed to: (720) 778-5809

Or emailed to: [Bursar@msudenver.edu](mailto:Bursar@msudenver.edu)

**Note: All policies are subject to change. Exceptions may be made solely at the discretion of the Office of the Bursar.**

# Associate of General Studies Degree

Under certain circumstances, students who have stopped out of Metropolitan State University of Denver for at least one year in the past decade and not completed a bachelor's degree, may be eligible to receive an Associate of General Studies Degree from the university.

The Colorado Re-Engaged (CORE) Initiative contained within HB 21-1330 allowed universities in the state to award an associate degree, a 2-year credential, to certain students who started a higher education but left without completing a bachelor's degree. To be eligible, the student must have stopped attending MSU Denver for at least one calendar year (three semesters including summer), not continued at another university to complete a bachelor's degree, and meet the following criteria:

- Must have completed at least 70 credit hours
- Must have completed at least 18 credit hours at MSU Denver
- Cannot have completed 15 or more credit hours total from the Colorado Community College System (Concurrent enrollment credits earned through a community college while in high school do not

count toward the 15 community college credits. Credits earned at an out-of-state community college do not count towards direct transfer.)

- Must have stopped out in the past 10 years

Working with the state, MSU Denver will review students who stopped out during the 10-year period prior to the publication of this fall catalog and meet the above criteria. If those former students meet the following standards, they will be eligible to receive an Associate of General Studies degree. To wit:

- At least 18 of the former student's earned credits should have been earned by completing state-recognized General Education courses with a grade of C- or higher.
- These 18 credits may have been earned at MSU Denver or at other institutions in the state that offer courses meeting the state's guaranteed transfer (gtPathways) requirements.
- Have a cumulative GPA for all course work of at least 2.0.
- Courses completed must include at least 18 credit hours in the university's General Studies program.

MSU Denver will review these students twice each year, once in the fall and once in the spring, to determine eligibility. Eligible students will be contacted by the university to arrange delivery of the Associate of General Studies degree.

Questions about this process? Contact the [Office of the Registrar](#)

# Undergraduate Studies

Undergraduate Studies brings together academic offices, centers, and programs that lie outside of the colleges at MSU Denver. Each of the offices, centers, and programs bring important enhancements to students' undergraduate experiences. Students can pursue experiential learning through the C2 Hub, the Office of International Studies, the Center for Urban Education, and the Center for Innovation, develop their own programs of study in the Center for Individualized Learning, and rise to meet the challenges of the Honors Program. All of these programs create authentic learning environments that prepare students for careers or post-graduate studies.

Undergraduate Studies also advances MSU Denver's community engagement mission. This work includes spearheading initiatives under the American Democracy Project and fostering partnerships for service learning and community-based research that prepare our students to become informed and engaged citizens of our globally connected society.

## Centers

- [Air Force ROTC](#)
- [C2 Hub](#)
- [Center for Individualized Learning](#)
- [Center for Urban Education](#)
- [Honors Program Office](#)
- [Military Science \(Army ROTC\)](#)
- [Office of International Studies](#)
- [One World One Water Center](#)
- [Undergraduate Research](#)

## Air Force ROTC

Air Force ROTC (UC-B) Folsom Stadium, 218  
University of Colorado at Boulder  
Boulder, Colorado 80309  
303-492-8351

U.S. Air Force ROTC offers several programs leading to a commission in the US Air Force upon receipt of at least a baccalaureate degree.

### Standard Four-Year Program

- **Air Force ROTC Standard Four-Year Program**

This program is in three parts: the General Military Course (GMC) for lower-division students; the Professional Officer Course (POC) for upper-division students; and the Leadership Laboratory (LLAB), attended by all cadets. Completion of the GMC is a prerequisite for entry into the POC. Completion of a

four-week summer training course is required prior to commissioning.

### Modified Two-Year Program

- **Air Force ROTC Modified Two-Year Program**

This program is offered to full-time, regularly enrolled degree students. It requires at least two years of full-time college (undergraduate or graduate level, or a combination). Those selected for this program must complete a six-week field-training program during the summer months as a prerequisite for entry into the POC the following fall semester.

### Leadership Lab

All AFROTC cadets must attend LLAB (one and one-half hours per week). The laboratory involves a study of Air Force customs and courtesies, drills and ceremonies, career opportunities, and the life and work of an Air Force junior officer.

### Other AFROTC Programs

Other programs are frequently available based on current Air Force needs. Any AFROTC staff member in Boulder at 303-492-8351 can discuss the best alternatives. Interested students should make initial contact as early as possible because selection is on a competitive basis. There is no obligation until a formal contract is entered.

### Air Force College Scholarship Program

Students participating in Air Force ROTC may be eligible to compete for Air Force ROTC college scholarships. Students selected for this program are placed on scholarships that pay tuition, book allowances, nonrefundable educational fees, and a subsistence of \$250-\$400 per month, tax-free. All cadets enrolled in the POC receive a month subsistence during the regular academic year. Two- and three-year scholarships are available to both men and women in all academic disciplines.

### Flight Opportunities

Prior to entering the fourth year of the AFROTC program, qualified AFROTC students can compete for pilot allocations. Cadets are eligible to fly with the Civil Air Patrol as ROTC members.

### USAF Medical Programs

Qualified pre-med or nursing students can compete for premed or nursing scholarships and programs. These scholarships and programs can lead to a rewarding career as an Air Force officer, serving as a doctor or nurse.

### AFROTC Course Credit

AFROTC courses may be worth up to 16 credit hours toward graduation depending on degree.



## Registration

Students who wish to register for AFROTC classes sign up for them through the normal course registration process.

AFROTC classes begin with the AFR prefix.

## C2 Hub

### *Internship Program*

The Classroom to Career (C2) Hub hosts a myriad of resources to support students' career aspirations. Within the C2 Hub, students can seek and land experiential learning opportunities including internships to integrate academic training with hands-on experience. Students will hone and develop practical skills as they build a professional network and understanding of an organization or industry.

- An internship will provide a variety of benefits including:
- Interns gain valuable job experience related to their major
- Students with internships enhance their marketability with employers
- Students with internships can better relate their coursework to a professional setting
- Internships help students make informed career decisions
- Internship supervisors can provide students with recommendations for graduate school or future jobs
- Paid internships help student earn money to help defray college expenses
- Interns can sometimes receive academic credit toward their degree

The Internship Program offers services to students seeking an internship placement. The Classroom to Career Hub staff will support students as they seek internship experiences, refine and tailor their resumes and cover letters, and will support interviewing strategies and techniques. Career Link serves as a comprehensive database of local internship positions for most majors on campus. Internship positions can be in large corporations, small businesses, government offices, and nonprofit agencies.

While internships can be paid or unpaid and can typically be done for academic credit, policies and eligibility for credit vary by department.

For more information, call or visit the Classroom to Career Hub at 303-615-1333, Administration Building Ste. 270, or email [C2Hub@msudenver.edu](mailto:C2Hub@msudenver.edu).

### *Service Learning Program*

Service learning is a form of experiential learning in which students combine classroom experience with community-based service. Service activities provide a forum for students to meet an identified community need while also gaining understanding and experience related to the course content. This method allows students to "learn by doing." The Service Learning Program at MSU Denver also

provides mentoring and funds to support faculty who want to integrate this methodology into their courses.

For more information on the Service Learning Program, visit <https://www.msudenver.edu/service-learning/>

### *Service Learning Courses*

While many classes at MSU Denver incorporate service learning activities, specific sections in some fields have been designated as service learning classes. To see a list of current sections for each term, go to the class schedule for the term and look for chart that allows to you search by specific class type or location (<https://www.msudenver.edu/catalog/#d.en.24724>) Service Learning has a link in this section. Service Learning sections also have the initials "SL" at the end of the class name.

Some sections of the below courses may be taught as Service Learning.

- ACC 3110 - Volunteer Income Tax Assistance (VITA) **Credits: 3**
- CDES 3101 - Community-Based Design **Credits: 3**
- CDES 4650 - Studio M **Credits: 3**
- COMM 4450 - Social Movement Rhetoric **Credits: 3**
- CPD 1300 - Transformations: Student Success **Credits: 3**
- DANC 3410 - Skills and Methods of Teaching Dance Technique **Credits: 3**
- DANC 3920 - Dance Entrepreneurship **Credits: 3**
- DANC 4920 - Community-Based Dance and Social Change **Credits: 3**
- EDS 1001 - Advancing Social Justice and Educational Equity: Challenges and Strategies **Credits: 3**
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools **Credits: 1**
- FER 3000 - Applications of Fire Research **Credits: 3**
- FER 3110 - Community Risk Reduction for Fire and Emergency Services **Credits: 3**
- FER 3140 - Fire and Emergency Services Administration **Credits: 3**
- FER 3200 - Fire Prevention, Organization, and Management **Credits: 3**
- FER 3300 - Understanding International Terrorism **Credits: 3**
- FER 3330 - Introduction to Homeland Security **Credits: 3**
- FER 3430 - Personnel Development for Fire and Emergency Services **Credits: 3**
- FER 3460 - Political and Legal Foundations for Fire Protection **Credits: 3**
- FER 3800 - Fire Service Ethics **Credits: 3**
- FER 3911 - Cultural Competence for First Responders **Credits: 3**
- FER 4160 - EMI National Response and Recovery Frameworks **Credits: 3**
- FER 4220 - Fire Dynamics **Credits: 3**



- FER 4260 - Fire Investigation and Analysis **Credits: 3**
- FER 4310 - Fire Protection Structures and Systems **Credits: 3**
- FER 4420 - Fire-Related Human Behavior **Credits: 3**
- FER 4510 - Managerial Issues in Hazardous Materials **Credits: 3**
- FER 4610 - Disaster Planning and Control **Credits: 3**
- FRE 4540 - Literature, Culture, and Translation **Credits: 3**
- GEG 4720 - Planning for Climate Change **Credits: 3**
- GWS 3170 - Social Justice, Self, and Citizenship: A Service Learning Course **Credits: 3**
- HCM 4161 - Disaster Planning and Control **Credits: 3**
- HIS 3782 - History of Human Rights **Credits: 3**
- HLDR 3800 - Servant Leadership in Hospitality **Credits: 3**
- HON 2770 - Dynamics of Change **Credits: 3**
- HSP 4025 - Peer Health Education- Field Experience **Credits: 3**
- ITP 4700 - Community Health Education and Lifestyle Medicine **Credits: 3**
- JMP 4740 - Public Relations in Crises **Credits: 3**
- JMP 4750 - Public Relations Laboratory **Credits: 3**
- MGT 3530 - Human Resources Management **Credits: 3**
- MGT 4850 - Organizational and Management Consulting **Credits: 3**
- MGT 4950 - Strategic Management **Credits: 3**
- MKT 4110 - Brand Management **Credits: 3**
- MTR 2050 - Community Climate Initiatives **Credits: 2**
- NUT 4720 - Nutrition Capstone **Credits: 3**
- PSC 3350 - Global Issues Forum: Variable Topics **Credits: 3**
- PSY 3170 - Social Justice: Self and Citizenship: A Service Learning Course **Credits: 3**
- PSY 4100 - Clinical/Counseling Psychology: Treatment, Practice, and Skills **Credits: 3**
- PUB 4020 - Peer Health Education- Field Experience **Credits: 3**
- SOC 1010 - People, Power, and Progress **Credits: 3**
- SPA 3110 - Advanced Conversation **Credits: 3**
- SPA 4025 - Introduction to Spanish Translation II **Credits: 3**
- SWK 1600 - Community Engagement and Civic Responsibility **Credits: 3**

## Center for Individualized Learning

The **Center for Individualized Learning** contributes to pre-eminence at MSU Denver by offering students and faculty the opportunity to engage in individualized, interdisciplinary and innovative educational initiatives.

Students use the **Individualized Degree Program** to craft their own majors and minors to address specific community needs and to meet their own unique educational goals.

Faculty reach across disciplines and Schools, collaborating with the Center, to develop, "incubate" and test new academic programs that meet emerging community needs such as Fire and Emergency Services Administration, Game Development and Design, and Aerospace Systems Engineering Technology. The IDP concentration provides a curricular vehicle for new interdisciplinary majors and minors that cannot be accommodated in existing academic departments.

**Merit Scholars** invites the growing number of older adults in the community to engage in lifelong learning, creating an intergenerational learning environment for all students.

## Programs

- [Individualized Degree Program](#)

### *Individualized Degree Program*

As a large, urban institution of higher education, Metropolitan State University of Denver is committed to responding to the specific educational goals of a diverse student population. The Individualized Degree Program enables MSU Denver to meet that commitment in three ways:

- It offers students the opportunity to collaborate with faculty to design an individualized major or minor to meet their own specific educational goals when other majors or minors listed in the catalog do not.
- The IDP serves as an incubator for faculty to develop new academic programs to meet emerging needs in the community and workplace. The IDP-as-incubator provides faculty with the opportunity to track demand and to experiment with the relevant curriculum prior to submitting the new program for review through the established curriculum approval process.
- A specific IDP concentration may be offered when a need exists for an interdisciplinary major or minor that does not fall within the purview of existing academic departments. An interdisciplinary core (not to exceed 50% of the minimum credit hours required) provides the foundation upon which the student and faculty mentor build an IDP program to meet the student's educational goals.

Each student works with an advisor in the Center for Individualized Learning and with a faculty mentor to develop a proposal for their degree program. A practicing professional in the student's field of study may also be invited to serve as a community consultant to assist the student and the faculty mentor in the development of the program of study. Because careful and thoughtful planning is essential to designing a coherent and congruent program of study, students are encouraged to begin their proposals early in their enrollment at MSU Denver. IDP proposals must be submitted no later than the semester prior to the semester the student intends to graduate.

Either a bachelor of arts or a bachelor of science degree in an Individualized Degree Program may be sought.

Interested students should contact the Center for Individualized Learning, by calling 303-615-0525 or visiting [our website](#) for assistance and for complete information regarding the policies and procedures for the development and approval of an Individualized Degree major or minor.

Each Individualized Degree major or minor is approved by the faculty mentor, department chair of the academic department from which the majority of credit is drawn, the appropriate dean, and the director of the Center for Individualized Learning.

## Basic Rules of the Individualized Degree Program

- All requirements that apply to any bachelor's degree apply to an Individualized Degree.
- A grade of "C-" or above must be earned in each course included in the student's major or minor, and students must have a GPA of 2.5 before an Individualized Degree program may be approved. In some circumstances on approval by the chair, waivers to this rule may be available.
- On the student's diploma, the title of the IDP will be "Individualized Degree in..." followed by the approved title. Titles of minors do not appear on a diploma, but both major and minor titles will appear on the final official transcript.
- Students with a large number of College of Business credits (over 25%) may need to take additional courses outside of the College of Business or receive special permission from the College of Business to use additional credits towards their IDP degree. For more information, talk to an IDP advisor.
- Each IDP student must submit their finalized IDP proposal (degree plan and essay) for approval by the deadlines posted on the [CIL website](#). Signed approval is required by the 1) faculty advisor, 2) chair of the department where the student is earning the most credit in the IDP, 3) the appropriate dean, and 4) the Center director. Students who submit a proposal after the IDP deadline require a waiver signed by the department chair and dean, which may result in delayed graduation. For all students, graduation is contingent on the proposal being submitted in a timely manner.

## Individualized Degree Program Options

Students may submit proposals for:

- An Individualized Degree standard MAJOR, which requires a minimum of 40 credit hours, including 21 hours of upper-division credit. It may benefit students to consider adding a minor to complement their IDP major. This option

can be discussed with the student's IDP Advisor and IDP Faculty Advisor.

- An Individualized Degree MINOR, which requires a minimum of 20 credit hours, including 6 hours of upper-division credit. A major chosen from the Catalog is required.

## *International Studies Concentration in IDP*

Students wishing to pursue a major in international studies may do so by choosing the Individualized Degree Program (IDP) International Studies Concentration. This concentration requires core courses in the field of international studies and provides the flexibility for each student to select courses from across the University to develop a coherent academic program that meets the student's own specific educational goals within the broader area of International Studies.

Through the International Studies Concentration students gain an understanding of international and intercultural relations and dynamics, and gain the skills and knowledge necessary for their specific chosen careers as those careers exist within an international context. The program also provides preparation for a graduate program in international studies, and students may include prerequisites for other graduate programs of their choice.

Students may choose to develop a proposal for an IDP major or an IDP extended major. Each is developed in consultation with a faculty mentor and the Center for Individualized Learning and must be approved by the faculty mentor, appropriate department chair, appropriate dean, Center advisor and the Center director. Students in this program follow the basic requirements and process for all IDP majors. The process for developing the IDP proposal and selecting the remaining courses is available at the [Center for Individualized Learning website](#).

A minimum of one year of study of a modern language other than English is required and students are strongly encouraged to complete at least two years of study in the same language. Students who are already proficient in a language other than English as demonstrated by successful completion of an approved proficiency examination will be exempt from the requirement. Students are advised to research the possible entry language requirements of any graduate programs in which they might be interested and plan their programs accordingly.

An appropriate study abroad or a local or regional experience with an international focus is required as a part of the individual student's proposal.

## Prerequisites

These courses can be used to satisfy General Studies requirements. See your advisor and the catalog for more information on any other General Studies restrictions for your catalog year.

- ECO 2010 - Principles of Macroeconomics **Credits: 3**

or

- ECO 1040 - A Citizen's Guide to Economics **Credits: 3**
- PSC 1020 - Comparative Politics **Credits: 3**

## International Studies Concentration Core

- ANT 1310 - Introduction to Cultural Anthropology **Credits: 3**
- ANT 2330 - Cross-Cultural Communication **Credits: 3**  
or
- ANT 3300 - Exploring World Cultures: Variable Topics **Credits: 3**
- GEG 1000 - World Regional Geography **Credits: 3**
- HIS 1040 - World History since 1500 **Credits: 3**
- PSC 2230 - Introduction to International Relations **Credits: 3**
- PSC 3340 - International Political Economy **Credits: 3**  
or
- ECO 3550 - Global Economics and International Trade **Credits: 3**

Total for Core: 18

## Additional Information

The senior experience may be selected from approved senior experiences listed in the *College Catalog* online. If no approved senior experience is appropriate for the student's program, a senior level course, internship or independent study that meets the criteria for senior experiences may be chosen with approval of the faculty mentor, chair, Center director and dean. Approval of a senior experience is not a separate process but is considered in the review and approval of the student's major proposal.

Some courses in the core may be applied to General Studies requirements. In that case, students will choose other courses in collaboration with their advisors so that the total number of credit hours in the major reflect the requirements for an IDP major or IDP extended major as listed below.

An IDP major requires a minimum of 40 credit hours (including the core), 21 of which must be upper division. A minor from the Catalog which will complement the student's proposed major is required.

An IDP extended major requires a minimum of 60 credit hours (including the core), 30 of which must be upper division. A minor is not required for the extended major, but students will choose other related coursework appropriate to their specific goals to meet the requirements for the IDP extended major.

The Center for Urban Education (CUE) supports and promotes the most effective teachers for high-need, urban schools. CUE partners with and provides **supplemental** services to MSU Denver students who are preparing to teach through the Teacher Education Departments and the School of Letters, Arts, and Sciences.

CUE facilitates pre-service teacher placements in urban schools, provides paid and volunteer tutoring and service opportunities in schools to help pre-service teachers and other university students build their professional resumes, develops and hosts urban education seminars and workshops for MSU Denver students, and convenes an annual, national, urban education summit aimed at building a national network of educators committed to addressing the educational needs of children in high-need, urban schools. CUE currently partners with Denver Public Schools.

For more information, visit the Center for Urban Education website at <https://msudenver.edu/centerforurbaneducation/>.

## Honors Program Office

Students in MSU Denver's Honors Program enjoy the benefits of a small community of engaged learners and exciting, dynamic instructors, while still having access to the substantial resources of MSU Denver and its vibrant, urban campus.

For more information on the Honors Program Office, visit [msudenver.edu/honors](https://msudenver.edu/honors).

## Honors Program

The Honors Program is rooted in the MSU Denver mission **to provide a high-quality, accessible, enriching education to a diverse student population in an atmosphere of mutual respect.** Students and faculty who participate in the Honors Program commit to pursue the University mission **to engage the community at large in scholarly inquiry, creative activity and the application of knowledge.**

The MSU Denver Honors Program offers a transformative intellectual challenge within the context of a supportive community. This program fosters interdisciplinary inquiry and experiential learning and provides guidance for in-depth research and creative projects. The Honors Program encourages students to become good stewards of their knowledge by inviting them to actively participate in academic leadership and service opportunities. Honors students also learn to integrate a variety of disciplines in their approach to a given project, demonstrate civic and intercultural knowledge and engagement, and reflect critically upon their values and the learning process. Students who enroll in Honors should expect a challenge that stimulates curiosity and research while broadening perspectives in unexpected ways.

## Curriculum Basics

## Center for Urban Education

The Honors Program curriculum requires **21 units of Honors Program approved courses and activities**. Each student is able to design his or her own path through the honors curriculum by completing the honors core courses and combining a selection of academic course options and co-curricular options. Students must earn a B-or better for courses to count for Honors credit.

## Honors Core Courses (11-13 credit hours):

Core courses taken by all honors students include two interdisciplinary Honors Colloquia as well as The Honors Thesis which is an independent research and/or creative project normally completed during the senior year. The Honors Thesis can also be completed in conjunction with degree program requirements. Honors Core Courses include:

- ENG 3525 - Scholarly Writing **Credits: 3**  
or
- COMM 3020 - Advanced Public Speaking **Credits: 3**
- HON 3910 - Honors Colloquium **Credits: 3** (two 3 hrs. courses)
- HON 4948 - Honors Thesis Seminar **Credits: 1**
- HON 4950 - Senior Honors Thesis **Credits: 3**  
or
- HON 4951 - Paired Senior Honors Thesis **Credits: 1** (must be paired with an upper division research, capstone or Senior Experience course)

## Honors General Studies Options

In addition to the core courses, honors students may select general studies and/or upper division course options to complete the academic course requirements. Many of these options can also fulfill degree program and university requirements. Service learning courses, internships and study abroad programs can also count as Honors Program credit.

- ENG 1021 - Honors Research and Argument Writing **Credits: 3** (Written Communication)
- HON 2750 - History of the Self **Credits: 3** (Arts and Humanities)
- HON 2770 - Dynamics of Change **Credits: 3** (Social and Behavioral Sciences II)
- HON 2800 - Scientific Revolutions **Credits: 3** (Natural and Physical Sciences)
- HON 2850 - Technology and Society **Credits: 3** (Social and Behavioral Sciences I)
- HON 2950 - Introduction to Critical Theory **Credits: 3** (Arts and Humanities)

## Honors Co-Curricular Options:

Students can also acquire hours towards the completion of the Honors Program by participating in a variety of exciting co-curricular options including:

- Serve as an officer in the Honors Student Council
- Present a project at an undergraduate research conference
- Participate in the annual Rocky Mountain Honors Conference
- Become a tutor, peer mentor, supplemental instruction leader, new student orientation leader, peer ambassador, or a research or teaching assistant to one of your professors. Work for Met Report or in the Writing Center (Most of these options are paid positions).

## Eligibility and Application Requirements

The Honors Program is open to new, continuing, and transfer students in all majors. The current GPA requirement is 3.3 and above, and students must maintain a 3.3 GPA to remain in good standing. Admission to the program is based on an application that includes high school or college GPA or GED, standardized test scores, a writing sample, and two references. Applications are evaluated by the Honors Director and Associate Directors.

## Military Science (Army ROTC)

Metropolitan State University of Denver (MSU Denver)  
Modular Building 1, 633 Curtis Street, Denver, CO 80217  
303-615-2050  
[msudenver.edu/arotc](http://msudenver.edu/arotc)

The Military Science Program at Metropolitan State University of Denver is offered in cooperation with the University of Colorado - Boulder (CU-Boulder). The Department of Military Science offers programs leading to an officer's commission in the active Army, Army Reserve, or National Guard in conjunction with an undergraduate or graduate degree. Military science courses are designed to supplement a regular degree program by offering practical leadership and management experience. Students attend classes at either MSU Denver, University of Colorado at Boulder, or Colorado School of Mines in Golden.

## Four-Year Program

- Military Science (Army ROTC) Standard Four-Year Program  
The four-year program consists of two phases: the basic course (freshman and sophomore years) and the advanced course (junior and senior years).

**Basic course.** The basic course offers a 2- or 3-credit course each semester, covering Army history and organization as well as military leadership and management. Laboratory sessions provide the opportunity to apply leadership skills while learning basic military skills. Enrollment in the basic course incurs no military obligation except for Army scholarship recipients.

**Advanced AROTC.** The advanced course covers leadership, tactics and unit operations, training techniques, military law, and professional ethics, and includes a leadership practicum each semester. A 35-day summer advanced camp at Fort Lewis, Washington, provides challenging leadership training,

and is a prerequisite for commissioning. Advanced course students must have completed the basic course and obtain permission from the Professor of Military Science (PMS).

## ***Two-Year Program***

- **Military Science (Army ROTC) Standard Two-Year Program**

The two-year program consists of the advanced course, preceded by a four-week summer ROTC basic course at Ft. Knox, Kentucky.

Veterans or students who have participated in three years of Junior ROTC or Civil Air Patrol may be eligible to enroll in the advanced course without attendance at basic camp or completion of the basic course. Inquiries on advanced placement should be directed to the Department of Military Science. Advanced course students must obtain permission from the Professor of Military Science (PMS).

## ***Scholarship Programs***

Four-year college scholarships are available to high school seniors, who should apply before December 1 of their senior year.

Competition for 2nd and 3rd year scholarships are open to all students, regardless of academic major and whether or not they are currently enrolled in ROTC. Scholarship students receive tuition and lab fees, a book allowance, and an allowance of \$300-\$500 per month during the academic year. For more information about scholarships, contact the Enrollment/Scholarship officer at 303-492-3549.

## ***Simultaneous Membership Program***

Students currently in the Army Reserves or Army National Guard and entering the second year of the basic course or the advanced course may participate in the Simultaneous Membership Program (SMP). Students participating in this program earn approximately \$240 in monthly drill pay in addition to the \$350-\$500 monthly stipend. Additionally, SMP participants may be eligible for Army National Guard or reserve education benefits that provide up to \$4,500 per year tuition assistance.

**Leadership Laboratories.** All students participate in a leadership laboratory one day per week. These three hour periods provide cadets with practical leadership experience and performance-oriented, hands-on instruction outside the classroom. Leadership labs are compulsory for enrolled cadets.

## ***AROTC Course Credit***

Army ROTC serves as elective credit in most departments. Exact course credit will be determined by the individual academic advisor.

## ***Registration***

Students who wish to register for Army ROTC classes (MILR prefix) sign up at MSU Denver through the normal course registration

process. For more information, contact the AROTC office at MSU Denver, 303-615-2050, or contact the AROTC Enrollment and Scholarship officer at 303-492-3459/303-492-6495 (main), email [arotc@colorado.edu](mailto:arotc@colorado.edu), or visit the website [msudenver.edu/arotc](http://msudenver.edu/arotc).

## ***Military Leadership Minor***

The minor in Military Leadership is available for students who are enrolled in the Reserve Officer Training Corps (ROTC) for the Army. The requirements for the minor mirror the required courses for the ROTC program and will meet the requirement in certain majors to complete a minor. Students interested in pursuing the Military Leadership minor but not currently enrolled in the ROTC program through the Army should consult with the ROTC program office about this possibility.

A grade of "C" or better is required for each course in this program.

## ***Required Courses***

- MILR 1011 - Adventures in Leadership I **Credits: 2**
- MILR 1021 - Adventures in Leadership II **Credits: 2**
- MILR 2031 - Methods of Leadership and Management I **Credits: 3**
- MILR 2041 - Methods of Leadership and Management II **Credits: 3**
- MILR 3052 - Military Operations and Training I **Credits: 3**
- MILR 3062 - Military Operations and Training II **Credits: 3**
- MILR 4072 - Adaptive Leadership **Credits: 3**
- MILR 4082 - Leadership in a Complex World **Credits: 3**

**Subtotal: 22 credits**

## ***Elective History Course***

Army ROTC also requires a military history course. Check with the program officer to verify that the course you select meets the requirement. The following 3-credit hour courses are pre-approved:

- HIS 1210 - American History to 1865 **Credits: 3**
- HIS 1220 - American History since 1865 **Credits: 3**
- HIS 3410 - American Colonial History **Credits: 3**
- HIS 3430 - American Revolution and Early National Period, 1763-1848 **Credits: 3**
- HIS 3520 - Civil War and Reconstruction **Credits: 3**
- HIS 3660 - American Protest: The History of Social Movements from the Cold War to the Twenty-First Century **Credits: 3**
- HIS 3690 - American Military History **Credits: 3**

## ***Military Science (Army ROTC) Standard Four-Year Program***

The Basic Course taken during the Freshman and Sophomore years is designed to introduce students to the Army. A variety of subjects



such as first aid, land navigation and military history are covered. Junior and Senior students participate in Advanced Course classes and focus on leadership, Army doctrine, and the transition from student/cadet to Lieutenant. All students participate in a leadership laboratory one day per week. Completion of a six-week summer camp, usually between the junior and senior years, is required.

For further information, visit the Military Science (Army ROTC) Department page.

## Required Courses

- MILR 1011 - Adventures in Leadership I **Credits:** 2
- MILR 1021 - Adventures in Leadership II **Credits:** 2
- MILR 2031 - Methods of Leadership and Management I **Credits:** 3
- MILR 2041 - Methods of Leadership and Management II **Credits:** 3
- MILR 3052 - Military Operations and Training I **Credits:** 3
- MILR 3062 - Military Operations and Training II **Credits:** 3
- MILR 4072 - Adaptive Leadership **Credits:** 3
- MILR 4082 - Leadership in a Complex World **Credits:** 3

## *Military Science (Army ROTC) Standard Two-Year Program*

Under this program students may enter the Advanced Course during their Junior year without participating in the Basic Course. They receive credit for the Basic Course by attending a five-week summer camp between their Sophomore and Junior years or receive credit for prior military experience.

For further information, visit the Military Science (Army ROTC) Department page.

## Required Courses

- MILR 3052 - Military Operations and Training I **Credits:** 3
- MILR 3062 - Military Operations and Training II **Credits:** 3
- MILR 4072 - Adaptive Leadership **Credits:** 3
- MILR 4082 - Leadership in a Complex World **Credits:** 3

## Office of International Studies

The Office of International Studies seeks to promote international and intercultural awareness by providing resources to students, faculty, and staff to engage in international issues and programs. As such, the office provides information about a variety of study abroad programs for students.

Many students cite their study abroad experience as one of the best experiences of their undergraduate career. Students who study abroad say that this experience is one of the most challenging and rewarding experiences of their lives. Lastly, many educators and employers recognize that an international experience is extremely valuable in an increasingly global marketplace.

For more information on the Office of International Studies, visit [msudenver.edu/internationalstudies](https://msudenver.edu/internationalstudies).

## One World One Water Center

### Mission Statement

The mission of the One World One Water Center for Urban Water Education and Stewardship at Metropolitan State University of Denver (MSU Denver) is to prepare an educated, empowered, solution-oriented Colorado citizenry to protect and preserve our precious water resources. MSU Denver fulfills the mission in three ways:

- Offer an interdisciplinary, hands-on Water Studies minor for students from diverse backgrounds and in any major;
- Provide co-curricular enrichment activities to the entire student population of the Auraria Campus, which includes MSU Denver, the University of Colorado - Denver, and the Community College of Denver;
- Enhance water stewardship on and beyond campus for the effective use of water resources.

Programs:

- [Water Studies Certificate](#)
- [Water Studies Minor](#)

For more information on the OWOW Center, visit [msudenver.edu/owow](https://msudenver.edu/owow).

## *Water Studies Certificate*

The Water Studies Certificate is a 15-credit, interdisciplinary program of study that provides a holistic, highly interactive experience. The curriculum is designed to facilitate water studies education to students from a wide range of disciplines by introducing them to the importance of water resources and stewardship via coursework and co-curricular programs.

## Water Admission and Graduation Requirements

This certificate program is open to all undergraduate, degree-seeking students and also to non-degree-seeking students. At least 9 credits of water studies courses in the certificate must be completed in residency at MSU Denver, as well as 6 credit hours of electives. A grade of "C" or better must be earned in each course required for the

certificate. Students should note that programs differ in the minimum grade required.

## Advising and Contact Information

Individuals interested in this certificate program should contact the One World One Water Center at 303-615-1199 to schedule an appointment for an advising session. For more information on the OWOW Center, visit [msudenver.edu/owow](http://msudenver.edu/owow).

## Required Courses

- HIS 3426 - Colorado Water and the American West **Credits: 3**  
OR
- JMP 3570 - Covering the Environment **Credits: 3**
- GEG 1910 - Global Water Concerns **Credits: 3**  
OR
- ENV 3400 - Water Resources **Credits: 3**
- MGT 3250 - Colorado Water Law and Water Rights Administration **Credits: 3** (Crosslisted: ENV 3250)  
OR
- ENV 4410 - Water Law **Credits: 3**  
OR
- ENV 4200 - Environmental Policy and Planning **Credits: 3**

**Subtotal: 9 credits**

## Elective Courses

Students must select 6 semester hours of elective courses in consultation with staff of the One World One Water Center or with an advisor in their major department.

**Subtotal: 6 credits**

**Total for Certificate: 15 credits**

## Water Studies Minor

The Water Studies Minor is an interdisciplinary field of study that provides a holistic, highly interactive program. The curriculum is designed to facilitate water studies education to students from a wide range of co-curricular programs. At least 9 credits of water studies courses in the minor must be completed in residency at MSU Denver, as well as 6 credit hours of electives and 3 credit hours of an

approved internship. A grade of "C" or better must be earned in each course required for the minor. Students should note that programs differ in the minimum grade required.

## Advising and Contact Information

Individuals interested in this certificate program should contact the One World One Water Center at 303-615-1199 to schedule an appointment for an advising session. For more information on the OWOW Center, visit [msudenver.edu/owow](http://msudenver.edu/owow).

## Required Courses

- GEG 1910 - Global Water Concerns **Credits: 3**  
OR
  - ENV 3400 - Water Resources **Credits: 3**
  - MGT 3250 - Colorado Water Law and Water Rights Administration **Credits: 3** (Crosslisted: ENV 3250)  
OR
  - ENV 4410 - Water Law **Credits: 3**  
OR
  - ENV 4200 - Environmental Policy and Planning **Credits: 3**
  - JMP 3570 - Covering the Environment **Credits: 3**  
OR
  - HIS 3426 - Colorado Water and the American West **Credits: 3**
  - Approved Internship\*
- Subtotal: 12 credits**

## Elective Courses

- A minimum of 6 additional semester hours of approved electives is required.\*

**Subtotal: 6 credits**

Total for the Water Studies Minor: 18 credits

*\*Internship course and elective courses will be selected in consultation with an advisor in the One World One Water Center.*

# College of Aerospace, Computing, Engineering, and Design

## Mission

Through state-of-the-art teaching and research, the College of Aerospace, Computing, Engineering, and Design prepares diverse students with advanced expertise and knowledge in their discipline, for the pursuit of post-graduate degrees and lifelong learning and to be leaders in innovation and problem-solving in their chosen professions. The college engages with industry partners to meet the technological needs of the state and region and to provide students with meaningful hands-on experience in the field.

## Academic Departments

- [Department of Aviation and Aerospace Science](#)
- [Department of Computer Sciences](#)
- [Department of Engineering and Engineering Technology](#)
- [Department of Industrial Design](#)
- [Department of Mathematics and Statistics](#)

## Institutes and Centers

- [Advanced Manufacturing Sciences Institute](#)
- [The Cybersecurity Center](#)

## Advanced Manufacturing Sciences Institute

Location: Aerospace and Engineering Sciences Building, Suite 300

Phone: 303-615-0880

E-Mail: [amsi@msudenver.edu](mailto:amsi@msudenver.edu)

Website: [Advanced Manufacturing Sciences Institute Website](#)

## *Advanced Manufacturing Sciences Major, B.S.*

[Advanced Manufacturing Sciences  
Institute](#)

[College of Aerospace, Computing,  
Engineering, and Design](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

The Advanced Manufacturing Sciences Institute is at the forefront of a revolution in America's manufacturing economy - the use of smarter, leaner factories to develop and produce innovative new products, materials, and techniques. This multi-disciplinary degree will prepare students for leading-edge careers in the Advanced Manufacturing sector.

The Advanced Manufacturing Sciences (AMS) baccalaureate degree is a multi-disciplinary major that emphasizes both theoretical and practical applications, providing students with a solid foundation in core skills, knowledge and dispositions to facilitate expertise in advanced manufacturing professional positions.

The major requires a core set of courses and selection of a concentration so that each concentration becomes an extended major. The AMS bachelor's degree is accredited through the Higher Learning Commission.

## Core Courses

The core of the AMS program is comprised of a set of courses that are integral to the goal of preparing students as manufacturing professionals in a variety of industry sectors. The required core courses are designed to provide students with a targeted skill set based on the following core competencies: subtractive manufacturing skills (CNC machining & inspection), additive manufacturing skills (including an opportunity to receive a Stratasys Certification), computer-aided design skills, quality assurance skills, soft skills including critical thinking, problem solving, teamwork, leadership and communication, math skills, computer skills including manufacturing data protection, technical writing skills, and basic electronics skills.

## Concentration Courses

The student will choose a concentration in which to specialize:

- Aerospace Concentration
- Industrial Design Concentration
- Mechanical Engineering Technology Concentration
- Operations Management Concentration

## Student Outcomes

### Technical Skills

- Design - Apply scientific, mathematical, and technological knowledge and skills to effectively solve manufacturing problems.
- Processes - Analyze and interpret results of standard tests and measurements to improve manufacturing processes.
- Materials - Analyze and interpret results of standard tests and measurements to select manufacturing materials.
- Equipment & Tools - Implement proper and safe use of manufacturing equipment and tools.



## Soft Skills

- Communication - Demonstrate effective written, oral, and graphical communication in both technical and non-technical environments.
- Critical Thinking - Analyze and evaluate information gathered by observation, experience, and reasoning and integrate and apply to inform decisions and actions.
- Teamwork - Demonstrate the ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for Core and Concentration courses that are not MET courses; all MET courses require a C or better. Students should note that programs differ in the minimum grade required.
- Students must achieve a minimum GPA of 2.5 within the major.
- Each student is required to complete an appropriate internship related to the degree program.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
  - **Recommended:** ENG 1010 - Composing Arguments and ENG 1020 - Research and Argument Writing
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1109 - College Algebra Stretch, Part II or MTH 1110 - College Algebra for Calculus or higher
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)

- **Recommended:** MET 1040 - Introduction to Engineering, PHY 1000 - Physics of Nature, PHY 2010 - College Physics I, PHY 2030 - College Physics I Laboratory
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** CET 3120 - Engineering Economy
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## AMS Core Courses: 44 credits

- AMS 1010 - Survey of Advanced Manufacturing and Workplace Preparation **Credits: 3**
- AMS 3010 - Additive Manufacturing Stratasys Certification Preparation **Credits: 3**
- CS 1030 - Computer Science Principles **Credits: 4**
- CSS 2751 - Principles of Cybersecurity **Credits: 3**
- CSS 3753 - Computing and Security for Manufacturing **Credits: 3**
- ELE 1001 - Introduction to Electrical Engineering **Credits: 3**
- IND 1450 - Technical Drawing and CAD **Credits: 3** or
- CET 1215 - Civil Engineering Graphics **Credits: 3** or
- MET 1200 - Technical Drawing I **Credits: 3**
- JMP 2610 - Introduction to Technical Writing **Credits: 3**
- MET 1010 - Manufacturing Processes **Credits: 3** or
- IND 2830 - Manufacturing Materials and Processes **Credits: 3**
- MET 1310 - Principles of Quality Assurance **Credits: 3**
- MET 2010 - CNC Machining and Inspection **Credits: 3**
- MET 3000 - Manufacturing Analysis **Credits: 4**

- MET 3630 - Lean Manufacturing Systems Engineering **Credits: 3**
- MTH 1120 - College Trigonometry **Credits: 3**

## Aerospace Concentration: 27 credits

Introduces students to aerospace operations and prepares them to contribute to the assembly, integration and test of air and spacecraft that make our lives on earth better.

- AES 1050 - Introduction to Space **Credits: 3**
- AES 2607 - Introduction to Aerospace Systems Simulation **Credits: 3**
- AES 3530 - Aerodynamics **Credits: 3**
- AES 3600 - Space Flight Operations I **Credits: 3**
- AES 3610 - Elements of Spacecraft Design I **Credits: 3**
- AES 3850 - Human Factors and Physiology of Flight **Credits: 3**
- AES 4601 - Space Flight Operations II **Credits: 3**
- AES 4603 - Aerospace Operations Systems Analysis and Design **Credits: 3**
- AES 4620 - Elements of Spacecraft Design II **Credits: 3**

## Industrial Design Concentration: 29 credits

Focuses on exposing students to 3D modeling, CNC machines and advanced materials from an industrial design perspective.

- IND 1000 - Introduction to Industrial Design **Credits: 1**
- IND 1100 - Materials I: Materials and Fabrication **Credits: 3**
- IND 1300 - Materials II: Design and Application **Credits: 3**
- IND 1470 - Design Drawing Techniques **Credits: 3**
- IND 2830 - Manufacturing Materials and Processes **Credits: 3**
- IND 3000 - Design Thinking **Credits: 3**
- IND 3400 - Product Usability and Ergonomics **Credits: 3**
- IND 3660 - Computer Aided Modeling **Credits: 3**
- IND 3800 - Design for Marketability and Manufacturing **Credits: 4**
- MET 3260 - Direct Digital Manufacturing **Credits: 3**

## Mechanical Engineering Technology Concentration: 30 credits

Provides practice in the ability to improve integrated systems, optimize manufacturing processes, adopt state-of-the-art materials, and produce superior quality products at minimal cost. Coursework provides students an opportunity to understand the operation and function of more complex technologies used in manufacturing.

- CHE 1100 - Principles of Chemistry **Credits: 4**

- CHE 1150 - Principles of Chemistry Laboratory **Credits: 1**
- MET 1210 - 3D Modeling **Credits: 3**
- MET 2200 - Materials of Engineering **Credits: 3**
- MET 3215 - Composites Manufacturing **Credits: 3**
- MET 3260 - Direct Digital Manufacturing **Credits: 3**
- MET 3410 - Geometric Dimensioning and Tolerancing **Credits: 3**
- MET 4080 - Computer Aided Manufacturing **Credits: 3**
- MET 4370 - Advanced Composite Structures: Design, Damage, Repair and Testing **Credits: 3**
- MTH 1410 - Calculus I **Credits: 4**

## Operations Management Concentration: 24 credits

A holistic perspective on the managerial and organizational systems that are used to make key decisions related to the planning for and day-to-day control of manufacturing operations. Beyond developing competence in analytical and planning skills, particular emphasis is given to the philosophy and methods of lean manufacturing, continuous quality improvement, effective supply chain management and Enterprise Planning.

- BUS 1850 - Introduction to Business **Credits: 3**
- CIS 2010 - Foundations of Information Systems **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**
- MGT 3530 - Human Resources Management **Credits: 3**
- MGT 3550 - Operations Management **Credits: 3**
- MGT 4050 - Supply Chain Management **Credits: 3**
- MGT 4360 - Service Operations Management **Credits: 3**
- MGT 4550 - Project Management **Credits: 3**

## Unrestricted Electives: 7-19 credits

### Senior Experience: 3 credits

- AMS 4940 - Capstone: Advanced Manufacturing Project Planning and Process Development **Credits: 3**  
This course is for individuals with extraordinary circumstances. Must have AMSI Director approval to register for AMS 4940.  
or
- AMS 4950 - Professional Internship **Credits: 1-15**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits

AMS Core Courses	44 credits
Selected Concentration	24-30 credits
Senior Experience	3 credits
Unrestricted Electives	7-19 credits
<b>Total for the Advanced Manufacturing Sciences Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Department of Aviation and Aerospace Science

Location: 1250 7th Street - Seventh Street Classroom

Phone: 303-605-5287

E-Mail: [aviationandaerospace@msudenver.edu](mailto:aviationandaerospace@msudenver.edu)

Website: [Aviation and Aerospace Department Website](#)

### *Aerospace Systems and Mission Design Major, B.S.*

Students who attain a Bachelor of Science degree with a major in Aerospace Systems and Mission Design will be equipped with a solid foundation in technical and operational concepts along with associated technology to support a career working with aerospace systems. The curriculum is underpinned with a comprehensive foundation of scientific principles to support students interested in overall space mission conceptualization, design and integration of space systems, and spaceflight mission operations and support throughout the entirety of the life cycle.

1. Students will develop a comprehensive understanding of aerospace systems along with professional technical and scientific communication skills using current technologies to conduct systems analysis.
2. Students will possess the knowledge, ethical principles, and expertise necessary to make a positive impact, effectively communicating complex information and solving problems within the aerospace domain.
3. Students will develop critical thinking skills, planning, decision-making, and effective communication abilities, integrating technical and scientific knowledge to address challenges in a professional context.

4. Students will evaluate and integrate the significance of regulatory compliance, understanding its influence on global aerospace operations while addressing interconnected technical, environmental, and human factors.
5. Students will apply innovative approaches to ensure long-term sustainability, emphasizing the responsible use of resources in the aerospace domain.

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of D- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- A grade of "C-" or better is required in all upper division courses listed as part of the major, whether or not they are AES prefixed courses, including electives. Students should note that programs differ in the minimum grade required. This requirement does not apply to General Studies classes.
- Students must maintain a minimum cumulative GPA of 2.0 or higher in the Bachelor of Science degree with a major in Aerospace Systems and Mission Design.
- A minor IS NOT required for this program.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** It is recommended that students fulfill this requirement with MTH 1110 - College Algebra for Calculus, which is required by the Aerospace Systems and Mission Design major.
- Arts and Humanities (6 credits)
  - **Recommended:** It is recommended that students partially fulfill this requirement with PHI 3370 - Computers, Ethics, and Society.
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** It is recommended that students fulfill this requirement with PHY 2311 - General Physics I, PHY 2321 General Physics I Laboratory, and AES 1050 - Introduction to Space, which are required by the Aerospace Systems and Mission Design major.
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** It is recommended that students partially fulfill this requirement with CET 3120 - Engineering Economy.

- Global Diversity (0 or 3 credits\*\*)

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

### Required Ancillary Courses: 40 credits

- CHE 1800 - General Chemistry I **Credits: 4**
- CS 1050 - Computer Science 1 **Credits: 4**
- CSS 2751 - Principles of Cybersecurity **Credits: 3**
- EET 2000 - Electric Circuits and Machines **Credits: 3**
- GIS 2250 - Geographic Information Systems **Credits: 4**
- GIS 4840 - Remote Sensing **Credits: 3**
- JMP 2610 - Introduction to Technical Writing **Credits: 3**
- MTH 1110 - College Algebra for Calculus **Credits: 4**
- MTH 1120 - College Trigonometry **Credits: 3**
- MTH 1410 - Calculus I **Credits: 4**
- PHY 2311 - General Physics I **Credits: 4**
- PHY 2321 - General Physics I Laboratory **Credits: 1**

### Required Courses: 37 credits

- AES 1050 - Introduction to Space **Credits: 3**
- AES 2607 - Introduction to Aerospace Systems Simulation **Credits: 3**
- AES 2630 - Spacecraft Mission Operations I **Credits: 3**
- AES 3600 - Space Flight Operations I **Credits: 3**
- AES 3620 - Aerospace Systems Project and Mission Scheduling **Credits: 3**
- AES 4601 - Space Flight Operations II **Credits: 3**
- AES 4602 - Aerospace Commercialization Operations **Credits: 3**
- AES 1910 - Aerospace Industry Exploration and Analysis **Credits: 3**
- AES 3640 - Fundamentals of Aerospace Systems Analysis and Design **Credits: 4**
- AES 4603 - Aerospace Operations Systems Analysis and Design **Credits: 3**
- AES 4640 - Aerospace Model-Based Systems Analysis **Credits: 3**
- AES 4650 - Aerospace Software and Mission Visualization Tools **Credits: 3**

### Electives: 18 credits

Select 18 credit hours from the following.

- AES 1040 - Introduction to Unmanned Aircraft Systems **Credits: 3**
- AES 2050 - Aviation and Aerospace History and Development **Credits: 3**
- AES 3530 - Aerodynamics **Credits: 3**
- AES 3607 - Orbital Mechanics and Aerospace Systems Simulations **Credits: 3**
- AES 3610 - Elements of Spacecraft Design I **Credits: 3**
- AES 3630 - Spacecraft Mission Operations II **Credits: 3**
- AMS 3010 - Additive Manufacturing Stratasys Certification Preparation **Credits: 3**
- CET 3120 - Engineering Economy **Credits: 3**
- CS 2050 - Computer Science 2 **Credits: 4**
- IND 1450 - Technical Drawing and CAD **Credits: 3**
- IND 2810 - Technology and Design: Global Perspectives **Credits: 3**
- IND 3000 - Design Thinking **Credits: 3**
- MET 4000 - Project Engineering **Credits: 3**
- MTH 3210 - Probability and Statistics **Credits: 4**
- PHI 3370 - Computers, Ethics, and Society **Credits: 3**

### Senior Experience: 3 credits

### Summary of Requirements

General Studies Requirement	33 credits
Multicultural Requirement	0-3 credits
Additional Requirements (Ancillary Courses)	40 credits
Major Requirements	37 credits
Elective Courses	18 credits
Senior Experience Course	3 credits
Unrestricted Electives	0-4 credits
<b>Total for the Aerospace Systems and Mission Design Major, B.S.</b>	<b>120 credits</b>

### *Airport Management Certificate*

This certificate will prepare a student for the American Association of Airport Executives (AAAE) Certified Member examination, often required for airport management positions.

## Required Courses:

- AES 3220 - Aviation and Aerospace Law **Credits:** 3  
or
- AES 3230 - Airline Management **Credits:** 3  
or
- AES 3240 - Airline Planning **Credits:** 3
- AES 3880 - Aviation Security **Credits:** 3
- AES 4230 - General and Business Aviation Operations **Credits:** 3
- AES 4200 - Airport Planning and Management I **Credits:** 3
- AES 4210 - Airport Planning and Management II **Credits:** 3
- AES 4870 - Aviation Safety Program Management **Credits:** 3

Total: 18

## *Aviation and Aerospace Management (AAM) Major, B.S.*

[Department of Aviation and Aerospace Science](#)

[College of Aerospace, Computing, Engineering, and Design](#)

Available Program  
Format(s): Online, [In-Person](#),  
[Hybrid](#)

### About the Program

The AAM program is designed for those seeking career opportunities in airport management, airline management, corporate aviation, or general aviation. This degree also supports careers that integrate the business venues of aerospace and space commercialization with many areas of management in aeronautics. This degree program integrates coursework from the aviation curriculum with a business minor to prepare the graduate for aviation and aerospace business-administration related professions.

All students must complete 33 semester hours of General Studies. Some General Studies courses are required by the major, so students would benefit from taking those courses for their General Studies courses. The Aviation and Aerospace Science curriculum guide, available in the AVS Department office, SS 102, lists recommended General Studies courses, each degree program with a recommended course sequence, and AVS policies and procedures. Students should schedule an advising session with an AVS faculty member early in their first semester in the department and each semester thereafter.

### Student Outcomes

- Demonstrate comprehension of the flight environment.

- Apply airport management and planning principles including regulatory and grant assurance compliance, and airport safety inspections; distinguish airport layout plans and airport master plans; apply airport and airfield planning processes related to the design aircraft, terminal expansion and overall airport development; construct an air service development strategy.
- Develop comprehensive safety programs utilizing the principles of Safety Management Systems and demonstrate how to implement incident command within the airport or airline environment.
- Demonstrate knowledge, skills and critical thinking abilities on current topics related to aviation and aerospace science, including analytical and interpretive abilities related to the airport management knowledge-base.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of D- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- A grade of "C-" or better is required in all upper division courses listed as part of the major, whether or not they are AES prefixed courses, including electives. Students should note that programs differ in the minimum grade required. This requirement does not apply to General Studies classes.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Courses: 58 credits

- AES 1010 - Introduction to Aviation and Aerospace Operations **Credits: 4**
- AES 1040 - Introduction to Unmanned Aircraft Systems **Credits: 3**  
or
- AES 1050 - Introduction to Space **Credits: 3**
- AES 1400 - Aviation Weather **Credits: 3**
- AES 2050 - Aviation and Aerospace History and Development **Credits: 3**  
or
- AES 2607 - Introduction to Aerospace Systems Simulation **Credits: 3**
- AES 2220 - Flight Dispatch and Load Planning **Credits: 3**
- AES 3220 - Aviation and Aerospace Law **Credits: 3**
- AES 3230 - Airline Management **Credits: 3**
- AES 3240 - Airline Planning **Credits: 3**
- AES 3600 - Space Flight Operations I **Credits: 3**
- AES 3850 - Human Factors and Physiology of Flight **Credits: 3**
- AES 3880 - Aviation Security **Credits: 3**
- AES 4200 - Airport Planning and Management I **Credits: 3**
- AES 4210 - Airport Planning and Management II **Credits: 3**
- AES 4230 - General and Business Aviation Operations **Credits: 3**
- AES 4240 - Air Cargo Industry **Credits: 3**
- AES 4601 - Space Flight Operations II **Credits: 3**
- AES 4602 - Aerospace Commercialization Operations **Credits: 3**

- AES 3620 - Aerospace Systems Project and Mission Scheduling **Credits: 3**  
or
- AES 4603 - Aerospace Operations Systems Analysis and Design **Credits: 3**
- AES 4870 - Aviation Safety Program Management **Credits: 3**

## Senior Experience: 3 credits

- AES 4910 - Aviation and Aerospace Strategic Planning **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Courses	58 credits
Senior Experience	3 credits
Unrestricted Electives	23-26 credits
<b>Total for the Aviation and Aerospace Management Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Aviation and Aerospace Science (ASC) Major, B.S.

[Department of Aviation and Aerospace Science](#)

[College of Aerospace, Computing, Engineering, and Design](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

All students must complete 33 semester hours of General Studies. Some General Studies courses are required by the major, so students would benefit from taking those courses for their General Studies courses. The Aviation and Aerospace Science curriculum guide, available in the AVS Department office, SS 102, lists recommended General Studies courses, each degree program with a recommended

course sequence, and AVS policies and procedures. Students should schedule an advising session with an AVS faculty member early in their first semester in the department and each semester thereafter.

The mission of Metropolitan State University of Denver's Department of Aviation and Aerospace Science, Aviation and Aerospace Science Major is to produce professional aerospace operators, air traffic controllers, and aviators possessing the leadership and skills necessary to sustain safety and profitability in the global aviation and aerospace industry.

The vision of Metropolitan State University of Denver's Department of Aviation and Aerospace Science, Aviation and Aerospace Science Major is to be a key leader in innovative collegiate aviation and aerospace programs, producing graduates who increase the safety and profitability of global aviation and aerospace.

## Program Goals

- Professional Competency: Graduates will possess the knowledge and expertise required to make a positive impact for their employer and act with the greatest standards of professionalism, as attested by their ethical principles and integrity.
- Regulatory Compliance: Graduates will possess the capability to evaluate the role and significance of regulatory compliance in shaping the operations of global aviation and aerospace commerce.
- Sustainable Aviation & Aerospace Practices: Graduates will be able to apply the understanding that long-term, sustained profitability in the global aviation and aerospace industry derives from the participation of innovative and committed individuals who maximize resource utilization.
- Critical Thinking: Graduates will exhibit the planning, decision-making, workload management, and communication abilities essential for critical thinking.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of D- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

- A grade of "C-" or better is required in all upper division courses listed as part of the major, whether or not they are AES prefixed courses, including electives. Students should note that programs differ in the minimum grade required. This requirement does not apply to General Studies classes.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Aerospace Operations Concentration (ASC1): 62 credits

This concentration is designed for those seeking career opportunities in aviation or aerospace operations, systems integration, or logistical planning. This degree also supports careers that integrate commercial venues of aerospace with aviation.

## Required Courses: 59 credits

- AES 1010 - Introduction to Aviation and Aerospace Operations **Credits: 4**
- AES 1040 - Introduction to Unmanned Aircraft Systems **Credits: 3**  
or



- AES 1050 - Introduction to Space **Credits: 3**
- AES 1400 - Aviation Weather **Credits: 3**
- AES 1710 - Instrument Flight Simulation I **Credits: 3**
- AES 2050 - Aviation and Aerospace History and Development **Credits: 3**
- AES 2200 - Fundamentals of Air Traffic Control **Credits: 4**
- AES 2220 - Flight Dispatch and Load Planning **Credits: 3**
- AES 2607 - Introduction to Aerospace Systems Simulation **Credits: 3**
- AES 2630 - Spacecraft Mission Operations I **Credits: 3**
- AES 3600 - Space Flight Operations I **Credits: 3**
- AES 3850 - Human Factors and Physiology of Flight **Credits: 3**
- AES 3880 - Aviation Security **Credits: 3**
- AES 4200 - Airport Planning and Management I **Credits: 3**
- AES 4601 - Space Flight Operations II **Credits: 3**
- AES 4602 - Aerospace Commercialization Operations **Credits: 3**  
or
- AES 4210 - Airport Planning and Management II **Credits: 3**
- AES 3620 - Aerospace Systems Project and Mission Scheduling **Credits: 3**  
or
- AES 3630 - Spacecraft Mission Operations II **Credits: 3**  
or
- AES 4603 - Aerospace Operations Systems Analysis and Design **Credits: 3**
- AES 4860 - Aviation Safety **Credits: 3**  
or
- AES 4870 - Aviation Safety Program Management **Credits: 3**
- AES 4910 - Aviation and Aerospace Strategic Planning **Credits: 3**
- BUS 1950 - Business Communication **Credits: 3**  
or
- JMP 2610 - Introduction to Technical Writing **Credits: 3**

### ASC1 Senior Experience: 3 credits

- AES 4930 - Professional Flight Standards Seminar **Credits: 3**  
or
- JMP 4790 - Senior Seminar **Credits: 3**

## Professional Flight Officer Concentration (ASC2): 75 credits

Professional Flight Officer (ASC2): This concentration is designed for those planning a career as a professional pilot. A student choosing this concentration must earn an FAA Commercial Single-Engine Airplane Certificate with an Instrument Rating and either (1) a multi-engine land rating or (2) an FAA Certified Flight Instructor Certificate (CFI) before graduation. Before enrolling in this concentration, ensure you can obtain the appropriate FAA medical certificate. For a list of FAA medical examiners, see <http://www.faa.gov/pilots/amelocator/>.

### Required Courses: 72 credits

- AES 1040 - Introduction to Unmanned Aircraft Systems **Credits: 3**  
or
- AES 2050 - Aviation and Aerospace History and Development **Credits: 3**
- AES 1100 - Private Pilot Ground **Credits: 4**  
or FAA Private Pilot Certificate
- AES 1400 - Aviation Weather **Credits: 3**
- AES 1500 - Private Pilot Flight Lab **Credits: 2**  
or FAA Private Pilot Certificate  
or AES Elective
- AES 1710 - Instrument Flight Simulation I **Credits: 3**  
or FAA Private Pilot Certificate
- AES 2120 - Instrument Pilot Ground **Credits: 4**  
or FAA Instrument Rating
- AES 3130 - Commercial Pilot Ground **Credits: 3**  
or FAA Commercial Certificate
- AES 2200 - Fundamentals of Air Traffic Control **Credits: 4**
- AES 2220 - Flight Dispatch and Load Planning **Credits: 3**
- AES 2500 - Instrument Pilot Flight Lab **Credits: 2**  
or FAA Instrument Rating  
or AES Elective
- AES 2710 - Instrument Flight Simulation II **Credits: 3**  
or FAA Instrument Rating
- AES 3000 - Aircraft Systems and Propulsion **Credits: 3**
- AES 3520 - Commercial Single-Engine Flight Lab **Credits: 2**  
or FAA Commercial Certificate  
or AES Elective
- AES 3530 - Aerodynamics **Credits: 3**
- AES 3710 - Multi-Engine Flight Simulation I **Credits: 3**  
or FAA Multi-Engine Rating
- AES 3850 - Human Factors and Physiology of Flight **Credits: 3**
- AES 3880 - Aviation Security **Credits: 3**
- AES 4040 - Aircraft Performance **Credits: 3**
- AES 4370 - Advanced Navigation Systems **Credits: 3**



- AES 4500 - Commercial Multi-Engine Flight Lab **Credits:** 2  
or FAA Commercial Multi-Engine Rating  
or AES Elective
- or
- AES 4510 - Flight Instructor Flight Lab **Credits:** 2  
or FAA Flight Instructor Certificate  
or AES Elective
- AES 4540 - FAA Instructor Certification-Ground School **Credits:** 3  
or FAA Flight Instructor Certificate
- AES 4935 - Advanced Commercial Aircraft Systems **Credits:** 4  
or FAA Airline Transport Pilot Certificate
- AES 4860 - Aviation Safety **Credits:** 3
- AES 4910 - Aviation and Aerospace Strategic Planning **Credits:** 3

## ASC2 Senior Experience: 3 credits

- AES 4930 - Professional Flight Standards Seminar **Credits:** 3

## Air Traffic Collegiate Training Initiative (AT-CTI) Concentration (ASC3): 78 credits

Air Traffic Collegiate Training Initiative (FAA AT-CTI) (ASC3): The Air Traffic Collegiate Training Initiative concentration (ASC3), also known as the AT-CTI program, has been designed through a partnership with the Federal Aviation Administration (FAA) in order to provide a foundation for students interested in becoming FAA air traffic control specialists. MSU Denver is one of only 36 higher education institutions across the country designated by the FAA as part of its Collegiate Training Initiative and is an FAA-approved AT-CTI program. Weather, airspace, teamwork in aviation, navigation, and search and rescue are among the fundamentals covered in this course of study.

## Required Courses: 48 credits

- AES 1100 - Private Pilot Ground **Credits:** 4
- AES 1400 - Aviation Weather **Credits:** 3
- AES 1710 - Instrument Flight Simulation I **Credits:** 3
- AES 2120 - Instrument Pilot Ground **Credits:** 4
- AES 2200 - Fundamentals of Air Traffic Control **Credits:** 4
- AES 3220 - Aviation and Aerospace Law **Credits:** 3

- AES 3850 - Human Factors and Physiology of Flight **Credits:** 3
- AES 3880 - Aviation Security **Credits:** 3
- AES 4100 - Advanced Air Traffic Control **Credits:** 3
- AES 4200 - Airport Planning and Management I **Credits:** 3
- AES 4210 - Airport Planning and Management II **Credits:** 3
- AES 4230 - General and Business Aviation Operations **Credits:** 3
- AES 4860 - Aviation Safety **Credits:** 3
- AES 4870 - Aviation Safety Program Management **Credits:** 3
- AES 4910 - Aviation and Aerospace Strategic Planning **Credits:** 3

## AES Electives: 27 credits

Select 27 credits in AES electives.

## ASC3 Senior Experience: 3 credits

- AES 4930 - Professional Flight Standards Seminar **Credits:** 3

## Summary of Requirements

Aerospace Operations Concentration (ASC1)	
General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Courses	59 credits
Senior Experience	3 credits
Unrestricted Electives	22-28 credits
Professional Flight Officer Concentration (ASC2)	
General Studies	33 credits
ESSJ Requirement	0-3 credits
Required Courses	72 credits
Senior Experience	3 credits
Unrestricted Electives	9-12 credits

<b>Air Traffic Collegiate Training Initiative (AT-CTI) Concentration (ASC3)</b>	
General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Courses	48 credits
AES Electives	27 credits
Senior Experience	3 credits
Unrestricted Electives	6-9 credits
<b>Total for the Aviation and Aerospace Science Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

### *Aviation Management Minor*

The Aviation Management Minor is designed to afford majors in other disciplines the opportunity to develop an understanding of the aviation and aerospace industries. It supports careers that integrate the business venues of aerospace and space commercialization with many areas of management in aeronautics. A cumulative 2.0 GPA is required for this program.

#### Required Courses

- AES 1100 - Private Pilot Ground **Credits: 4**
- AES 3220 - Aviation and Aerospace Law **Credits: 3**

**Subtotal: 7**

Plus 12 semester hours selected from:

- AES 3230 - Airline Management **Credits: 3**
- AES 3240 - Airline Planning **Credits: 3**
- AES 3850 - Human Factors and Physiology of Flight **Credits: 3**
- AES 4200 - Airport Planning and Management I **Credits: 3**
- AES 4210 - Airport Planning and Management II **Credits: 3**
- AES 4230 - General and Business Aviation Operations **Credits: 3**
- AES 4240 - Air Cargo Industry **Credits: 3**

- AES 4870 - Aviation Safety Program Management **Credits: 3**
- AES 4910 - Aviation and Aerospace Strategic Planning **Credits: 3**

**Subtotal: 12**

**Total: 19**

### *Aviation Technology Minor*

A student must possess at least an FAA Private Pilot Certificate before graduation. Documentation of this certification must be provided by the student to the AVS Department. A cumulative 2.0 GPA is required for this program.

#### Required Courses

- AES 1100 - Private Pilot Ground **Credits: 4**
- AES 1400 - Aviation Weather **Credits: 3**
- AES 1710 - Instrument Flight Simulation I **Credits: 3**

**Subtotal: 10**

#### AES Approved Electives

Students must select 9 credits of AES Approved Electives (3 credits must be upper division)

**Subtotal: 9**

**Total for Minor: 19**

### *Space Commercialization Certificate*

This certificate will provide increased knowledge and understanding of skills as related to the commercial space industry as an important and expanding part of the Colorado and national economy. All courses within this certificate can be applied toward the completion of any major in the Department of Aviation and Aerospace Science.

#### Required Courses

- AES 2607 - Introduction to Aerospace Systems Simulation **Credits: 3**  
or
- AES 3620 - Aerospace Systems Project and Mission Scheduling **Credits: 3**
- AES 3600 - Space Flight Operations I **Credits: 3**
- AES 4601 - Space Flight Operations II **Credits: 3**

- AES 4602 - Aerospace Commercialization Operations  
**Credits: 3**
- AES 4603 - Aerospace Operations Systems Analysis and Design **Credits: 3**

**Total: 15**

*Notes: Students must complete each course in the certificate program with a "C" or better. The courses cannot be taken pass/fail.*

## ***Spacecraft Flight Operations Certificate***

This certificate prepares the student with a strong foundation in specialized training for career development in the space and aerospace industry as a Spacecraft Mission and Flight Operations Specialist. It also expands opportunities for those currently employed in the industry seeking a stronger understanding of spacecraft operations command and control operations through an applied approach utilizing specialized laboratory and scenario training resources in ground segments, flight dynamics, satellite communication, mission planning and modeling, and space environment factors.

### **Required Courses**

- AES 2607 - Introduction to Aerospace Systems Simulation  
**Credits: 3**
- AES 2630 - Spacecraft Mission Operations I **Credits: 3**
- AES 3600 - Space Flight Operations I **Credits: 3**
- AES 3630 - Spacecraft Mission Operations II **Credits: 3**
- AES 4601 - Space Flight Operations II **Credits: 3**
- AES 3607 - Orbital Mechanics and Aerospace Systems Simulations **Credits: 3**  
or
- AES 3610 - Elements of Spacecraft Design I **Credits: 3**  
or
- AES 4603 - Aerospace Operations Systems Analysis and Design **Credits: 3**

**Total Credit Hours: 18**

## ***Unmanned Aircraft Systems Certificate***

This certificate prepares the student with a strong foundation for career development in the commercial unmanned aerial systems industry as a 14 CFR Part 107 Remote Pilot. It also expands opportunities for those currently employed in the industry seeking a better understanding of how to leverage and manage UAS-based resources for enhancing commerce and exploring new entrepreneurial opportunities. A student must possess the FAA Part 107 Remote Pilot Certificate before graduation with this certificate.

Students seeking the Unmanned Aircraft Systems Certificate must earn a grade of "C" or better for each class required in the program.

## **Certificate Requirements**

- AES 1040 - Introduction to Unmanned Aircraft Systems  
**Credits: 3**
- AES 2040 - Unmanned Aircraft Systems Flight and Control  
**Credits: 4**
- AES 3040 - Unmanned Aircraft Systems Data Collection and Analysis **Credits: 4**
- FAA Part 107 Remote Pilot Certificate
- AES Approved Elective **Credits: 6**

**Total Credit Hours: 17**

## **Department of Computer Sciences**

Location: Aerospace and Engineering Sciences (AES) - 200DD

Phone: 303-615-0399

E-Mail: [computersciences@msudenver.edu](mailto:computersciences@msudenver.edu)

Website: [Computer Sciences Department Website](#)

## ***Computer Science Major, B.S.***

[Department of Computer Sciences](#)

[College of Aerospace, Computing, Engineering, and Design](#)

Available Program  
Format(s): [In-Person](#)

### **About the Program**

The Department Computer Sciences offers coursework leading to the Bachelor of Science (B.S.) degree in Computer Science. The Computer Science major provides students with broad-based preparation in Computer Science with the appropriate supporting Mathematics background. Graduates in Computer Science are positioned for employment in a wide variety of jobs in the computing field. The CS major also prepares students for continued study of Computer Science at the graduate level. Students are encouraged to contact the department for further details (303-615-0399). The Computer Science BS degree program is accredited by the Computing Accreditation Commission of ABET, <http://abet.org>.

### **Student Outcomes**

1. Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practices based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply computer science theory and software development fundamentals to produce computing-based solutions.

*\*\*Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required in all CS courses included in the major, all ancillary courses, all required mathematics courses, and all science courses for the science requirement. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion. Some of the science, mathematics, and ancillary courses required for the CS major may partially or fully satisfy specific General Studies requirements.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

## Required Mathematics Courses: 12 credits

- MTH 1410 - Calculus I **Credits: 4**
- MTH 3130 - Applied Methods in Linear Algebra **Credits: 4**
- MTH 3210 - Probability and Statistics **Credits: 4**

(MTH 3140 may be substituted for MTH 3130.)

## Science Requirement: 6 credits

A total of at least 6 credits of the following departmentally approved science courses.

Must include one of the following science sequences. Additional science course(s) may be chosen from the courses listed below, or ENV 1200.

- BIO 1080 - General Biology I **Credits: 3**
- BIO 1090 - General Biology Laboratory I **Credits: 1**  
or
- BIO 1081 - General Biology II **Credits: 3**
- BIO 1091 - General Biology Laboratory II **Credits: 1**  
or
- CHE 1800 - General Chemistry I **Credits: 4**
- CHE 1801 - General Chemistry I Laboratory **Credits: 1**  
or
- CHE 1810 - General Chemistry II **Credits: 4**
- CHE 1811 - General Chemistry II Laboratory **Credits: 1**  
or
- GEL 1010 - Physical Geology **Credits: 4**  
or
- MTR 1400 - Weather and Climate **Credits: 3**
- MTR 2020 - Weather and Climate Lab for Scientists **Credits: 1**  
or
- PHY 2311 - General Physics I **Credits: 4**
- PHY 2321 - General Physics I Laboratory **Credits: 1**

or

- PHY 2331 - General Physics II **Credits: 4**
- PHY 2341 - General Physics II Laboratory **Credits: 1**

## Required Ancillary Courses: 9 credits

## Professional Presentation Requirement: 3 credits

- COMM 1010 - Presentational Speaking **Credits: 3**  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**

## Technical Writing Requirement: 3 credits

- JMP 2610 - Introduction to Technical Writing **Credits: 3**

## Computer Science Ethics Requirement: 3 credits

- PHI 3370 - Computers, Ethics, and Society **Credits: 3**

## Required Computer Science Courses: 62 credits

## Major Core Courses: 46 credits

- CS 1030 - Computer Science Principles **Credits: 4**
- CS 1050 - Computer Science 1 **Credits: 4**
- CS 1400 - Computer Organization **Credits: 4**
- CS 2050 - Computer Science 2 **Credits: 4**
- CS 2240 - Discrete Structures for Computer Science **Credits: 4**
- CS 2400 - Assembly Language Programming and Introduction to High Performance Computing **Credits: 4**
- CS 3210 - Principles of Programming Languages **Credits: 4**
- CS 3240 - Introduction to the Theory of Computation **Credits: 2**
- CS 3250 - Software Development Methods and Tools **Credits: 4**
- CS 3600 - Operating Systems **Credits: 4**
- CS 3700 - Networking and Distributed Computing **Credits: 4**
- CS 4050 - Algorithms and Algorithm Analysis **Credits: 4**

## Upper Division Electives: 12 credits

A minimum of 12 additional semester hours selected from upper-division CS courses, DSML 3850, DSML 4220, and MTH 4480.

## Senior Experience: 4 credits

- CS 4360 - Senior Experience in Computer Science **Credits: 4**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Mathematics Courses	12 credits
Science Requirement	6 credits
Professional Presentation Requirement	3 credits
Technical Writing Requirement	3 credits
Computer Science Ethics Requirement	3 credits
Required Major Core Courses	46 credits
Major Upper Division Electives	12 credits
Senior Experience	4 credits
Unrestricted Electives	0-10 credits
<b>Total for the Computer Science Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Note

As an alternative to the B.S. degree program, the Department of Computer Sciences works with the Center for Individualized Learning to provide students with programs customized to their educational needs.

## *Computer Science Minor*

The Department of Computer Sciences offers coursework leading to the Minor in Computer Science. This program prepares students to add computer science knowledge to their major field of study. A grade of "C-" or better is required in each course included in the

minor. Students should note that programs differ in the minimum grade required.

## Required Core Courses:

- CS 1050 - Computer Science 1 **Credits:** 4
- CS 2050 - Computer Science 2 **Credits:** 4

## Electives:

A minimum of 12 semester hours chosen from CS 1030, CS 1400, CS 2400, CS 2240, and upper-division CS courses, a minimum of 4 semester hours of which must be upper division CS course(s).

**Total: 20 credits**

## Computer Security Minor

This program prepares students to add computer security knowledge to their major field of study. A grade of "C" or better is required in each course included in the minor. Students should note that programs differ in the minimum grade required.

## Required Courses

- CSS 2751 - Principles of Cybersecurity **Credits:** 3
- CSS 2752 - Information Assurance **Credits:** 3
- CSS 2753 - Network Security **Credits:** 3
- CSS 2754 - Host Security **Credits:** 3
- CSS 3751 - Application Security **Credits:** 3
- CSS 3752 - Computer Forensics **Credits:** 3

**Total: 18 credit hours**

## Data Science and Machine Learning Major, B.S.

[Department of Computer Sciences](#)

Available Program  
Format(s): [In-Person](#)

[College of Aerospace, Computing,  
Engineering, and Design](#)

## About the Program

The Department of Computer Sciences offers coursework leading to a Bachelor of Science in Data Science and Machine Learning.

A degree in Data Science and Machine Learning will provide students with a strong foundation in computing and statistics to be able to pursue a career in any industry in which data is used. Students are invited to consult with department faculty concerning career options and further specialization within this field. The department recommends that students be aware of the similar, yet distinct, MSU degree offerings in Statistical Science and Computer Science.

All Majors in Data Science and Machine Learning are required to complete the required courses with a required minimum grade of "C-" and a minimum overall GPA of 2.00 in these courses. Students should note that programs differ in the minimum grade required.

Given the interdisciplinary nature of Data Science, and the broad range of domains/industries in which data-driven insights can yield innovation, students will be encouraged to concentrate their general undergraduate elective credits within another department outside of Math and Statistics/Computer Science.

## Student Outcomes

The student outcomes to be reached upon completion of this program are an extension of the CS degree requirements and aligned with the ABET criteria for "Data Science, Data Analytics, and Similarly Named Computing Programs." The student outcomes for this degree program are:

1. An ability to apply knowledge of computing, mathematics, and machine learning to the broad discipline of data science.
2. An ability to analyze complex datasets, and identify, define, and extract patterns and insights appropriate for problem-solving.
3. An ability to design, implement, and evaluate data-driven models, machine learning algorithms, and systems to meet desired needs.
4. An ability to communicate effectively with stakeholders to answer or solve a given problem through the use of data and modeling.
5. An understanding of professional, ethical, legal, security, and social issues and responsibilities, particularly those concerning data and machine learning models.
6. An ability to communicate effectively with a range of audiences, particularly in translating data insights to actionable recommendations.
7. An ability to analyze the local and global impact of data science solutions on individuals, organizations, and society.
8. Recognition of the need for, and an ability to engage in, continuing professional development, particularly in the rapidly evolving field of machine learning.
9. An ability to use current techniques, skills, and tools necessary for data manipulation, analysis, visualization, and machine learning practices.
10. An ability to apply statistical foundations, algorithmic principles, and machine learning theory in the modeling and design of data-driven systems, demonstrating comprehension of the trade-offs involved in design and model choices.

11. An ability to apply design and development principles in the construction of data pipelines, preprocessing systems, and machine learning models of varying complexity.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required in all CS, MTH, and DSML courses included in the major, all ancillary courses, and all science courses for the science requirement. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

Some of the science, mathematics, and ancillary courses required may partially or fully satisfy specific General Studies requirements.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\*Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Ancillary Courses: 9 credits

The courses JMP 2610 and PHI 3370 must be completed. One of either COMM 1010 or 1100 must also be completed.

- JMP 2610 - Introduction to Technical Writing **Credits: 3**  
AND
- PHI 3370 - Computers, Ethics, and Society **Credits: 3**  
AND  
(
- COMM 1010 - Presentational Speaking **Credits: 3**  
OR
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**  
)

## Required Science Courses: 6 credits

Must include one of the following groups of courses. Additional science course(s) may be chosen from the courses listed below, or ENV 1200.

- BIO 1080 - General Biology I **Credits: 3**
- BIO 1090 - General Biology Laboratory I **Credits: 1**  
OR
- BIO 1081 - General Biology II **Credits: 3**
- BIO 1091 - General Biology Laboratory II **Credits: 1**  
OR
- CHE 1800 - General Chemistry I **Credits: 4**
- CHE 1801 - General Chemistry I Laboratory **Credits: 1**  
OR
- CHE 1810 - General Chemistry II **Credits: 4**
- CHE 1811 - General Chemistry II Laboratory **Credits: 1**  
OR
- GEL 1010 - Physical Geology **Credits: 4**  
OR
- MTR 1400 - Weather and Climate **Credits: 3**
- MTR 2020 - Weather and Climate Lab for Scientists **Credits: 1**  
OR
- PHY 2311 - General Physics I **Credits: 4**
- PHY 2321 - General Physics I Laboratory **Credits: 1**  
OR
- PHY 2331 - General Physics II **Credits: 4**
- PHY 2341 - General Physics II Laboratory **Credits: 1**

## Required Core Courses: 48 credits

- CS 1050 - Computer Science 1 **Credits: 4**
- CS 2050 - Computer Science 2 **Credits: 4**
- CS 3120 - Machine Learning **Credits: 4**
- CS 3250 - Software Development Methods and Tools **Credits: 4**
- CS 3810 - Principles of Database Systems **Credits: 4**
- DSML 3850 - Cloud Computing **Credits: 4**
- DSML 4220 - Deep Learning **Credits: 4**
- MTH 1410 - Calculus I **Credits: 4**
- MTH 3130 - Applied Methods in Linear Algebra **Credits: 4**
- MTH 3210 - Probability and Statistics **Credits: 4**
- MTH 3220 - Statistical Methods **Credits: 4**
- MTH 3270 - Data Science **Credits: 4**

## Electives: 8 credits

A minimum of two elective courses chosen from the following (for a total of 8 credits).

- CS 3150 - Digital Image Processing and Computer Vision **Credits: 4**
- CS 3700 - Networking and Distributed Computing **Credits: 4**
- CS 4050 - Algorithms and Algorithm Analysis **Credits: 4**
- MTH 2520 - R Programming **Credits: 4**
- MTH 2540 - Scientific Computing with Python **Credits: 4**
- MTH 4230 - Regression and Computational Statistics **Credits: 4**

## Senior Experience: 4 credits

- DSML 4360 - Senior Experience in Data Science and Machine Learning **Credits: 4**

## Summary of Credits

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Ancillary Courses	9 credits
Required Science Courses	6 credits
Required Core Courses	48 credits
Electives	8 credits

Senior Experience	4 credits
Unrestricted Electives	9-27 credits
<b>Total for the Data Science and Machine Learning Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## The Cybersecurity Center

The Cybersecurity Center at MSU Denver is a workforce development resource for higher education cybersecurity efforts in the region and beyond and a resource for all academic programs at MSU Denver. The Center provides program guidance and oversight, general cyber defense information, collaboration and outreach opportunities among students, faculty, other academic units/departments within the University.

## Department of Engineering and Engineering Technology

Location: Aerospace and Engineering Sciences Building, Suite 300

Phone: 303-615-0499

E-Mail: [eact@msudenver.edu](mailto:eact@msudenver.edu)

Website: [Engineering and Engineering Technology Department Website](#)

## Additive Manufacturing Engineering Certificate

The certificate in Additive Manufacturing Engineering is designed to prepare students with hands-on training and knowledge necessary to meet increasing demand in the design, scanning, and manufacture of components with additive manufacturing techniques. The program will provide students with theoretical and practical knowledge in material identification, 3D design and scanning, design for additive manufacturing, direct digital manufacturing techniques, inspection, and applications. All of the courses within this certificate can be applied toward the completion of a major in the Mechanical Engineering Technology (MET) program. The certificate in Additive Manufacturing Engineering is comprised of a minimum of 18 credit hours.

## Admission and Graduation Requirements



This certificate program is open to all undergraduate, degree-seeking students. To be awarded the program certificate, the student must meet the following requirements:

complete 18 credits of courses as recommended by the certificate program;  
achieve a cumulative GPA of 3.0 or higher in the certificate program;  
earn at least a "C" or better in each of the certificate courses; and  
earn a minimum of 60% of required courses at MSU Denver.

- a. complete 18 credits of courses as recommended by the certificate program;
- b. achieve a cumulative GPA of 3.0 or higher in the certificate program;
- c. earn at least a "C" or better in each of the certificate courses; and
- d. earn a minimum of 60% of required courses at MSU Denver.

### Advising and Contact Information

Individuals interested in this certificate program should contact the Department of Engineering and Engineering Technology at 303-615-0499 to schedule an appointment for an advising session either in person or by phone.

### Required Courses

- MET 1010 - Manufacturing Processes **Credits: 3**
- MET 1200 - Technical Drawing I **Credits: 3**
- MET 1210 - 3D Modeling **Credits: 3**
- MET 1310 - Principles of Quality Assurance **Credits: 3**
- MET 3260 - Direct Digital Manufacturing **Credits: 3**
- MET 3410 - Geometric Dimensioning and Tolerancing **Credits: 3**

**Total for Certificate: 18 credits**

## *Advanced Composite Materials and Manufacturing Certificate*

The certificate in Advanced Composite Materials and Manufacturing is designed to prepare students with hands-on training and knowledge necessary to meet increasing demand in the design, manufacture and repair of components constructed with advanced composite materials, such as carbon and aramid fibers. The program will provide students with theoretical and practical knowledge in material identification, design, composite safety, manufacturing techniques, inspection, and repairs. The certificate in Advanced Composite Materials and Manufacturing is comprised of a minimum of 15 credit hours.

### Admission and Graduation Requirements

This certificate program is open to all undergraduate, degree-seeking students. To be awarded the program certificate, the student must meet the following requirements:

- complete 15 credits of courses as recommended by the certificate program;
- achieve a GPA of 3.0 or higher in the certificate program courses;
- earn at least a "C" or better in each of the certificate courses; and
- earn a minimum of 60% of required courses at MSU Denver.

### Advising and Contact Information

Individuals interested in this certificate program should contact the Department of Engineering and Engineering Technology at 303-615-0499 to schedule an appointment for an advising session either in person or by phone.

### Prerequisite Courses

- CHE 1800 - General Chemistry I **Credits: 4**
- MTH 1110 - College Algebra for Calculus **Credits: 4**

**Total Prerequisites: 8 credits**

### Required Courses

- MET 1010 - Manufacturing Processes **Credits: 3**
- MET 1310 - Principles of Quality Assurance **Credits: 3**
- MET 2200 - Materials of Engineering **Credits: 3**
- MET 3215 - Composites Manufacturing **Credits: 3**
- MET 4370 - Advanced Composite Structures: Design, Damage, Repair and Testing **Credits: 3**

**Total for Certificate: 15 credits**

## *Architecture Minor*

### Required Courses

- ARCH 2001 - Introduction to Architecture **Credits: 3**
- ARCH 2002 - Architectural Design-Studio 1 **Credits: 3**
- ARCH 2003 - Building Structures **Credits: 3**
- ARCH 3001 - Architectural Interior Design **Credits: 3**
- ARCH 3002 - Architectural Design-Studio 2 **Credits: 3**
- ARCH 3003 - Digital Presentations in Architecture **Credits: 3**

**Total for Architecture Minor: 18 credits**

# Civil Engineering Technology Major, B.S.

[Department of Engineering and Engineering Technology](#)

[College of Aerospace, Computing, Engineering, and Design](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

The Bachelor of Science degree is awarded upon completion of the required program. The program emphasizes theory and practice.

The Civil Engineering Technology curriculum provides a foundation of knowledge in applied engineering by merging the analytic skills of the engineer with the practical skills of the technician. The combination of theory and application prepares graduates for a transition to rewarding employment in a variety of industries.

Civil engineering technology graduates apply engineering principles in performing many of the tasks necessary for the planning and construction of highways, buildings, railroads, bridges, reservoirs, dams, irrigation works, water systems, airports, and other structures. Graduates may participate in estimating costs, preparing specifications for materials, and in surveying, drafting, and design work. In recent years, a major work area for civil and environmental engineering technology has involved environmental problems. This area includes design and construction of water supply facilities and the design of wastewater collection and treatment facilities.

Under the revised rules and regulations of the Colorado State Board for Registration for Professional Engineers and Professional Land Surveyors, students within 30 semester hours of graduation may take the Fundamentals of Engineering Examination.

This program is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, III Market Place, Suite 1050, Baltimore, MD 21202-4012, Phone: 410-347-7700.

If considering graduate school studies in engineering or physical science, students are encouraged to elect the mathematics minor.

If considering graduate school studies in architectural engineering, students are encouraged to elect the architecture minor.

## Student Outcomes

The program must have documented student outcomes that support the program educational objectives. Attainment of these outcomes prepares graduates to enter the professional practice of engineering.

1. an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline;

2. an ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
3. an ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
4. an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results; and
5. an ability to function effectively as a member of a technical team.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- Any course identified in the CET major core, the concentrations, and the optional minors must be passed with a grade of "C" or better.
- All MTH, PHY, CHE courses must be passed with a grade of "C-" or better.
- CET majors must comply with all University General Studies requirements.
- A total minimum of 128 semester hours are required for graduation.
- Students should note that programs differ in the minimum grade required.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1410 - Calculus I
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended :**
    - CHE 1100 - Principles of Chemistry
    - CHE 1150 - Principles of Chemistry Laboratory

- CHE 1800 - General Chemistry I
- CHE 1801 - General Chemistry I Laboratory
- PHY 2311 - General Physics I
- PHY 2321 - General Physics I Laboratory
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** CET 3120 - Engineering Economy
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

### Required Prerequisites: 17 credits

The department recommends that this requirement be met along with the General Studies requirements.

- CET 3120 - Engineering Economy **Credits:** 3
- CHE 1100 - Principles of Chemistry **Credits:** 4  
or
- CHE 1800 - General Chemistry I **Credits:** 4
- CHE 1150 - Principles of Chemistry Laboratory **Credits:** 1  
or
- CHE 1801 - General Chemistry I Laboratory **Credits:** 1
- MTH 1410 - Calculus I **Credits:** 4
- PHY 2311 - General Physics I **Credits:** 4
- PHY 2321 - General Physics I Laboratory **Credits:** 1

### Required Courses: 70 credits

- CET 1040 - Introduction to Engineering **Credits:** 3  
or
- CET 1100 - Introduction to Civil Engineering Technology **Credits:** 3
- CET 1215 - Civil Engineering Graphics **Credits:** 3
- CET 2150 - Mechanics I-Statics **Credits:** 3

- CET 3135 - Mechanics of Materials with Laboratory **Credits:** 4
- CET 3170 - Introduction to Structural Analysis **Credits:** 3
- CET 3185 - Fluid Mechanics I for Civil Engineering Technology **Credits:** 3
- CET 3190 - Fluid Mechanics II for Civil Engineering Technology **Credits:** 3
- CET 3330 - Environmental Technology Processes **Credits:** 3
- CET 4120 - Concrete Design I **Credits:** 3
- CET 4130 - Soil Mechanics **Credits:** 4
- CET 4135 - Foundation Engineering **Credits:** 3
- CET 4140 - Concrete Design II **Credits:** 3
- CET 4150 - Highway Engineering and Surveying **Credits:** 3
- CET 4400 - Steel Design I **Credits:** 3
- CET 4410 - Steel Design II **Credits:** 3
- CET 4450 - Timber Design **Credits:** 3
- CET 4570 - Engineering Law **Credits:** 3
- JMP 2610 - Introduction to Technical Writing **Credits:** 3
- MET 3110 - Thermodynamics **Credits:** 3
- MET 3160 - Mechanics II-Dynamics **Credits:** 3
- PHY 2331 - General Physics II **Credits:** 4
- PHY 2341 - General Physics II Laboratory **Credits:** 1
- Approved Technical Electives **Credits:** 3 (consult with CET faculty advisor)

*Technical elective options are CET 3100, CET 3980, CET 4200, CET 4500 or as approved by CET faculty advisor.*

### Additional Required Courses: 14 credits

- CET 2003 - Building Structures **Credits:** 3
- EET 2340 - Technical Programming **Credits:** 3
- MTH 2410 - Calculus II **Credits:** 4
- MTH 2420 - Calculus III **Credits:** 4

### Senior Experience: 3 credits

- CET 4100 - Capstone: Design Project I **Credits:** 1
- CET 4110 - Capstone: Design Project II **Credits:** 2

### Recommended Optional Minors for CET Majors

#### Architecture Minor

[Architecture Minor](#)

#### Mathematics Minor

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Prerequisites	17 credits
Required Courses	70 credits
Additional Required Courses	14 credits
Senior Experience	3 credits
<b>Total for the Civil Engineering Major, B.S.</b>	<b>Minimum of 125 credits</b>

Required courses for the major may also count for General Studies and Multicultural requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Computer Engineering Major, B.S.

[Department of Engineering and Engineering Technology](#)

[College of Aerospace, Computing, Engineering, and Design](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

The Computer Engineering (CPE) program offers the Bachelor of Science degree major.

The Bachelor of Science in Computer Engineering is a discipline with historical foundations in computer science and electrical engineering. It is concerned with the study of a variety of topics including circuit design, programmable logic, computer design, computer programming, data communication, machine intelligence, robotics, the algorithmic solutions of problems, and the various representations of information including numeric, alphabetic, visual, audio and sensory. In the modern society, the Computer Engineering discipline will also deal with secure computing in Web information, space and industry systems. This discipline deals with effective ways to represent and manipulate information, algorithms to process information, hardware systems and technologies to run software, design methodologies for hardware and software systems, and engineering techniques for ensuring the accuracy and cost effectiveness of these processes.

Students majoring in Computer Engineering must meet the following curriculum and are required to complete all General Studies courses, program pre-requisite courses, elective courses and core courses with a grade required for graduation. Technical elective courses must be approved by the program coordinator or department chair. Students who are considering a major in Computer Engineering are expected to consult with CPE faculty for advising.

Students are encouraged to enroll in an internship/cooperative education program through the University's C2 Hub to gain valuable work experience.

A full-time student may complete the program in four years (eight semesters).

### Student Outcomes

Student outcomes are used to evaluate the students and support the program educational objectives. The students in the Computer Engineering program are expected to attain the outcomes (1) through (7) as defined by ABET Criterion 3, Student Outcomes.

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. an ability to communicate effectively with a range of audiences.
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A minimum of 126 semester hours are required for graduation.
- A grade of "C" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- For every computer engineering course, a minimum grade of "C" is required for all prerequisites before a student can progress
- CPE majors must comply with all University General Studies requirements.
- Students may refer to program flowchart or consult with an advisor for degree planning.
- Selecting any General Studies course approved for ESSJ credit will satisfy the ESSJ requirement of three credits. Selecting any General Studies course approved for Global Diversity credit will satisfy the Global Diversity requirement of three credits.
- Some courses require prerequisites from outside CPE courses. Check with the Department for more information.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1410 - Calculus I is recommended to fulfill this requirement.
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** PHY 2200 - General Physics for Computer and Electrical Engineering, PHY 2341 - General Physics II Laboratory, CHE 1150 - Principles of Chemistry Laboratory are all recommended to fulfill this requirement.
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Program Prerequisites: 30 credits

All students must complete the following courses. The department recommends that this requirement be met along with the General Studies requirements.

- CHE 1100 - Principles of Chemistry **Credits: 4**
- CHE 1150 - Principles of Chemistry Laboratory **Credits: 1**
- CS 2240 - Discrete Structures for Computer Science **Credits: 4**
- MTH 1410 - Calculus I **Credits: 4** (also meets General Studies requirements)
- MTH 2410 - Calculus II **Credits: 4**
- MTH 3130 - Applied Methods in Linear Algebra **Credits: 4**
- MTH 3210 - Probability and Statistics **Credits: 4**
- PHY 2200 - General Physics for Computer and Electrical Engineering **Credits: 4**
- PHY 2341 - General Physics II Laboratory **Credits: 1**

## Required CPE Courses: 60 credits

- CEE 1140 - Circuits I **Credits: 3**
- CEE 1145 - Circuits I Laboratory **Credits: 1**
- CEE 1150 - Circuits II **Credits: 3**
- CEE 1155 - Circuits II Laboratory **Credits: 1**
- CEE 2145 - Solid State Electronics **Credits: 3**
- CEE 2165 - Solid State Electronics Laboratory **Credits: 1**
- CEE 2310 - Digital Systems I **Credits: 3**
- CEE 2350 - Programming for Engineers **Credits: 3**
- CEE 3330 - Digital Systems II **Credits: 3**
- CEE 3620 - A&D Communications **Credits: 3**
- CEE 4370 - Embedded System Design I **Credits: 3**
- CEE 4390 - Embedded System Design II **Credits: 3**
- CPE 1040 - Introduction to Computer Engineering **Credits: 3**
- CPE 3400 - Signals and Systems **Credits: 3**
- CPE 3500 - Semiconductor Device Fundamentals **Credits: 3**
- CPE 4020 - Digital Circuits III - Hardware Description Language **Credits: 3**
- CPE 4320 - Digital Filter Design **Credits: 3**
- CPE 4600 - VLSI Circuits and Systems **Credits: 3**
- CS 1050 - Computer Science 1 **Credits: 4**
- CS 2050 - Computer Science 2 **Credits: 4**

- CS 2400 - Assembly Language Programming and Introduction to High Performance Computing **Credits:** 4

## Upper Division Major Electives: 9 credits

Students may select from the following approved electives:

- CEE 3980 - Internship in Computer and Electrical Engineering **Credits:** 3 (a maximum of 3 credits)
- ELE 3120 - Advanced Analog Electronics **Credits:** 4
- ELE 3410 - Electric Machines **Credits:** 3
- ELE 3420 - Electric Power Distribution **Credits:** 3
- ELE 3430 - Power Electronics **Credits:** 3
- ELE 3630 - Electromagnetic Fields **Credits:** 3
- ELE 4620 - RF and Microwave Design **Credits:** 3
- CS 3013 - Mobile App Development **Credits:** 4
- CS 3120 - Machine Learning **Credits:** 4
- CS 3250 - Software Development Methods and Tools **Credits:** 4

## Senior Experience: 3 credits

- CEE 4700 - Senior Design I **Credits:** 1
- CEE 4800 - Senior Design II **Credits:** 2

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Prerequisites	30 credits
Required Major Courses	60 credits
Upper Division Major Electives	9 credits
Senior Experience	3 credits
<b>Total for the Computer Engineering Major, B.S.</b>	<b>Minimum of 126 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

Up to 9 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.

## Construction Project Management Major, B.A.

[Department of Engineering and Engineering Technology](#)

[College of Aerospace, Computing, Engineering, and Design](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

This is a multi-disciplinary major created to support a workforce initiative for the Construction Industries. A Minor is recommended. The suggested options are Architecture Minor, Business Minor, and Spanish Minor. Students with a completed U.S. Department of Labor (DOL) Office of Apprenticeship (OA) four-year Registered Construction Trades Apprenticeship and journeyman's credentials are awarded a block of 30 lower division semester credits that may be used in their CPM major or up-to 45 lower division semester credits in case of a transfer from Emily Griffith Technical College, based on the agreement between School District No. 1 in the City and County of Denver, State of Colorado, Emily Griffith Technical College, and Metropolitan State University of Denver.

Apprenticeship credits are only applicable for the CPM major and may not be utilized in any other way at MSU Denver.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- A minor is recommended for this program. Recommended minors are:
  - Architecture Minor
  - Business Minor
  - Spanish Minor
- Students are required to take a minor or elective courses to complete their major and fulfill the graduation requirement of 120 credits. Students should consult with an advisor prior to selecting a minor or electives.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1210 - Introduction to Statistics
- Arts and Humanities (6 credits)
  - **Recommended:** PHI 3360 - Business Ethics or PHI 3370 - Computers, Ethics, and Society
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** CET 3120 - Engineering Economy and COMM 3000 - Diversity and Communication in the U.S.
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## CPM Required Courses: 39 credits\*

*\*The industry internship is required for students who do not bring in the apprenticeship credits noted above. The internship must be an approved construction industry placement.*

Students are requested to take 9 credits of internship.

- CPM 1010 - Introduction to Construction Project Management **Credits:** 3
- CPM 1100 - Introduction to Facilities Management **Credits:** 3
- CPM 2010 - Building Technology and Software **Credits:** 3
- CPM 3000 - Workplace Safety **Credits:** 3
- CPM 3020 - Facilities Maintenance and Operations **Credits:** 3

- CET 3980 - Industry Internship **Credits:** 1-15 (9 credits required)
- CET 3100 - Construction Methods **Credits:** 3
- CET 3110 - Construction Estimating **Credits:** 3
- CET 4570 - Engineering Law **Credits:** 3
- CIS 2010 - Foundations of Information Systems **Credits:** 3
- MGT 3000 - Organizational Management **Credits:** 3

## Additional CPM Requirement: 6 credits

All students must complete the following courses:

- ARCH 2003 - Building Structures **Credits:** 3
- CET 3120 - Engineering Economy **Credits:** 3

## Select one of the following two concentrations:

### Computer Information Systems Concentration: 21 credits

- CIS 2110 - Structured Problem Solving in Information Systems **Credits:** 3
- CIS 3050 - Fundamentals of Systems Analysis and Design **Credits:** 3
- CIS 3060 - Database Management Systems **Credits:** 3
- CIS 3145 - Business Application Development **Credits:** 3
- CIS 3490 - Managing Business Information with Enterprise Systems **Credits:** 3
- CIS 4260 - Database Administration **Credits:** 3
- CIS 4410 - Management Information Systems **Credits:** 3

(Elective courses may not include those with the following prefixes: ACC, CIS, FIN, MKT, MGT)

### Management Concentration: 21 credits

- MGT 2210 - Legal Environment of Business I **Credits:** 3
- MGT 3220 - Legal Environment of Business II **Credits:** 3  
or
- MGT 3240 - Employment and Human Resource Law **Credits:** 3
- MGT 3530 - Human Resources Management **Credits:** 3
- MGT 3550 - Operations Management **Credits:** 3
- MGT 3260 - Managing Business Risk **Credits:** 3



- MGT 4050 - Supply Chain Management **Credits:** 3
- MGT 4550 - Project Management **Credits:** 3

(Elective courses may not include those with the following prefixes: ACC, CIS, FIN, MKT, MGT)

## Senior Experience: 3 credits

- CPM 4950 - Professional Internship **Credits:** 1-15 (3 credits required)

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
CPM Required Courses	39 credits
Additional Requirements	6 credits
Concentration	21 credits
Senior Experience	3 credits
Recommended Minor and Unrestricted Electives	15-21 credits
<b>Total for the Construction Project Management Major, B.A.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## *Electrical Engineering Major, B.S.*

[Department of Engineering and Engineering Technology](#)

Available Program  
Format(s): [In-Person](#)

[College of Aerospace, Computing, Engineering, and Design](#)

### About the Program

The Electrical Engineering curriculum emphasizes both theoretical and practical applications, providing students with a solid foundation in electrical engineering fundamentals, as well as hands-on laboratory work. Electrical Engineers are employed in various industries ranging from large aerospace companies to small businesses applying engineering analysis to solve problems and design of electrical and

electronics systems and products. The Electrical Engineering program at MSU Denver is aimed to educate students in the theoretical and applied skillsets necessary to excel in a wide range of industrial positions from the design of power systems to microelectronic devices and communication systems. This degree is also excellent preparation for graduate studies in the field of Electrical Engineering.

### Student Outcomes

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A minimum of 131 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- For every electrical engineering course (CEE & ELE), a minimum grade of "C-" is required for all prerequisites before a student can progress



- EE majors must comply with all University General Studies requirements.
- Students may refer to program flowchart or consult with an advisor for degree planning.
- Selecting any General Studies course approved for ESSJ credit will satisfy the ESSJ requirement of three credits. Selecting any General Studies course approved for Global Diversity credit will satisfy the Global Diversity requirement of three credits.
- Some courses require prerequisites from outside EE courses. Check with the Department for more information.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1410 - Calculus I is recommended to fulfill this requirement.
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** CHE 1150 - Principles of Chemistry Laboratory as well as PHY 2200 - General Physics for Computer and Electrical Engineering and PHY 2341 - General Physics II Laboratory are recommended.
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

## Program Prerequisites: 34 credits

All students must complete the following courses. The department recommends that this requirement be met along with the General Studies requirements.

- CHE 1100 - Principles of Chemistry **Credits:** 4

- CHE 1150 - Principles of Chemistry Laboratory **Credits:** 1
- MTH 1410 - Calculus I **Credits:** 4
- MTH 2410 - Calculus II **Credits:** 4
- MTH 2420 - Calculus III **Credits:** 4
- MTH 3130 - Applied Methods in Linear Algebra **Credits:** 4
- MTH 3210 - Probability and Statistics **Credits:** 4
- MTH 3420 - Differential Equations **Credits:** 4
- PHY 2200 - General Physics for Computer and Electrical Engineering **Credits:** 4 (also meets General Studies requirements)
- PHY 2341 - General Physics II Laboratory **Credits:** 1 (also meets General Studies requirements)

## Electrical Engineering Core: 70 credits

The core courses required to complete the Electrical Engineering degree.

- CEE 1140 - Circuits I **Credits:** 3
- CEE 1145 - Circuits I Laboratory **Credits:** 1
- CEE 1150 - Circuits II **Credits:** 3
- CEE 1155 - Circuits II Laboratory **Credits:** 1
- CEE 2145 - Solid State Electronics **Credits:** 3
- CEE 2165 - Solid State Electronics Laboratory **Credits:** 1
- CEE 2310 - Digital Systems I **Credits:** 3
- CEE 2350 - Programming for Engineers **Credits:** 3
- CEE 3330 - Digital Systems II **Credits:** 3
- CEE 3620 - A&D Communications **Credits:** 3
- CEE 4370 - Embedded System Design I **Credits:** 3
- CEE 4390 - Embedded System Design II **Credits:** 3
- ELE 1001 - Introduction to Electrical Engineering **Credits:** 3
- ELE 3110 - Signals and Systems **Credits:** 4
- ELE 3120 - Advanced Analog Electronics **Credits:** 4
- ELE 3410 - Electric Machines **Credits:** 3
- ELE 3630 - Electromagnetic Fields **Credits:** 3
- ELE 3715 - Control Systems Analysis **Credits:** 4
- ELE 3730 - Process Control Systems **Credits:** 2
- ELE 3740 - Programmable Logic Controllers **Credits:** 2

15 Credits of Technical Electives. Students must choose from the following courses:

- CEE 3980 - Internship in Computer and Electrical Engineering **Credits:** 3
- CPE 3500 - Semiconductor Device Fundamentals **Credits:** 3
- CPE 4600 - VLSI Circuits and Systems **Credits:** 3
- CPE 4710 - Digital Control System Design **Credits:** 4
- ELE 3420 - Electric Power Distribution **Credits:** 3
- ELE 3430 - Power Electronics **Credits:** 3
- ELE 4320 - Digital Filters **Credits:** 3
- ELE 4620 - RF and Microwave Design **Credits:** 3

## Senior Experience: 3 Credits

- CEE 4700 - Senior Design I **Credits: 1**
- CEE 4800 - Senior Design II **Credits: 2**

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Prerequisite Courses	34 credits
Required Core	70 credits
Senior Experience	3 credits
<b>Total for the Electrical Engineering Major, B.S.</b>	<b>Minimum of 131 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## *Electrical Engineering Technology Certificate*

### Prerequisites:

- MTH 1400 - Precalculus Mathematics **Credits: 4**  
(The sequence MTH 1110 and MTH 1120; or MTH 1410 may be substituted.)
- PHY 2311 - General Physics I **Credits: 4**  
(Algebra-based PHY 2010 may be substituted.)
- PHY 2321 - General Physics I Laboratory **Credits: 1**  
(Algebra-based PHY 2030 may be substituted.)
- PHY 2331 - General Physics II **Credits: 4**  
(Algebra-based PHY 2020 may be substituted.)
- PHY 2341 - General Physics II Laboratory **Credits: 1**  
(Algebra-based PHY 2040 may be substituted.)

### Required Courses:

- EET 2000 - Electric Circuits and Machines **Credits: 3**  
(The sequence EET 1140 and EET 1150 may be substituted.)

- EET 2310 - Digital Circuits I **Credits: 3**
- EET 2350 - Advanced Technical Programming **Credits: 3**
- EET 2145 - Electronics **Credits: 3 \***  
or
- EET 3010 - Industrial Electronics **Credits: 4**
- EET 3330 - Digital Circuits II **Credits: 3**
- EET 4370 - Microcontrollers **Credits: 3**

Total: 19

### Note:

\*EET certificate students planning to continue on to the Electrical Engineering Technology Bachelor of Science degree are required to take EET 1140, EET 1150, and EET 2145.

## *Electrical Engineering Technology Minor*

A grade of "C" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

### Prerequisites:

- MTH 1400 - Precalculus Mathematics **Credits: 4**  
(The sequence MTH 1110 and MTH 1120; or MTH 1410 may be substituted.)
- PHY 2311 - General Physics I **Credits: 4**  
(Algebra-based PHY 2010 may be substituted.)
- PHY 2321 - General Physics I Laboratory **Credits: 1**  
(Algebra-based PHY 2030 may be substituted.)
- PHY 2331 - General Physics II **Credits: 4**  
(Algebra-based PHY 2020 may be substituted.)
- PHY 2341 - General Physics II Laboratory **Credits: 1**  
(Algebra-based PHY 2040 may be substituted.)

### Required Courses:

- EET 2000 - Electric Circuits and Machines **Credits: 3**  
(The sequence EET 1140 and EET 1150 may be substituted.)
- EET 2310 - Digital Circuits I **Credits: 3**

- EET 2350 - Advanced Technical Programming **Credits:** 3
- EET 3010 - Industrial Electronics **Credits:** 4 (preferred for minor)  
or
- EET 2145 - Electronics **Credits:** 3 \*
- EET 3330 - Digital Circuits II **Credits:** 3
- EET 4370 - Microcontrollers **Credits:** 3

**Total: 19**

## Note:

\*EET minor students planning to continue on to the Electrical Engineering Technology major for the Bachelor of Science degree are required to take EET 1140, EET 1150, and EET 2145.

## Engineering Manufacturing Certificate

The proposed certificate provides fundamental knowledge and practical skills for subtractive manufacturing and the quality assurance concept for general manufacturing industry. With the certificate, a student should be able to start his or her career in mechanical or industrial engineering technician positions with a chance to move into quality assurance expert jobs or become lean manufacturing specialists. Also, since all of required courses can be applied to the manufacturing concentration of mechanical engineering technology (MET), a student can come back to MSU Denver to pursue a BS degree in MET in the future.

### Non-Degree Seeking Students

Non-degree seeking students need to be aware of their application process: <https://msudenver.edu/admissions/student-types/non-degree/>

Financial aid is not available for non-degree seeking students.

### Advising

Students can contact the College of Aerospace, Computing, Engineering, and Design (CACED) for advising.

### Important Notice

Completion of this certificate does not guarantee admission into any Engineering and Engineering Technology undergraduate program.

### Academic Policies:

Academic policies and the Student Code of Conduct will be employed to all MSU Denver students, regardless of level. Access the Student Code of Conduct.

- **Total: 25 credits**
- **Students have 19 required credit hours and choose 6 credit hours of electives**
- **In addition, there are 6 credit hours of ancillary pre-requisites that are not counted in this certificate - check all required and elective courses for these ancillary pre-requisites**
- *Some courses might require additional prerequisite(s). Please refer to the University Catalog for additional information*

## Required Courses:

- AMS 1010 - Survey of Advanced Manufacturing and Workplace Preparation **Credits:** 3
- MET 1010 - Manufacturing Processes **Credits:** 3  
Or
- IND 2830 - Manufacturing Materials and Processes **Credits:** 3
- MET 1310 - Principles of Quality Assurance **Credits:** 3
- MET 3000 - Manufacturing Analysis **Credits:** 4
- MET 3630 - Lean Manufacturing Systems Engineering **Credits:** 3
- MET 3980 - Internship in Mechanical Engineering Technology **Credits:** 1-15  
Or
- AMS 4950 - Professional Internship **Credits:** 1-15

Students must complete all 19 required credit hours and 6 credit hours of electives

## Elective Courses:

- CET 1215 - Civil Engineering Graphics **Credits:** 3
- ELE 1001 - Introduction to Electrical Engineering **Credits:** 3
- IND 1450 - Technical Drawing and CAD **Credits:** 3
- IND 3660 - Computer Aided Modeling **Credits:** 3
- JMP 2610 - Introduction to Technical Writing **Credits:** 3
- MET 1200 - Technical Drawing I **Credits:** 3
- MET 1210 - 3D Modeling **Credits:** 3
- MET 3300 - Statistical Process Control **Credits:** 3

Students must complete 6 credit hours of electives

**Total credit hours for certificate = 25**

## Ancillary Pre-Requisite Courses

These credit hours are not counted in the credit hour total.

- ENG 1010 - Composing Arguments **Credits:** 3 or higher level course
- MTH 1110 - College Algebra for Calculus **Credits:** 4 or higher level course

**Total ancillary pre-requisite hours = 7**

## *Environmental Engineering Major, B.S.*

[Department of Engineering and Engineering Technology](#)

[College of Aerospace, Computing, Engineering, and Design](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

The Environmental Engineering (EVE) program prepares students to plan and design sustainable environmental systems maximizing the quality of life by minimizing the impact of human activity on the environment. Environmental Engineering graduates will receive a crosscutting collaborative education between two distinct departments. By offering a multidisciplinary approach between engineering and earth and atmospheric sciences, students will receive more customized degree tailored to their interests and flexible to an ever-changing job market. The educational approach will incorporate theory and hands-on learning to reinforce theoretical concepts. The engineering core component will provide solid training on the majority subjects required by Fundamental Engineering (FE) exam.

### Student Outcomes

Student outcomes are used to evaluate the students and support the program educational objectives. The students in the Environmental Engineering program are expected to attain the outcomes (1) through (7) as defined by ABET Criterion 3, Student Outcomes.

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. an ability to communicate effectively with a range of audiences.

4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A minimum of 128 semester hours are required for graduation.
- A grade of "C" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- A minimum grade of "C" is required for all prerequisites before a student can progress. A full-time student may complete the program in four years (total of eight semesters)
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1410 - Calculus I
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:**
  - CHE 1800 - General Chemistry I

- CHE 1801 - General Chemistry I Laboratory
- PHY 2311 - General Physics I
- PHY 2321 - General Physics I Laboratory
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

### Required Prerequisite Courses: 14 credits

All students must complete the following courses. The department recommends that this requirement be met along with the General Studies requirements.

- CHE 1800 - General Chemistry I **Credits: 4**
- CHE 1801 - General Chemistry I Laboratory **Credits: 1**
- MTH 1410 - Calculus I **Credits: 4**
- PHY 2311 - General Physics I **Credits: 4**
- PHY 2321 - General Physics I Laboratory **Credits: 1**

### Required Core Courses: 84 credits

- BIO 1080 - General Biology I **Credits: 3**
- BIO 1090 - General Biology Laboratory I **Credits: 1**
- CHE 1810 - General Chemistry II **Credits: 4**
- CHE 1811 - General Chemistry II Laboratory **Credits: 1**
- CEE 2350 - Programming for Engineers **Credits: 3**
- EVE 1040 - Introduction to Environmental Engineering **Credits: 3**
- EVE 1215 - Engineering Graphics: Solid Modeling **Credits: 3**
- EVE 2000 - Analytical Methods of Water and Wastewater **Credits: 4**
- EVE 2150 - Mechanics of Static Systems **Credits: 3**
- EVE 3000 - Concepts in Environmental Engineering **Credits: 3**
- EVE 3110 - Thermodynamics **Credits: 3**
- EVE 3135 - Strength of Materials **Credits: 3**

- EVE 3185 - Fundamental Fluid Mechanics with Laboratory **Credits: 4**
- EVE 3400 - Water and Wastewater Engineering **Credits: 3**
- EVE 3500 - Fate and Transport of Contaminants in the Environment **Credits: 3**
- EVE 3730 - Environmental Risk Assessment **Credits: 3**
- EVE 4000 - Environmental Nanotechnology **Credits: 3**
- EVE 4160 - Geotechnical Engineering with Laboratory **Credits: 4**
- EVE 4300 - Environmental Assessment of Plastic Particles **Credits: 3**
- EVE 4400 - Water Resources Engineering **Credits: 3**
- EVE 4500 - Solid and Hazardous Waste Engineering **Credits: 3**
- MTH 2410 - Calculus II **Credits: 4**
- MTH 2420 - Calculus III **Credits: 4**
- MTH 3210 - Probability and Statistics **Credits: 4**
- MTH 3420 - Differential Equations **Credits: 4**
- PHY 2331 - General Physics II **Credits: 4**
- PHY 2341 - General Physics II Laboratory **Credits: 1**

### Major Elective Courses: 3 credits

Students are required to take at least 3 credit hours of approved electives courses. Please see your faculty advisor for an approved list of electives.

### Senior Experience: 3 credits

- EVE 4611 - Senior Design Project I **Credits: 1**
- EVE 4612 - Senior Design Project II **Credits: 2**

### Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Prerequisite Courses	14 credits
Required Core Courses	84 credits
Major Elective Courses	3 credits
Senior Experience	3 credits
<b>Total for the Environmental Engineering Major, B.S.</b>	<b>Minimum of 128 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree.**

Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

Up to 9 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.

## *Mechanical Engineering Technology Major, B.S.*

[Department of Engineering and  
Engineering Technology](#)

[College of Aerospace, Computing,  
Engineering, and Design](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

The Mechanical Engineering Technology curriculum emphasizes both theoretical and practical applications, providing MSU Denver students with a solid foundation in mechanical engineering fundamentals, as well as hands-on laboratory work. This applied engineering emphasis allows students to experience the integration of engineering theory and practice. The MET program offers concentrations in mechanical and manufacturing engineering technology courses that keep students current with industry standards. Mechanical Engineering Technologists are employed in various industries ranging from large aerospace companies to small manufacturing and custom-design businesses applying engineering analysis to solve problems and design to enhance existing conditions. The Mechanical Engineering Technology program at MSU Denver is aimed to educate students in the theoretical and applied skillsets necessary to work in a wide range of technology industry positions.

Under the revised rules and regulations of the Colorado State Board for Professional Engineers and Professional Land Surveyors, MET students at MSU Denver pursuing their Professional Engineering license may take the Fundamentals of Engineering Examination within 30 semester hours of graduation.

This program is accredited by the Engineering Technology Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202, and Telephone: (410) 347-7700 (abet.org). ABET, Inc. was formally known as Accreditation Board for Engineering and Technology, Inc.

### Student Outcomes

1. an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline;
2. an ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
3. an ability to apply written, oral, and graphical communication in well-defined technical and non-technical

environments; and an ability to identify and use appropriate technical literature;

4. an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results; and
5. an ability to function effectively as a member of a technical team.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 128-129 semester hours are required for graduation.
- A grade of "C" or better is required for each course in this program to count toward the bachelor's degree.
- Any course used to satisfy a prerequisite for an MET course must be passed with a grade of C or better.
- All MTH, PHY, CHE courses must be passed with a grade of "C-" or better
- Students must achieve a cumulative GPA of 2.0 for all MET core and concentration courses.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1400 - Precalculus Mathematics (the sequence of MTH 1110 - College Algebra for Calculus and MTH 1120 - College Trigonometry may be substituted for MTH 1400)
- Arts and Humanities (6 credits)
  - **Recommended:** PHI 1030 - Thinking about Ethics: Morality and the Good Life or PHI 3360 - Business Ethics
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:**
    - PHY 2311 - General Physics I

- PHY 2321 - General Physics I Laboratory
- PHY 2331 - General Physics II
- PHY 2341 - General Physics II Laboratory
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2020 - Principles of Microeconomics and IND 2810 - Technology and Design: Global Perspectives
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Ancillary Courses: 14 credits

All students must complete the following courses. These courses can also count towards the General Studies Requirements.

- MTH 1400 - Precalculus Mathematics **Credits:** 4 or (the sequence of MTH 1110 - College Algebra for Calculus and MTH 1120 - College Trigonometry may be substituted for MTH 1400)
- PHY 2311 - General Physics I **Credits:** 4
- PHY 2321 - General Physics I Laboratory **Credits:** 1
- PHY 2331 - General Physics II **Credits:** 4
- PHY 2341 - General Physics II Laboratory **Credits:** 1

## Required MET Core Courses: 66 credits

- CET 2150 - Mechanics I-Statics **Credits:** 3
- CET 3135 - Mechanics of Materials with Laboratory **Credits:** 4
- CHE 1100 - Principles of Chemistry **Credits:** 4
- CHE 1150 - Principles of Chemistry Laboratory **Credits:** 1
- EET 2000 - Electric Circuits and Machines **Credits:** 3
- EET 2340 - Technical Programming **Credits:** 3
- EET 3010 - Industrial Electronics **Credits:** 4
- or

- ELE 3730 - Process Control Systems **Credits:** 2 and
- ELE 3740 - Programmable Logic Controllers **Credits:** 2
- JMP 2610 - Introduction to Technical Writing **Credits:** 3
- MET 1000 - Introduction to Mechanical Engineering Technology **Credits:** 3 or
- MET 1040 - Introduction to Engineering **Credits:** 3
- MET 1010 - Manufacturing Processes **Credits:** 3
- MET 1200 - Technical Drawing I **Credits:** 3
- MET 1210 - 3D Modeling **Credits:** 3
- MET 1310 - Principles of Quality Assurance **Credits:** 3
- MET 2200 - Materials of Engineering **Credits:** 3
- MET 3110 - Thermodynamics **Credits:** 3
- MET 3160 - Mechanics II-Dynamics **Credits:** 3
- MET 3185 - Fluid Mechanics **Credits:** 3
- MET 3410 - Geometric Dimensioning and Tolerancing **Credits:** 3
- MET 4000 - Project Engineering **Credits:** 3
- MTH 1410 - Calculus I **Credits:** 4
- MTH 2410 - Calculus II **Credits:** 4

Select one of the following two concentrations:

### Advanced Manufacturing Concentration: 22 credits

- MET 2010 - CNC Machining and Inspection **Credits:** 3
  - MET 3000 - Manufacturing Analysis **Credits:** 4
  - MET 3250 - Tool Design and Production Tooling **Credits:** 3
  - MET 3330 - Robotics for Manufacturing **Credits:** 3
  - MET 4080 - Computer Aided Manufacturing **Credits:** 3
  - MET 3XXX Upper Division Elective **Credits:** 6
- Students must complete 6 hours of upper division electives with the faculty advisor's approval. That includes upper division courses from the mechanical concentration or the certificate programs in the MET program.

### Mechanical Concentration: 21 credits

- MET 3070 - Machine Design **Credits:** 3
- MET 3125 - Heat Transfer with Laboratory **Credits:** 3
- MET 3320 - Instrumentation Laboratory **Credits:** 3
- MET 4070 - Computer Aided Design **Credits:** 3
- MET 4280 - Advanced Energy Technology **Credits:** 3
- MET 3XXX Upper Division Electives **Credits:** 6

Students must complete 6 hours of upper division electives with the faculty advisor's approval. That includes upper division courses from the advanced manufacturing concentration or the certificate programs in the MET program.

## Senior Experience: 3 credits

- MET 4100 - Senior Project I **Credits: 1**
- MET 4110 - Senior Project II **Credits: 2**

## Summary of Requirements

### Mechanical Engineering Major with Manufacturing Concentration

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Ancillary Courses	14 credits
Required MET Core Courses	66 credits
Manufacturing Concentration	22 credits
Senior Experience	3 credits
<b>Total for the Mechanical Engineering Major, B.S., Manufacturing Concentration</b>	<b>Minimum of 129 credits</b>

### Mechanical Engineering Major with Mechanical Concentration

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Ancillary Courses	14 credits
Required MET Core Courses	66 credits
Mechanical Concentration	21 credits
Senior Experience	3 credits
<b>Total for the Mechanical Engineering Major, B.S., Mechanical Concentration</b>	<b>Minimum of 128 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

**Up to 9 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.**

## Mathematics Minor\*\* (Optional) recommended for MET Students

Required Technical Studies:

- MTH 1410 - Calculus I **Credits: 4**
- MTH 2410 - Calculus II **Credits: 4**
- MTH 2420 - Calculus III **Credits: 4**
- MTH 3130 - Applied Methods in Linear Algebra **Credits: 4**
- MTH 3210 - Probability and Statistics **Credits: 4**
- MTH 3420 - Differential Equations **Credits: 4**
- CS 1050 - Computer Science 1 **Credits: 4 \***  
or
- CSS 1247 - Introduction to Programming: Visual Basic **Credits: 4**

**Total for Minor: 28 credits**

*\* May be used to satisfy computer programming requirement with approval of MET advisor.*

*\*\* The minor may not be used to replace the concentration. Some of the classes are required for the MET major.*

## Mechanical Engineering Technology Minor

A grade of C or better must be earned in each course required for the minor. Students should note that programs differ in the minimum grade required.

### Required Courses:

- MET 1000 - Introduction to Mechanical Engineering Technology **Credits: 3**
- MET 1010 - Manufacturing Processes **Credits: 3**
- MET 1310 - Principles of Quality Assurance **Credits: 3**
- MET 2200 - Materials of Engineering **Credits: 3**  
Upper-division MET Electives

**Total: 18**

## Department of Industrial Design

Location: Aerospace and Engineering Sciences Building, Suite 200A

Phone: 303-615-0599



E-Mail: [ind@msudenver.edu](mailto:ind@msudenver.edu)

Website: [Industrial Design Department Website](#)

## *Industrial Design Major, B.S.*

[Department of Industrial Design](#)

[College of Aerospace, Computing,  
Engineering, and Design](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

Industrial Designers create and develop product ideas and then communicate those ideas to clients and production entities through technical drawings, concept and final renderings, mock-ups, models, and prototypes.

The curriculum at MSU Denver prepares students for professional design practice by teaching graphic and verbal presentation skills, as well as hands on technical skills, to enhance their innate creativity. Collaborative projects with other disciplines and industry partners are a vital part of the curriculum and typically occur in the design studio classes. Students also complete a professional internship as their senior experience to further enhance the real world learning the department strives for. Students are required to pass through a portfolio review process at the end of the sophomore year to allow registration for upper-division studio courses, thus maintaining the quality of the program's graduates. The details of this process are outlined on the department website ([msudenver.edu/industrial-design](http://msudenver.edu/industrial-design)) and available in hard copy at the department office, located in the Aerospace and Engineering Sciences building, suite 200. Graduates with an industrial design major earn a bachelor of science degree. A minor in industrial design is also available.

The program is accredited by the National Association of Schools of Art and Design (NASAD) and works with the Industrial Designers Society of America (IDSA) to enhance the profession. The department has an active student IDSA chapter and faculty involved in the national leadership of IDSA. Through this solid foundation of an accredited curriculum, as well as real world learning opportunities, the program's graduates are well equipped to meet the challenges of the competitive, industrial design industry.

### Student Outcomes

To the standard of an entry level professional designer, graduating students should be able to:

- Perform design research that contributes to the definition and solution of design problems.
- Formulate multiple creative design solutions for a given problem, assess those concepts and select the most appropriate final design.

- Demonstrate proficient skills in sketching and rendering with appropriate media, technical drawing, 3-D physical and computer modeling, and prototyping.
- Develop final design solutions to optimize appropriate use of materials, manufacturing processes, user safety and marketability.
- Prepare presentations that demonstrate quality visual organization, verbal skills, writing proficiency and professionalism.
- Produce designs that address human-centered design and demonstrate an understanding of diverse cultural and global contexts.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "D-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** COMM 1010 - Presentational Speaking
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
  - **Recommended:** ARTH 1500 - Art and Visual Literacy, which is required for the major by IND's accreditation body
  - **Recommended:** ARTH 1700 - Art of the Medieval and Early Modern World, which is required for the major by IND's accreditation body
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** PHY 1000 - Physics of Nature
- Social and Behavioral Sciences (6 credits)

- **Recommended:** PSY 1001 - Introductory Psychology
- Global Diversity (0 or 3 credits\*)

*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Core Courses: 76 credits

- ART 1101 - Art Studio: 2D **Credits:** 3
- ART 1141 - Art Studio: Drawing **Credits:** 3
- ART 1501 - Art Studio: 3D **Credits:** 3
- ARTH 1500 - Art and Visual Literacy **Credits:** 3
- ARTH 1700 - Art of the Medieval and Early Modern World **Credits:** 3
- IND 1000 - Introduction to Industrial Design **Credits:** 1
- IND 1100 - Materials I: Materials and Fabrication **Credits:** 3
- IND 1300 - Materials II: Design and Application **Credits:** 3
- IND 1450 - Technical Drawing and CAD **Credits:** 3
- IND 1470 - Design Drawing Techniques **Credits:** 3
- IND 2100 - Digital Composition **Credits:** 3
- IND 2450 - Beginning Industrial Design Studio **Credits:** 4
- IND 2830 - Manufacturing Materials and Processes **Credits:** 3
- IND 3050 - Advanced Sketching **Credits:** 3
- IND 3400 - Product Usability and Ergonomics **Credits:** 3
- IND 3450 - Intermediate Industrial Design Studio **Credits:** 4
- IND 3480 - Industrial Design Model Making **Credits:** 3
- IND 3600 - Digital Visualization Techniques in ID **Credits:** 3
- IND 3660 - Computer Aided Modeling **Credits:** 3
- IND 3800 - Design for Marketability and Manufacturing **Credits:** 4
- IND 3950 - History of Industrial Design **Credits:** 3
- IND 4450 - Advanced Industrial Design Studio **Credits:** 4
- IND 4460 - Professional Industrial Design Studio **Credits:** 4

- IND 4540 - Concept and Portfolio Development **Credits:** 4

## Senior Experience: 3 credits

- IND 4960 - Professional Internship **Credits:** 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Major Requirements	76 credits
Senior Experience	3 credits
Unrestricted Electives	5-14 credits
<b>Total for the Industrial Design Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Industrial Design Minor

An Industrial Design Minor is offered by the Department of Industrial Design. There is an increasing trend in business to value individuals who have educational backgrounds in both business and a technical field such as industrial design. Therefore, this minor would be an excellent option for majors in the College of Business or Engineering. The minor may also be useful for students in areas that are linked to design, such as art or technical communication. A minimum grade of C- is required for this minor.

## Required Courses

- IND 1000 - Introduction to Industrial Design **Credits:** 1
- IND 1100 - Materials I: Materials and Fabrication **Credits:** 3
- IND 1300 - Materials II: Design and Application **Credits:** 3
- IND 1450 - Technical Drawing and CAD **Credits:** 3
- IND 1470 - Design Drawing Techniques **Credits:** 3
- IND 2830 - Manufacturing Materials and Processes **Credits:** 3
- IND 3000 - Design Thinking **Credits:** 3
- IND 3950 - History of Industrial Design **Credits:** 3

**Total: 22 credits**

# Department of Mathematics and Statistics

Location: Science Building, Suite 1022

Phone: 303-615-0299

E-Mail: [mathdepartment@msudenver.edu](mailto:mathdepartment@msudenver.edu)

Website: [Mathematics and Statistics Department Website](#)

All students who are considering a major or minor in mathematics or statistical science are expected to consult with faculty for advising. All test score prerequisites for 1000 level MTH courses must be five or fewer years old.

## Mathematics Major, B.S.

[Department of Mathematics and Statistics](#)

[College of Aerospace, Computing, Engineering, and Design](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

The Department of Mathematics and Statistics offers coursework leading to the bachelor of science degree.

A degree in mathematics is useful in a variety of professional fields including, among many others, business, economics, computer science, government, education, technology, and science. Students are invited to consult with the department concerning career options.

### Student Outcomes

- Program Outcome 1: Graduates know the important mathematical facts related to their chosen concentration.
- Program Outcome 2: Graduates are able to think like mathematicians.
- Program Outcome 3: Graduates are able to write a good proof.
- Program Outcome 4: Graduates are able to explain mathematical ideas clearly.

### General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)

- [Senior Experience Graduation Requirements](#)

### Program Requirements

- A total of 120 semester hours are required for graduation.
- All majors in mathematics are required to complete the following basic core of courses (with a required minimum grade of "C-" in each of these courses).
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

### General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

### Ethnic Studies & Social Justice

#### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

### Basic Mathematics Core: 15 credits

- MTH 1410 - Calculus I **Credits:** 4
- MTH 2410 - Calculus II **Credits:** 4
- MTH 2420 - Calculus III **Credits:** 4
- MTH 3100 - Introduction to Mathematical Proofs **Credits:** 3

## Note:

Each major is required to take a Senior Experience course. The following mathematics courses have been approved as Senior Experience courses: MTH 4210, MTH 4410, MTH 4480, and MTL 4630. The course MTH 3240 does not count toward a mathematics major or a mathematics minor.

The student may choose to complete a mathematics major in one of the following concentrations:

- General
- Mathematics Education
- Probability and Statistics
- Theoretical Mathematics
- Applied Mathematics

## General Concentration: 41 credits

The general concentration in mathematics is designed to meet the needs of students with diverse mathematical interests or background, since it allows considerable flexibility among upper division course choices. A grade of "C-" or better is required in each course included in the major.

## Required Courses: 15 credits

- Basic Core: 15 credits

## One of the following three courses: 4 credits

- MTH 2540 - Scientific Computing with Python **Credits: 4**
- MTH 2520 - R Programming **Credits: 4**
- CS 1050 - Computer Science 1 **Credits: 4**

## A minimum of 22 credit hours chosen from:

MTH 2140\*, or any upper-division mathematics courses with the exception of MTH 3240. The 22 credit hours must include at least 20 upper-division hours, at least seven hours of 4000-level courses in mathematics, including at least one Senior Experience course in mathematics, and one of the following sequences:

- MTH 3110 - Abstract Algebra I **Credits: 4**  
and
- MTH 3140 - Linear Algebra **Credits: 4**  
or
- MTH 4110 - Abstract Algebra II **Credits: 3**  
  
or
- MTH 3210 - Probability and Statistics **Credits: 4**  
and
- MTH 3220 - Statistical Methods **Credits: 4**

or

- MTH 3420 - Differential Equations **Credits: 4**  
and
- MTH 4440 - Partial Differential Equations **Credits: 4**

or

- MTH 4210 - Probability Theory **Credits: 4**  
and
- MTH 4230 - Regression and Computational Statistics **Credits: 4**

or

- MTH 4410 - Real Analysis I **Credits: 4**  
and
- MTH 4420 - Real Analysis II **Credits: 3**

or

- MTH 4480 - Numerical Analysis I **Credits: 4**  
and
- MTH 4490 - Numerical Analysis II **Credits: 4**

*\*Only one of the three courses MTH 2140, MTH 3130, and MTH 3140 can be counted.*

## Senior Experience: 4 credits

Senior experience credit counted elsewhere in concentration.

- MTH 4210 - Probability Theory **Credits: 4**  
or
- MTH 4410 - Real Analysis I **Credits: 4**  
or
- MTH 4480 - Numerical Analysis I **Credits: 4**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Basic Core	15 credits
General Concentration Courses	26 credits
Senior Experience	counted elsewhere in concentration
Unrestricted Electives	43-49 credits
<b>Total for the Mathematics Major, B.S., General Concentration</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be**

greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Applied Mathematics Concentration: 43 credits

The concentration in applied mathematics is designed to meet the needs of the scientific, technical, and computer-based economy and to prepare the student for graduate study. The department has made every effort to have state-of-the-art technologies and practices available for student use. A grade of "C-" or better is required in each course included in the major.

### Required Courses: 15 credits

- Basic Core: 15

### One of the following three courses: 4 credits

- MTH 2540 - Scientific Computing with Python **Credits: 4**
- MTH 2520 - R Programming **Credits: 4**
- CS 1050 - Computer Science 1 **Credits: 4**

### All four of the following courses: 16-20 credits

- MTH 3140 - Linear Algebra **Credits: 4 \***
- MTH 3210 - Probability and Statistics **Credits: 4**
- MTH 3420 - Differential Equations **Credits: 4**
- MTH 4480 - Numerical Analysis I **Credits: 4**

### Two of the following courses: 8 credits

- MTH 3400 - Chaos and Nonlinear Dynamics **Credits: 4**
- MTH 3430 - Mathematical Modeling **Credits: 4**
- MTH 3450 - Complex Variables **Credits: 4**
- MTH 4410 - Real Analysis I **Credits: 4 \*\***
- MTH 4440 - Partial Differential Equations **Credits: 4**
- MTH 4490 - Numerical Analysis II **Credits: 4**

At least 26 of the total 43 hours must be at the level of 3000 or above and at least 7 of the total 43 hours must be at the level of 4000.

### Notes:

*\*MTH 3130 and one of the following (MTH 3110 or MTH 3650 or MTH 4110 or MTH 4150 or MTH 4410 or MTH 4660) may substitute for MTH 3140.*

*\*\*Students who are considering graduate school in mathematics are strongly encouraged to take MTH 4410.*

## Senior Experience: 4 credits

Senior experience credit counted elsewhere in concentration.

- MTH 4480 - Numerical Analysis I **Credits: 4**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Basic Core	15 credits
Applied Mathematics Concentration Courses	28-32 credits
Senior Experience	counted elsewhere in concentration
Unrestricted Electives	37-47 credits
<b>Total for the Mathematics Major, B.S., Applied Mathematics Concentration</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Probability and Statistics Concentration: 43 credits

The concentration in probability and statistics stresses the application of the principles and methods of statistics and probability to the biological, physical, social sciences, and engineering. This concentration also prepares the students for graduate study in the area of statistics. A grade of "C-" or better is required in all courses included in the major.

### Required Courses: 15 credits

Basic Core: 15

### All of the following courses: 16 credits

- MTH 3210 - Probability and Statistics **Credits: 4**
- MTH 3220 - Statistical Methods **Credits: 4**
- MTH 4210 - Probability Theory **Credits: 4**
- MTH 4230 - Regression and Computational Statistics **Credits: 4**

One of the following two courses: 4 credits

- MTH 3130 - Applied Methods in Linear Algebra **Credits:** 4
- MTH 3140 - Linear Algebra **Credits:** 4

One of the following four courses: 4 credits

- MTH 2520 - R Programming **Credits:** 4
- MTH 2540 - Scientific Computing with Python **Credits:** 4
- MTH 3510 - SAS Programming **Credits:** 4
- CS 1050 - Computer Science 1 **Credits:** 4

One of the following five courses: 4 credits

- MTH 3230 - Stochastic Processes **Credits:** 4
- MTH 3270 - Data Science **Credits:** 4
- MTH 3430 - Mathematical Modeling **Credits:** 4
- MTH 4250 - Statistical Theory **Credits:** 4
- MTH 4410 - Real Analysis I **Credits:** 4

Senior Experience: 4 credits

Senior experience credit counted elsewhere in concentration.

- MTH 4210 - Probability Theory **Credits:** 4

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Basic Core	15 credits
Probability and Statistics Concentration Courses	28 credits
Senior Experience	counted elsewhere in concentration
Unrestricted Electives	41-47 credits
<b>Total for the Mathematics Major, B.S., Probability and Statistics Concentration</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Theoretical Mathematics Concentration: 40-41 credits

The concentration in theoretical mathematics prepares the student for further specialized study at the graduate level as well as being adaptable to positions in business, industry, and government. A grade of "C-" or better is required in all courses included in the major.

Required Courses: 15 credits

- Basic Core: 15

One of the following four courses: 4 credits

- MTH 2540 - Scientific Computing with Python **Credits:** 4
- MTH 2520 - R Programming **Credits:** 4
- MTH 3510 - SAS Programming **Credits:** 4
- CS 1050 - Computer Science 1 **Credits:** 4

All four of the following courses: 15-19 credits

- MTH 3110 - Abstract Algebra I **Credits:** 4
- MTH 3140 - Linear Algebra **Credits:** 4 \*
- MTH 4410 - Real Analysis I **Credits:** 4
- MTH 4420 - Real Analysis II **Credits:** 3
- Or
- MTH 4110 - Abstract Algebra II **Credits:** 3

Two of the following courses: 6-7 credits

- MTH 3450 - Complex Variables **Credits:** 4
- MTH 4110 - Abstract Algebra II **Credits:** 3
- MTH 4150 - Elementary Number Theory **Credits:** 3
- MTH 4660 - Introduction to Topology **Credits:** 3

Senior Experience: 4 credits

Senior experience credit counted elsewhere in concentration.

- MTH 4410 - Real Analysis I **Credits:** 4

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Basic Core	15 credits
Theoretical Concentration Requirements	25-26 credits

Senior Experience	counted elsewhere in concentration
Unrestricted Electives	39-50 credits
<b>Total for the Mathematics Major, B.S., Theoretical Mathematics Concentration</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

#### Note:

*\*MTH 3130 and one of the following (MTH 3640 or MTH 3650 or MTH 4150) may substitute for MTH 3140.*

## Mathematics Education Concentration:

The Department of Mathematics and Statistics offers a major in Mathematics with a concentration in Mathematics Education through two degree tracks:

### 1) Licensure in Secondary or Middle Mathematics

**Education:** This track fulfills the requirements for secondary or middle mathematics education Colorado state licensure. Degree completion requires the courses listed for Mathematics Core, Mathematics Education Concentration, and Educational Foundations and Methods.

**2) Non-Licensure:** For degree completion this track requires the Mathematics Core, Mathematics Education Concentration, and additional coursework to meet the 120 hour graduation requirement.

Candidates are required to meet with one or more of the faculty advisors in the mathematics education concentration area as well as a secondary education advisor as they plan their academic program. The Mathematics Major with Mathematics Education Concentration requires completion of the courses listed below and satisfaction of the minimum grade requirements. Any of the courses required for the major that were taken more than ten years ago will need to be repeated unless currency of knowledge in the concepts of the course can be demonstrated.

#### Student Outcomes

The goals of this program are to provide degree-seeking candidates with:

1. broad-based and coherent preparation in the various disciplines that constitute the mathematical sciences; and
  2. the pedagogical knowledge of mathematics needed to begin a career as a middle or high school mathematics teacher.
- Track 1 will also provide candidates the opportunity to

complete state requirements for obtaining Colorado licensure.

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Track 2 of this program does not meet the 120 hours of coursework required for graduation so additional coursework will be required. See your mathematics education advisor for recommended coursework.
- This program with licensure is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion. The recommended General Studies courses listed below can also satisfy additional degree program requirements beyond General Studies.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** EDS 3130 - Foundations of Educational Psychology and Philosophy; and EDS 3150 - Critical Sociocultural Lenses for Teachers
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

- **Recommended:** EDS 3150 - Critical Sociocultural Lenses for Teachers

## Required Courses: 15 credits

- Basic Core: 15

## Senior Experience: 4 credits

- MTL 4630 - Teaching Secondary Mathematics **Credits:** 4

## Concentration Courses: 29-47 credits

- MTH 3110 - Abstract Algebra I **Credits:** 4
- MTH 3140 - Linear Algebra **Credits:** 4 \*
- MTH 3210 - Probability and Statistics **Credits:** 4
- MTH 3470 - Introduction to Discrete Mathematics and Modeling **Credits:** 4
- MTL 3620 - Mathematics of the Secondary Curriculum **Credits:** 4
- MTH 3640 - History of Mathematics **Credits:** 4
- MTH 3650 - Foundations of Geometry **Credits:** 4
- Mathematics or Computer Science Elective (Choose ONE of the following):
  - Any 1000 level or higher course with a CS prefix
  - Any programming-specific MTH course such as MTH 2520 - R Programming or MTH 2540 - Scientific Computing with Python
  - Any 3000 or 4000 level MTH course except MTH 3240
  - Any MTL course except MTL 3600
  - Restrictions: MTH 3240 and MTL 3600 do not count as electives.

NOTE: For licensure students, MTL 4630 must be taken concurrently with MTL 3638 and EDS 3280 (courses listed in Educational Foundation and Methods section below).

\* **MTH 3130 and one of the following (MTH 4110 or MTH 4150 or MTH 4410 or MTH 4660) may substitute for MTH 3140.**

## Educational Foundations and Methods:

### Continuation for TRACK 1: Licensure Option

Students seeking teacher licensure at the secondary level with endorsement in mathematics must take the following sequence of courses and be admitted to the teacher education program (see notes below). Students should pay particular attention to corequisites and prerequisites.

*Note: This section not required for Track 2: Non-Licensure option. Students pursuing a Mathematics Major with a Mathematics Education Concentration but who are NOT seeking licensure are not required to complete the following courses but are instead required to complete the requirements listed under TRACK 2 below.*

## Required Courses: 38 credits

All candidates must obtain admission to the teacher preparation program before they can register for their first field experience course(s) - EDS 3140 - First Field Experience in Secondary Education. See the following page and consult with an education advisor for details: <https://www.msudenver.edu/education/apply/>

Students must also achieve satisfactory scores on the state licensure examination. See your advisor for more information.

- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits:** 4
- EDS 3140 - First Field Experience in Secondary Education **Credits:** 1
- NOTE: EDS 3130 and EDS 3140 must be taken concurrently.
- REQUIRES provisional admission to the teacher preparation program in the School of Education: More information [HERE](#)
- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits:** 3
- EDT 3010 - Integrating Educational Technology into Teaching **Credits:** 3
- SED 3600 - Exceptional Learners in the Classroom **Credits:** 3
- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits:** 3
- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools **Credits:** 3
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools **Credits:** 1
- NOTE: EDS 3210 and EDS 3240 must be taken concurrently.
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits:** 3
- MTL 3638 - Secondary Mathematics Field Experience **Credits:** 2
- NOTE: MTL 4630, MTL 3638, and EDS 3280 must be taken concurrently.
- MTL 4690 - Student Teaching and Seminar: Secondary 7-12 **Credits:** 12
- NOTE: This course requires formal admission to the teacher preparation program.



## Summary of Requirements

### Track 1: Mathematics Education Concentration with Licensure

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Basic Core	15 credits
Concentration Courses	29-47 credits
Track 1: Licensure Option	38 credits
Senior Experience	4 credits
Unrestricted Electives	0-10 credits
<b>Total for the Mathematics Major, B.S., Mathematics Education Concentration, Track 1</b>	<b>Minimum of 120 credits</b>

### Track 2: Mathematics Education Concentration, Non-Licensure

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Basic Core	15 credits
Concentration Courses	29-47 credits
Senior Experience	4 credits
Unrestricted Electives to complete the 120 hour graduation requirement	18-42 credits
<b>Total for the Mathematics Major, B.S., Mathematics Education Concentration, Track 2</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Mathematics Minor

Only one of three courses, MTH 2140, MTH 3130, or MTH 3140 can be counted. A major that requires a minor in mathematics can specify the courses for such a minor, and the total hours required may exceed

the 22 hour total listed below. Please consult the listings included with those majors.

Students must achieve a cumulative GPA of 2.0 or higher in all MSU Denver courses counted in this minor. Students should note that programs differ in the minimum grade required.

## Required Courses

- MTH 1410 - Calculus I **Credits: 4**
- MTH 2410 - Calculus II **Credits: 4**

## One of the following courses:

- MTH 2540 - Scientific Computing with Python **Credits: 4**
- MTH 2520 - R Programming **Credits: 4**
- MTH 3100 - Introduction to Mathematical Proofs **Credits: 3**
- CS 1050 - Computer Science 1 **Credits: 4**

## Electives:

A minimum of 10 additional hours chosen from CS 1050 and the set of all 2000, 3000, or 4000 level math classes, with the exception of MTH 3240.

- At most one of MTH 2520, MTH 2540, MTH 3510 and CS 1050 may be counted.
- At least 7 hours must be 3000 or 4000 level math classes, excluding MTH 3510.

## Electives: 10

## Total: 21-22

## Statistical Science Major, B.S.

[Department of Mathematics and Statistics](#)

[College of Aerospace, Computing, Engineering, and Design](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

The Department of Mathematics and Statistics offers coursework leading to a Bachelor of Science in Statistical Science.

A degree in Statistical Science is useful in a variety of professional fields including but not limited to biostatistics, health sciences, data science, business analytics, and econometrics. Students are invited to consult with department faculty concerning career options. The

department strongly recommends that students interested in data science pursue the Computer Science Minor.

## Student Outcomes

- Program Outcome 1: Graduates are able to use statistical methods to analyze data
- Program Outcome 2: Graduates are able to explain statistical ideas clearly
- Program Outcome 3: Graduates understand the foundations of probability and theoretical statistics
- Program Outcome 4: Graduates are able to write computer programs that perform statistical procedures

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree and a minimum overall GPA of 2.00 in these courses. Students should note that programs differ in the minimum grade required.
- Majors in Statistical Science are not allowed to minor in Mathematics. Students who wish to double major in Statistical Science and a major that requires a Mathematics Minor must consult a faculty advisor. A double major in Statistical Science and Mathematics is not allowed.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

### Required Courses: 45-46 credits

#### All of the following courses: 38 credits

- MTH 1410 - Calculus I **Credits: 4**
- MTH 2410 - Calculus II **Credits: 4**
- MTH 2420 - Calculus III **Credits: 4**
- MTH 2520 - R Programming **Credits: 4**
- MTH 3210 - Probability and Statistics **Credits: 4**
- MTH 3220 - Statistical Methods **Credits: 4**
- MTH 3270 - Data Science **Credits: 4**
- MTH 4230 - Regression and Computational Statistics **Credits: 4**
- MTH 4250 - Statistical Theory **Credits: 4**
- MTH 4290 - Senior Statistics Project **Credits: 2**

#### One of the following two courses: 4 credits

- MTH 3130 - Applied Methods in Linear Algebra **Credits: 4**
- MTH 3140 - Linear Algebra **Credits: 4**

#### One of the following four courses: 3-4 credits

- CS 3120 - Machine Learning **Credits: 4**
- MTH 2540 - Scientific Computing with Python **Credits: 4**
- MTH 3100 - Introduction to Mathematical Proofs **Credits: 3**
- MTH 3230 - Stochastic Processes **Credits: 4**
- MTH 3510 - SAS Programming **Credits: 4**

### Senior Experience: 4 credits

- MTH 4210 - Probability Theory **Credits: 4**

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Major Requirements	45-46 credits
Senior Experience	4 credits
Unrestricted Electives	34-41 credits
<b>Total for the Statistical Science Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree.

Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Statistics Minor

Statistics is widely used in science, industry and government. Statistical methods are used to collect, analyze, and interpret data in natural and social sciences, business, and engineering. The courses in the Statistics Minor focus on applied topics that are useful for students in a variety of disciplines.

A grade of "C-" or better is required for each course in this program to count toward the Statistics Minor. Calculus I (MTH 1410) is not listed in the requirements for the Statistics Minor, but this course is a prerequisite for required courses in the minor. A Statistics Minor cannot be combined with a Mathematics Major or Statistical Science Major.

## Prerequisites

- MTH 1410 - Calculus I **Credits: 4**

## Required Courses

- MTH 2140 - Computational Matrix Algebra **Credits: 2 \***
- MTH 3210 - Probability and Statistics **Credits: 4**
- MTH 3220 - Statistical Methods **Credits: 4**
- MTH 4230 - Regression and Computational Statistics **Credits: 4**

**Subtotal: 14-16 credits**

## Elective

One elective course must be chosen from among:

- MTH 2520 - R Programming **Credits: 4**
- MTH 2540 - Scientific Computing with Python **Credits: 4**
- MTH 3230 - Stochastic Processes **Credits: 4**
- MTH 3510 - SAS Programming **Credits: 4**
- MTH 4210 - Probability Theory **Credits: 4**
- CS 1050 - Computer Science 1 **Credits: 4**

**Subtotal: 4 credits**

**Total for Statistics Minor: 18-20 credits**

*\* MTH 2140 may be replaced with MTH 3140 or MTH 3130 (4 credits).*

# College of Business

The College of Business offers students a variety of educational opportunities that either lead to a bachelor's degree or provide opportunities for non-degree-seeking students to gain additional undergraduate education through our extensive course offerings and certificate programs.

The College provides convenient access to instruction through traditional classroom sessions at the main Auraria campus and online, during the day, evenings, and weekends. The College consists of over 80 full-time faculty, over 40 affiliate faculty, and 21 full-time staff. Around 3000 students major in business and economics. Students can take advantage of on-the-job training through internship placements, internships, and independent study course work.

Students may declare a major in the College of Business during the admission process, or at any time thereafter by contacting a department faculty advisor and completing the "Major Declaration Form." Students are encouraged to declare as early as possible to ensure accurate advising on degree program requirements.

## Mission

The MSU Denver College of Business engages a diverse student population with an inclusive educational experience to become successful business professionals.

### Engage:

We engage students through teaching methods that are centered on individualized attention through small classes, interactive and shared instructional experiences that includes opportunities to connect with the business community while leveraging the use of relevant technology.

### Inclusive:

We provide an enriching student learning experience for students from all backgrounds in ways that are appropriate to meet their educational needs. Our students have access to an affordable education through multiple delivery options. Our educational experiences focus on providing a quality curriculum that prepares students for the rapidly changing global business environment. Students are instructed by a diverse faculty who stay current in their disciplines through scholarly activities and professional experiences.

### Business Professionals:

Through our undergraduate and graduate programs, students develop knowledge, skills and abilities to become successful professionals who provide business solutions utilizing technological, ethical and global frameworks.

The various educational opportunities available through the College of Business are listed below. Students interested in the MBA, MPAcc, Graduate Certificate in Business Analytics, or Graduate Certificate in Risk Assurance and Advisory programs should refer to

the Graduate Catalog for details. Course descriptions and prerequisites can be found by clicking here.

If you have any questions about the offerings, academic policies and practices, or admission requirements, contact the Dean of the College of Business or the chair of the appropriate department.

## Bachelor of Science Degree Programs

Students may earn a Bachelor of Science degree in Accounting, Business Administration, Business Intelligence, Computer Information Systems, Economics, Finance, Human Resource Management, International Business, Management, Marketing, Operations Management, or Real Estate. The degree requires completion of coursework in general studies, the core business disciplines and requirements, a major, and electives. A minor is not required.

- [Accounting](#)
- [Business Administration](#)
- [Business Intelligence](#)
- [Computer Information Systems](#)
- [Economics](#)
- [Finance \(General Finance, Financial Services\)](#)
- [Human Resource Management](#)
- [International Business](#)
- [Management](#)
- [Marketing](#)
- [Operations Management](#)
- [Real Estate](#)

## Bachelor of Arts Degree Program

- [Economics](#)
- [Entrepreneurship](#)
- [Professional Selling](#)

## Business Minor

The Business Minor provides students a strong foundation in business fields including Accounting, Computer Information Systems, Economics, Finance, Management, and Marketing.

- [Business Minor](#)

## International Business Concentration and Minor

An International Business Concentration is available to students with Business Majors except International Business.

An International Business Minor is available to students with non-Business or Business Majors except International Business.

- International Business Concentration
- International Business Minor

## College of Business Prerequisite and Attendance Policy

All students are expected to know and fulfill all current prerequisite requirements. The College of Business reserves the right to disenroll students who do not meet current prerequisite requirements or who fail to meet expected course attendance policies. In addition to meeting specific course prerequisites, the following general requirements also apply:

Prior to attending an Upper-Division Business Core classes offered in the College of Business Bachelor of Science programs, all students must have:

- completed all General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy;
- completed at least 60 credit hours overall (junior standing);
- declared a major in any discipline or be of non-degree seeking status.

## Business Program Residency Requirements

To earn a Bachelor of Science degree in Business, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any business courses with the prefix ACC, ACCM, BNK, CIS, ECO, FIN, MGT, MKT, and REL and a course number of at least 2000.

## Business Degree Program Planning

Some important things to remember as you plan your business studies:

- All degree-seeking students must meet the University's requirements for all bachelor degrees outlined in the general information section of this Catalog.
- During the first 60 credit hours, business majors should complete their General Studies courses and the 2000-level business core courses.
- The University requires at least 39 credit hours of upper-division courses (3000 or 4000 level). Consult with an advisor to ensure that your specific degree program meets this requirement.

The following sections describe the scope of the degree program, course requirements, career opportunities, and competencies for career success in each degree program.

## Minors in the College of Business

The College of Business offers minors in Accounting, Advertising and Promotion, Appraisal and Title, Banking, Business (non-business majors only), Business Sustainability, Computer Information Systems, Digital Marketing, Economics, Entrepreneurship, Financial Services, General Finance, Human Resource Management, International Business, Management, Marketing, Property Management, Real Estate, and Sales. Most minors require 18 credit hours plus prerequisites, if any. The acceptance of transfer credits will be governed by standards and policies of the College of Business and its departments.

Students should choose a minor that will help them in their chosen career. Minors should be declared with the help of a faculty advisor or department chair of the appropriate department.

## Certificates in the College of Business

The College of Business offers a [Nonprofit Studies Certificate](#). In addition, other certificates offered through departments include: [Affordable Housing Management Certificate](#) (Department of Finance), [Digital Marketing Certificate](#) (Department of Marketing), [Sales Certificate](#) (Department of Marketing), (Department of Management), [Risk Assurance and Advisory Certificate](#) (Department of Accounting), and [Personal Financial Planning Certificate](#) (Department of Finance). At the Graduate level, certificates in Business Analytics and Risk Assurance and Advisory are also available.

## Nonprofit Studies Certificate

This certificate of completion is intended to provide additional knowledge and skills in the area of Non-profit Studies. This certificate program is designed for working professionals and non-degree-seeking students who may or may not have a baccalaureate or master's degree or agency training in the administration and management of non-profit and public organizations. Non-degree students may select classes that specifically meet their professional goals. Students are required to achieve a minimum grade of C in all courses, to successfully complete the certificate program.

## Required Courses:

- HSP 2010 - Introduction to High-Impact Nonprofit Organizations **Credits: 3**
  - MKT 3190 - Marketing for Social Good **Credits: 3**
  - MKT 3820 - Fundraising Strategies for Nonprofit Organizations **Credits: 3**
  - MGT 3510 - The People of Nonprofits: Staff, Board, Volunteers, Clients and You **Credits: 3**
  - MGT 3860 - Social Entrepreneurship **Credits: 3**
  - FIN 4450 - Nonprofit Financial Management and Financing **Credits: 3**
- OR
- Any Internship (3980) of 3 hours approved by Chair.

## Total:

Total hours for certificate: 18

## Department of Accounting

Location: Administration Building, Suite 500

Phone: 303-615-1111

E-Mail: [lclem11@msudenver.edu](mailto:lclem11@msudenver.edu)

Website: [Accounting Department Website](#)

## Accounting Major, B.S.

[Department of  
Accounting](#)

Available Program Format(s): [Online, In-Person, Hybrid](#)

[College of Business](#)

### About the Program

The undergraduate accounting program offers a broad education in accounting and business that provides students the foundational global knowledge, skills and abilities to ethically engage in an accounting career, and be able to prepare and communicate accounting information for management and stakeholder decision-making.

In addition to the business core, students will also complete coursework in 5 areas within the accounting discipline to ensure that graduates are also prepared to pursue professional licensure and certification, as well as graduate education, within accounting or other business disciplines.

### Student Outcomes

Upon graduation, accounting students will demonstrate comprehension of and competence in the following:

#### Goal 1. Audit

- Accounting students will demonstrate comprehension of and competence in the area of auditing based on GAAS framework.

#### Goal 2: Accounting information and Technology

- Accounting students will demonstrate comprehension of and competence in the area of accounting information systems and technology

#### Goal 3: Financial Accounting and Reporting

- Accounting students will demonstrate comprehension of and competence in the areas of financial accounting and external reporting

#### Goal 4: Managerial Accounting

- Accounting students will demonstrate comprehension of and competence in the areas of cost accounting and managerial accounting.

#### Goal 5: Individual Taxation

- Accounting students will demonstrate comprehension of and competence in the area of individual taxation.

The College of Business B.S. programs, including Accounting, share a common set of four cross-disciplinary core competencies, knowledge, and skills.

**Competency 1: Communication** - Business students will be able to:

- 1.1 - Communicate effectively through writing.
- 1.2 - Communicate effectively through speaking.

**Competency 2: Business Solutions** - Business students will be able to analyze a business situation and recommend effective solutions utilizing:

- 2.1 - appropriate technological frameworks.
- 2.2 - appropriate ethical frameworks.
- 2.3 - appropriate global frameworks.

**Competency 3: Technological Agility** - Business students will be able to:

- 3.1 - understand the impact of current technology on the business environment.

**Competency 4: Core Knowledge** - Business students will demonstrate competence in required business topics, including accounting, computer information systems, data analytics, economics, ethics, finance, marketing, management, and business law.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Science degree in Accounting, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL and a course number of 2000 or higher. A student must complete at least 12 upper-division semester hours in Accounting at MSU Denver.
- In order to graduate, students must maintain a 2.0 average inside the **Business Core** and also maintain a 2.0 inside **Accounting Major required courses, elective courses**, and the **senior experience**.
- A grade of **C or better** is required for each accounting course.
- Students should note that programs differ in the minimum grade required.

## Additional Program Information:

- Students interested in becoming Certified Public Accountants (CPAs) in Colorado should be aware that they must take two auditing courses and one ethics course to qualify for licensure. To fulfill CPA requirements, one of the two required auditing courses must be ACC 4200 - Auditing and Attestation. All states require 150 semester hours of education to become a licensed CPA. MSU Denver offers classes that satisfy the 150-hour requirement for licensure.
- ACC 1010 will not substitute as a requirement in the Bachelor of Science in Accounting.
- Students should consult an Accounting faculty advisor to develop an appropriate academic program. A wide variety of internship opportunities are available through the C2 Hub.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major.)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1310 - Finite Mathematics for the Management and Social Sciences (one of

these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major).

- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
  - **Recommended:** ECO 2020 - Principles of Microeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies and Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## College of Business Additional

### Requirements: 7 credits

- COMM 1010 - Presentational Speaking **Credits: 3**  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**
- MTH 1110 - College Algebra for Calculus **Credits: 4**  
or
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits: 4**

## Business Core: 45 credits

All business majors require foundation course work in all significant areas of business theory and practice. The following courses are required for all students with a BS in a business discipline. Students must maintain a 2.0 average inside the **Business Core**.

- ACC 2010 - Principles of Accounting I **Credits: 3**
- ACC 2020 - Principles of Accounting II **Credits: 3**
- BUS 1850 - Introduction to Business **Credits: 3 \***
- BUS 1950 - Business Communication **Credits: 3**
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits: 3**  
or
- ACC 4440 - Accounting Ethics and Professionalism **Credits: 3**  
or  
Enrollment in the MPAcc 3+2 Program
- CIS 2010 - Foundations of Information Systems **Credits: 3**
- CIS 2320 - Descriptive and Predictive Analytics **Credits: 3**
- CIS 3320 - Prescriptive Analytics **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- FIN 3300 - Managerial Finance **Credits: 3**
- MKT 3000 - Principles of Marketing **Credits: 3**
- MGT 2210 - Legal Environment of Business I **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**
- MGT 4950 - Strategic Management **Credits: 3 \*\***

*\* Transfer students that transfer in 6 or more credits of business courses will not need to take BUS 1850 but may take any other College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.*

*\*\* "C-" or better must be earned in MGT 4950.*

## Accounting Major Requirements: 21 credits

Accounting majors should have learning experiences that focus on the development, measurement, analysis, validation, and communication of financial and other information. The following courses are required for all majors in Accounting. A grade of "C-" or better is required for each course in this section to count toward the bachelor's degree.

- ACC 3090 - Income Tax I **Credits: 3**
- ACC 3300 - Accounting Information Systems **Credits: 3**
- ACC 3400 - Cost Accounting **Credits: 3**
- ACC 3510 - Intermediate Accounting I **Credits: 3**
- ACC 3520 - Intermediate Accounting II **Credits: 3**
- ACC 4200 - Auditing and Attestation **Credits: 3**
- ACC 4510 - Advanced Accounting **Credits: 3**

## Accounting Electives: 9 credits

A grade of "C-" or better is required for each course in this section to count toward the bachelor's degree. Students should complete 9 credits of upper division accounting courses. Below are suggested

courses, but any upper division ACC course (3000 or 4000 level) will count towards this requirement.

- ACC 3100 - Income Tax II **Credits: 3**
- ACC 3110 - Volunteer Income Tax Assistance (VITA) **Credits: 3**
- ACC 3200 - Governmental Accounting **Credits: 3**
- ACC 3750 - International Accounting **Credits: 3**
- ACC 3980 - Internship in Accounting **Credits: 1-15**
- ACC 4440 - Accounting Ethics and Professionalism **Credits: 3**
- ACC 4520 - Mergers and Acquisitions **Credits: 3**
- ACC 3700 - Risk Assurance and Advisory I **Credits: 3**

## Senior Experience: 3 credits

- MGT 4950 - Strategic Management **Credits: 3** (this course is also required and counted in the Business Core)

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
College of Business Additional Requirements	7 credits
Business Core	45 credits
Major Requirements	21 credits
Major Electives	9 credits
Senior Experience	(counted in business core)
Unrestricted Electives	2-17 credits
<b>Total for the Accounting Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Accounting Minor

The accounting minor offers students a broad-based education in accounting, emphasizing a particular field within this discipline, such as financial accounting, managerial accounting, tax accounting, or governmental accounting.



The Accounting Department requires 60 credit hours (junior standing) before taking upper-division accounting courses. At least 12 hours of accounting courses in the minor must be completed in residency at MSU Denver. In order to meet the 18 credit hours requirement for a minor, a business major seeking a minor in accounting will have ACC 2010 - Accounting Principles I and ACC 2020 - Accounting Principles II waived from the Business Core requirements.

A grade of "C" or better is required for an accounting course to count towards a minor.

## Required Courses:

- ACC 2010 - Principles of Accounting I **Credits: 3**
- ACC 2020 - Principles of Accounting II **Credits: 3**
- ACC 3090 - Income Tax I **Credits: 3**
- ACC 3510 - Intermediate Accounting I **Credits: 3**
- 6 credits of approved electives\*

## Total Credits Required for Accounting Minor: 18

*\*A student may select any course in the accounting program or curriculum provided that the course is approved by an Accounting Department advisor.*

## ***Risk Assurance and Advisory Certificate***

Risk Assurance and Advisory professionals add value to organizations by providing independent assurance and advisory services addressing governance, risk management and controls across all aspects of the business. These professionals may work directly for a specific organization in any industry or in professional services and consulting firms offering risk assurance and advisory services to a variety of clients. This certificate will enable students to gain practical knowledge and skills that are transferrable to a wide variety of governance, risk management and controls roles as well as prepare for other industry-relevant certifications. Since MSU Denver is recognized as an Internal Auditing Education Partner, the student will also earn a certificate endorsed by the Institute of Internal Auditors.

Students will take 12 credits of required courses, plus 3 credits of elective courses, for a total of 15 credits to earn the Risk Assurance and Advisory Certificate.

Students must complete each course in the certificate program with a grade of "C" or better. The courses cannot be taken pass/fail. Some courses in the certificate have prerequisites which must be satisfied. At least nine credit hours of the required courses for this certificate must be completed at MSU Denver.

## Required Courses

Students will take four required courses totaling 12 credits. These courses incorporate skills and knowledge necessary to be an effective Risk Assurance and Advisory professional including governance, enterprise risk management, internal controls, internal audit standards and ethics, business processes, information systems security to support effective business processes and data analysis.

- ACC 3300 - Accounting Information Systems **Credits: 3**
- ACC 3700 - Risk Assurance and Advisory I **Credits: 3**
- CIS 3350 - Knowledge Discovery and Data Mining **Credits: 3**  
And select between:
- ACC 4440 - Accounting Ethics and Professionalism **Credits: 3**  
OR
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits: 3**

## Electives

In addition to the four required courses, an additional course must be taken from the electives listed here. There are electives from each College of Business major so students have a wide range of choices.

- ACC 3400 - Cost Accounting **Credits: 3**
- CIS 3460 - Data Warehousing and Mining **Credits: 3**
- FIN 3300 - Managerial Finance **Credits: 3**
- MGT 4850 - Organizational and Management Consulting **Credits: 3**

## Total for Certificate: 15 credits

## Department of Computer Information Systems and Business Analytics

Location: Administration Building, Suite 560

Phone: 303-615-0660

E-Mail: [dries1@msudenver.edu](mailto:dries1@msudenver.edu)

Website: [Computer Information Systems and Business Analytics Department Website](#)

## ***Business Intelligence Major, B.S.***

[Department of Computer Information Systems and Business Analytics](#)

Available Program Format(s): [Online](#), [In-Person](#), [Hybrid](#)

## About the Program

The AACSB-Accredited Bachelor of Science in Business Intelligence degree provides a solid foundation in business data analytics as well as the ability to use state-of-the-art methods to stay ahead of the curve in decision-making processes. The program addresses Information Systems topics such as problem-solving, database management systems, systems analysis and design, and information systems security. In addition, the following subjects are part of the degree: business analytics (descriptive, predictive and prescriptive), knowledge discovery and data mining, data science and big data, and data warehousing. The degree contains coverage of classic and cutting-edge tools and techniques including optimization models, waiting line models, simulation and transportation models, as well as key statistical-based tools such as regression modeling, analysis of variance, and tests of independence. Other topics included are data structures and data visualization approaches, advanced methods for predictive analytics using the state-of-the-art software R, supervised learning methods such as neural nets, KNN, classification and regression trees, along with unsupervised learning methods such as association rules, cluster analysis, and principal component analysis. Given the importance of primary and secondary data to the processes of marketing planning and strategy, as well as of marketing insights and product innovation, the degree also includes content of marketing research methods and tools.

## Student Outcomes

**Goal 1 - Core Knowledge:** Students will demonstrate competence in required business intelligence topics.

- Objective 1.1: Database Management
- Objective 1.2: Data Mining/Machine Learning
- Objective 1.3: Big Data Analytics
- Objective 1.4: Marketing Research

The College of Business B.S. programs, including Business Intelligence, share a common set of four cross-disciplinary core competencies, knowledge, and skills.

**Competency 1: Communication** - Business students will be able to:

- 1.1 - Communicate effectively through writing.
- 1.2 - Communicate effectively through speaking.

**Competency 2: Business Solutions** - Business students will be able to analyze a business situation and recommend effective solutions utilizing:

- 2.1 - appropriate technological frameworks.
- 2.2 - appropriate ethical frameworks.
- 2.3 - appropriate global frameworks.

**Competency 3: Technological Agility** - Business students will be able to:

- 3.1 - understand the impact of current technology on the business environment.

**Competency 4: Core Knowledge** - Business students will demonstrate competence in required business topics, including accounting, computer information systems, data analytics, economics, ethics, finance, marketing, management, and business law.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Science degree in Business Intelligence, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL and a course number of 2000 or higher.
- In order to graduate, students must maintain a 2.0 average inside the **Business Core** and also maintain a 2.0 inside **Business Intelligence Major required courses and elective courses**.
- In order to graduate, a grade of "C-" or better is required in MGT 4950.
- Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major.)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1310 - Finite Mathematics

for the Management and Social Sciences (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major).

- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
  - **Recommended:** ECO 2020 - Principles of Microeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies and Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## College of Business Additional Requirements: 7 credits

- COMM 1010 - Presentational Speaking **Credits:** 3  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits:** 3
- MTH 1110 - College Algebra for Calculus **Credits:** 4  
or
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits:** 4

## Business Core: 45 credits

All business majors require foundation course work in all significant areas of business theory and practice. The following courses are

required for all students with a BS in a business discipline. Students must maintain a 2.0 average inside the **Business Core**.

- ACC 2010 - Principles of Accounting I **Credits:** 3
- ACC 2020 - Principles of Accounting II **Credits:** 3
- BUS 1850 - Introduction to Business **Credits:** 3 \*
- BUS 1950 - Business Communication **Credits:** 3
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits:** 3  
or
- ACC 4440 - Accounting Ethics and Professionalism **Credits:** 3  
or  
Enrollment in the MPAcc 3+2 Program
- CIS 2010 - Foundations of Information Systems **Credits:** 3
- CIS 2320 - Descriptive and Predictive Analytics **Credits:** 3
- CIS 3320 - Prescriptive Analytics **Credits:** 3
- ECO 2010 - Principles of Macroeconomics **Credits:** 3
- ECO 2020 - Principles of Microeconomics **Credits:** 3
- FIN 3300 - Managerial Finance **Credits:** 3
- MKT 3000 - Principles of Marketing **Credits:** 3
- MGT 2210 - Legal Environment of Business I **Credits:** 3
- MGT 3000 - Organizational Management **Credits:** 3
- MGT 4950 - Strategic Management **Credits:** 3 \*\*

*\* Transfer students that transfer in 6 or more credits of business courses will not need to take BUS 1850 but may take any other College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.*

*\*\* "C-" or better must be earned in MGT 4950.*

## Required Courses: 33 credits

In order to graduate, students must maintain a 2.0 average inside Business Intelligence Major required courses and elective courses.

- CIS 2110 - Structured Problem Solving in Information Systems **Credits:** 3
- CIS 2200 - Introduction to Business Intelligence **Credits:** 3
- CIS 2500 - Security Essentials **Credits:** 3
- CIS 3060 - Database Management Systems **Credits:** 3
- CIS 3145 - Business Application Development **Credits:** 3
- CIS 3350 - Knowledge Discovery and Data Mining **Credits:** 3
- CIS 3460 - Data Warehousing and Mining **Credits:** 3
- CIS 4060 - Advanced Database Management Systems **Credits:** 3
- CIS 4070 - Application of AI in Business **Credits:** 3
- CIS 4370 - Data Science and Big Data Analytics **Credits:** 3
- MKT 3010 - Marketing Research and Insights **Credits:** 3

## Senior Experience: 3 credits

- MGT 4950 - Strategic Management **Credits: 3** (this course is also required and counted in the Business Core)

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
College of Business Additional Requirements	7 credits
Business Core	45 credits
Major Requirements	33 credits
Senior Experience	(counted in business core)
Unrestricted Electives	0-14 credits
<b>Total for the Business Intelligence Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Computer Information Systems Major, B.S.

[Department of Computer Information Systems and Business Analytics](#)

[College of Business](#)

Available Program  
Format(s): [In-Person](#),  
[Hybrid](#)

## About the Program

The Computer Information Systems (CIS) bachelor's program offers a challenging education in both general business and modern technology that will allow the student to become part of the fast-paced digital world. This is the only CIS program in Colorado accredited by both **AACSB and ABET**, the world's top accrediting agencies for business and engineering/technology/computing programs.

The Computer Information Systems courses involve hands-on experience in the latest technologies applied in the context of business. Not only does the student have opportunities to take courses in HTML5 and CSS3, Java/Python, PHP and operating systems such as Windows, UNIX and Linux, but can also take advantage of

advanced studies in cybersecurity, business analytics, systems analysis and design, database design and administration, telecommunications, local and wide-area networking, data mining, ERP/SAP, Web administration and application development.

## Student Outcomes

- SO1: Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- SO2: Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- SO3: Communicate effectively in a variety of professional contexts.
- SO4: Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- SO5: Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- SO6: Support the delivery, use, and management of information systems within an information systems environment.

The College of Business B.S. programs, including Computer Information Systems, share a common set of four cross-disciplinary core competencies, knowledge, and skills.

**Competency 1: Communication** - Business students will be able to:

- 1.1 - Communicate effectively through writing.
- 1.2 - Communicate effectively through speaking.

**Competency 2: Business Solutions** - Business students will be able to analyze a business situation and recommend effective solutions utilizing:

- 2.1 - appropriate technological frameworks.
- 2.2 - appropriate ethical frameworks.
- 2.3 - appropriate global frameworks.

**Competency 3: Technological Agility** - Business students will be able to:

- 3.1 - understand the impact of current technology on the business environment.

**Competency 4: Core Knowledge** - Business students will demonstrate competence in required business topics, including accounting, computer information systems, data analytics, economics, ethics, finance, marketing, management, and business law.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Science degree in Computer Information Systems, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL and a course number of 2000 or higher. A student must complete at least twelve (12) upper-division semester hours in Computer Information Systems at MSU Denver.
- In order to graduate, students must maintain a 2.0 average inside the **Business Core** and also maintain a 2.0 inside **Computer Information Systems Major required courses and elective courses**.
- In order to graduate, a grade of "C-" or better is required in MGT 4950.
- Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major.)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1310 - Finite Mathematics for the Management and Social Sciences (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major).
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics (required in the Business Core

for Business students completing any Bachelor of Science major)

- **Recommended:** ECO 2020 - Principles of Microeconomics (required in the Business Core for Business students completing any Bachelor of Science major)

- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies and Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## College of Business Additional

### Requirements: 7 credits

- COMM 1010 - Presentational Speaking **Credits: 3**  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**
- MTH 1110 - College Algebra for Calculus **Credits: 4**  
or
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits: 4**

## Business Core: 45 credits

All business majors require foundation course work in all significant areas of business theory and practice. The following courses are required for all students with a BS in a business discipline. Students must maintain a 2.0 average inside the **Business Core**.

- ACC 2010 - Principles of Accounting I **Credits: 3**
- ACC 2020 - Principles of Accounting II **Credits: 3**
- BUS 1850 - Introduction to Business **Credits: 3 \***
- BUS 1950 - Business Communication **Credits: 3**
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits: 3**  
or

- ACC 4440 - Accounting Ethics and Professionalism **Credits: 3**  
or  
Enrollment in the MPAcc 3+2 Program
- CIS 2010 - Foundations of Information Systems **Credits: 3**
- CIS 2320 - Descriptive and Predictive Analytics **Credits: 3**
- CIS 3320 - Prescriptive Analytics **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- FIN 3300 - Managerial Finance **Credits: 3**
- MKT 3000 - Principles of Marketing **Credits: 3**
- MGT 2210 - Legal Environment of Business I **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**
- MGT 4950 - Strategic Management **Credits: 3** \*\*

*\* Transfer students that transfer in 6 or more credits of business courses will not need to take BUS 1850 but may take any other College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.*

*\*\* "C-" or better must be earned in MGT 4950.*

## Computer Information Systems Major Requirements: 33 credits

In order to graduate, students must maintain a 2.0 average inside the Business Core and also maintain a 2.0 inside Computer Information Systems Major required courses, and elective courses.

(24 required credits plus 9 credits from Option 1 or 9 credits from Option 2):

### Required Courses: 24 credits

- CIS 2110 - Structured Problem Solving in Information Systems **Credits: 3**
- CIS 3050 - Fundamentals of Systems Analysis and Design **Credits: 3**
- CIS 3060 - Database Management Systems **Credits: 3**
- CIS 3230 - Telecommunication Systems and Networking **Credits: 3**
- CIS 3145 - Business Application Development **Credits: 3**
- CIS 3500 - Information Systems Security **Credits: 3**
- CIS 4050 - Systems Analysis and Design **Credits: 3**
- Any CIS prefix course at the 2000 level or above except CIS 2500.

### Option 1: CIS Degree (9 credits)

This option does not require students to declare an area of concentration and thus allows them maximum flexibility in choosing

their two upper-division CIS Electives and their CIS Capstone Group course.

- Computer Information Systems Capstone Group (any 4000-level CIS course excluding CIS 4050) (3 credits)
- Upper-division CIS Electives (6 credits)

### Option 2: CIS Degree with an Area of Concentration (9 credits)

This option requires students to declare one, and only one, area of concentration. The area of concentration chosen dictates the CIS electives the students take. In addition, students complete the same set of core CIS courses as in Option 1.

Select one of the following concentrations:

#### Application Development

- CIS 3030 - Business Web Page Development **Credits: 3**
- CIS 4060 - Advanced Database Management Systems **Credits: 3**

#### Business Analytics Concentration

- CIS 3350 - Knowledge Discovery and Data Mining **Credits: 3**
- CIS 3460 - Data Warehousing and Mining **Credits: 3**
- CIS 4370 - Data Science and Big Data Analytics **Credits: 3**

#### Database Development and Administration

- CIS 3460 - Data Warehousing and Mining **Credits: 3**
- CIS 4060 - Advanced Database Management Systems **Credits: 3**
- CIS 4260 - Database Administration **Credits: 3**

#### Information Systems Security

- CIS 4500 - Information Systems Security Tools and Techniques **Credits: 3**
- CIS 4550 - Information Systems Security Management and Information Assurance **Credits: 3**  
and
- CIS 4280 - Network Installation and Administration **Credits: 3**  
or
- CIS 4281 - Network Installation and Administration with UNIX/Linux **Credits: 3**

#### Network Systems and Administration

- CIS 3280 - LAN and WAN Systems for Business **Credits:** 3  
and two of the following courses:
- CIS 4280 - Network Installation and Administration **Credits:** 3
- CIS 4281 - Network Installation and Administration with UNIX/Linux **Credits:** 3
- CIS 4500 - Information Systems Security Tools and Techniques **Credits:** 3

### Web Development and Administration

- CIS 3030 - Business Web Page Development **Credits:** 3
- CIS 4030 - Web Site Administration **Credits:** 3
- CIS 4500 - Information Systems Security Tools and Techniques **Credits:** 3

### Senior Experience: 3 credits

- MGT 4950 - Strategic Management **Credits:** 3 (this course is also required and counted in the Business Core)

### Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
College of Business Additional Requirements	7 credits
Business Core	45 credits
Major Requirements	33 credits
Senior Experience	(counted in business core)
Unrestricted Electives	0-14 credits
Total for the Computer Information Systems Major, B.S.	120 credits

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

### Computer Information Systems Minor

This minor will provide a basic understanding of the concepts, current methodology, and rapid changes in the design, development, and use of computer-oriented systems for businesses and

organizations. At least 9 credits of computer information systems courses in the minor must be completed in residency at MSU Denver. A grade of "D-" or better must be earned in each course required for the minor. Students should note that programs differ in the minimum grade required.

### Required Courses:

- CIS 2010 - Foundations of Information Systems **Credits:** 3
- CIS 2110 - Structured Problem Solving in Information Systems **Credits:** 3
- CIS 3060 - Database Management Systems **Credits:** 3  
CIS Upper Division Electives\*

### Total Hours Required for Computer Information Systems Minor: 18

### Note:

*\*Electives are selected in consultation with and approved by an advisor in the Department of Computer Information Systems and Business Analytics.*

## Department of Economics

Location: Administration Building, Suite 530

Phone: 303-615-0111

E-Mail: [economics@msudenver.edu](mailto:economics@msudenver.edu)

Website: [Economics Department Website](#)

### Economics Major, B.A.

[Department of Economics](#)

[College of Business](#)

Available Program Format(s): [In-Person](#),  
[Online](#), [Hybrid](#)

MSU Denver's Economics program is not a business program and Economics majors do not have the same requirements as other majors in the College of Business. For example, Economics majors do not need to take the business core. Graduates will receive a Bachelor of Arts degree instead of a Bachelor of Science degree.

### About the Program

The Department of Economics is a non-business degree program housed in the College of Business offering a traditional Bachelor of



Arts degree. Economics is the scientific study of the allocation of scarce or limited resources among competing uses. The study of economics provides specialized and general knowledge of the operation of economic systems and institutions. The bachelor of arts degree program gives students a fundamental knowledge of domestic and foreign economies and the quantitative tools necessary for independent analytical research and thought. Specialized courses develop the student's ability to apply the tools of economic theory and analysis to a broad range of social, political, and economic issues. Such training is essential for graduates who wish to qualify for positions as professional economists and provides an excellent background for students interested in law school or graduate programs in economics, finance, or business. Majors interested in graduate studies in economics are highly encouraged to minor in mathematics.

## Student Outcomes

### Mission

Our mission statement reflects our commitment.

*The Department of Economics at the Metropolitan State University of Denver delivers a high quality, accessible bachelor of arts program in economics while also providing significant service to the University, the College of Business, and the community by providing accessible and quality general studies courses in the principles of microeconomics and macroeconomics. We prepare students for lifelong learning in a complex free civil society; for graduate or professional education in economics, business and legal studies, or the law; and for careers in a broad range of private and public activities.*

*The Department of Economics pursues excellence in teaching and learning as its primary purpose. The faculty of the department engages in scholarly activity that contributes to the literature in applied and basic economic research and other professional activity that enhances quality instruction.*

While most positions as a professional economist require graduate training, for someone with a bachelor's degree employment opportunities are available in national and international business; federal, state and local government; and various nonprofit organizations.

Successful economics students will attain the following competencies:

- ability to examine, analyze, and interpret data;
- sound decision-making abilities;
- proficiency in oral and written communications;
- knowledge of economic theory, history, practices, and trends;
- knowledge of statistical procedures;
- ability to follow and interpret economic and political trends.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A 2.0 GPA average is required in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- A student must complete at least twelve (12) upper-division semester hours in economics at MSU Denver.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1111 - College Algebra for Calculus with Laboratory or MTH 1210 - Introduction to Statistics or MTH 1310 - Finite Mathematics for the Management and Social Sciences or MTH 1311 - Finite Mathematics for the Management and Social Sciences with Laboratory or MTH 1400 - Precalculus Mathematics (these course options are also in the additional requirement section).
- Arts and Humanities (6 credits)
- Historical (3 credits)
  - **Recommended:** ECO 1776 - Global Economic History: The Origins of Growth
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics and ECO 2020 - Principles of Microeconomics (courses required in major)
- Global Diversity (0 or 3 credits\*\*)
  - **Recommended:** ECO 3800 - Development Economics or ECO 1776 - Global Economic History: The Origins of Growth



*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

### Additional Requirements: 7-8 credits

- MTH 1110 - College Algebra for Calculus **Credits: 4**  
or
  - MTH 1111 - College Algebra for Calculus with Laboratory **Credits: 4**  
or
  - MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits: 4**  
or
  - MTH 1311 - Finite Mathematics for the Management and Social Sciences with Laboratory **Credits: 4**  
or
  - MTH 1400 - Precalculus Mathematics **Credits: 4**  
(Any of these courses serves as a pre-requisite for ECO 3010)
- and
- MTH 1210 - Introduction to Statistics **Credits: 4**  
or
  - CIS 2320 - Descriptive and Predictive Analytics **Credits: 3**  
(Any of these courses serves as a pre-requisite for ECO 3150 or ECO 3160)

### Required Courses: 15 credits

- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- ECO 3010 - Intermediate Microeconomics **Credits: 3**
- ECO 3020 - Intermediate Macroeconomic Theory **Credits: 3**
- ECO 3150 - Econometrics **Credits: 3**  
or
- ECO 3160 - Business and Economic Forecasting **Credits: 3**

### Economics Electives: 18 credits

A minimum of 18 upper-division semester hours in economic courses selected from the list below (or upper-division omnibus courses).

If you take both ECO 3150 and ECO 3160 one will fulfill 3 credits of Required Courses and one will fulfill 3 credits for upper-division electives

- ECO 3100 - Money and Banking **Credits: 3**
- ECO 3150 - Econometrics **Credits: 3**
- ECO 3160 - Business and Economic Forecasting **Credits: 3**
- ECO 3200 - Economic History of the U S **Credits: 3**
- ECO 3250 - Labor Economics **Credits: 3**
- ECO 3384 - Urban Economics **Credits: 3**
- ECO 3397 - Culture and Economy **Credits: 3**
- ECO 3450 - Environmental Economics **Credits: 3**
- ECO 3459 - Policy Debates in the History of Economic Thought **Credits: 3**
- ECO 3500 - Managerial Economics **Credits: 3**
- ECO 3550 - Global Economics and International Trade **Credits: 3**
- ECO 3600 - Economics of Social Justice **Credits: 3**
- ECO 3700 - Political Economy of the Middle East and North Africa **Credits: 3**
- ECO 3790 - The Political Economy of Immigration **Credits: 3**
- ECO 3800 - Development Economics **Credits: 3**
- ECO 3850 - Geopolitics and Economics of World Oil Markets **Credits: 3**
- ECO 3980 - Internship in Economics **Credits: 1-15**
- ECO 4100 - Sports Economics **Credits: 3**
- ECO 4200 - Game Theory **Credits: 3**
- ECO 4300 - Public Finance **Credits: 3**
- ECO 4400 - Industrial Organization and Public Policy **Credits: 3**
- ECO 4450 - International Macroeconomics **Credits: 3**
- ECO 4650 - Advanced Macroeconomics **Credits: 3**
- ECO 4700 - Law and Economics **Credits: 3**
- ECO 4750 - The Economic Approach to Politics **Credits: 3**

### Senior Experience: 3 credits

- ECO 4800 - Economic Policy Analysis **Credits: 3**

### Economics with Secondary Social Studies Licensure:

Students interested in this concentration should visit the Economics Major, B.A. with Secondary Social Studies Teacher Licensure Concentration page in the catalog.

### Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Additional Requirements	7-8 credits
Major Requirements	15 credits
Major Electives	18 credits
Senior Experience	3 credits
Unrestricted Electives	40-56 credits
<b>Total for the Economics Major, B.A.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## ***Economics Major, B.A. with Secondary Social Studies Teacher Licensure Concentration***

[Department of Economics](#)

[College of Business](#)

Available Program Format(s): [In-Person](#)

### **About the Program**

The Economics Major with a Concentration in Secondary Social Studies Licensure is designed for those students who plan to teach Social Studies in Colorado. The program includes an Economics Major, a Social Studies focus, and Secondary Education courses required by the Colorado Department of Education for licensure.

Students interested in an Economics Major only should search the MSU Denver catalog separately for that degree option.

### **Student Outcomes**

#### Economics Student Learning Outcomes:

- Apply tools of microeconomic analysis to explain microeconomic relationships and phenomena.
- Apply tools of macroeconomic analysis to explain macroeconomic and monetary relationships and phenomena.
- Apply tools of statistical analysis to explain economic relationships and phenomena.
- Demonstrate mastery of pedagogical strategies in Social Studies for secondary school teaching.

- Connect Literacy and Math-Utilize literacy, including Culturally and Linguistically Diverse (CLD), strategies as well as mathematics when teaching Social Studies.
- Create Inclusive Teaching Environment-Create a safe, inclusive and respectful learning environment that facilitates Social Studies learning for diverse populations, including CLD students.
- Plan and deliver effective instruction in History, Civics, and Geography.
- Demonstrate professionalism as a teacher candidate through ethical conduct, reflection, and leadership.
- Demonstrate knowledge of first and second language acquisition and teaching strategies for CLD students.

#### Secondary Social Studies Licensure Student Learning Outcomes:

- Demonstrate mastery of pedagogical strategies in Social Studies for secondary school teaching.
- Connect Literacy and Math-Utilize literacy, including Culturally and Linguistically Diverse (CLD), strategies as well as mathematics when teaching Social Studies.
- Create Inclusive Teaching Environment-Create a safe, inclusive and respectful learning environment that facilitates Social Studies learning for diverse populations, including CLD students.
- Plan and deliver effective instruction in History, Civics, and Geography.
- Demonstrate professionalism as a teacher candidate through ethical conduct, reflection, and leadership.
- Demonstrate knowledge of first and second language acquisition and teaching strategies for CLD students.

## **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## **Program Requirements**

- A total of 123 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- This program is defined as an extended major.

## **General Studies Requirements: 33 credits**

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

Courses recommended below will satisfy both General Studies and additional degree requirements below.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1210 - Introduction to Statistics which also satisfies a major requirement.
- Arts and Humanities (6 credits)
- Historical (3 credits)
  - **Recommended:** HIS 1040 - World History since 1500
- Natural and Physical Sciences (6 credits)
  - **Recommended:** GEG 1100 - Introduction to Physical Geography
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** Two of the following: PSC 1010 - American National Government; ANT 2330 - Cross-Cultural Communication; GEG 1000 - World Regional Geography
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.
  - **Recommended:** EDS 3150 - Critical Sociocultural Lenses for Teachers

## Economics Major Core: 15 credits

- ECO 2010 - Principles of Macroeconomics **Credits:** 3
- ECO 2020 - Principles of Microeconomics **Credits:** 3
- ECO 3010 - Intermediate Microeconomics **Credits:** 3
- ECO 3020 - Intermediate Macroeconomic Theory **Credits:** 3
- ECO 3150 - Econometrics **Credits:** 3

or

- ECO 3160 - Business and Economic Forecasting **Credits:** 3

## Economics Major Electives: 15 credits

- ECO 3200 - Economic History of the U S **Credits:** 3
- ECO xxxx Selected in consultation with an advisor **Credits:** 3
- ECO xxxx Selected in consultation with an advisor **Credits:** 3
- ECO xxxx Selected in consultation with an advisor **Credits:** 3
- ECO xxxx Selected in consultation with an advisor **Credits:** 3

## Required Math Courses: 8 credits

Take one of the following three courses:

- MTH 1110 - College Algebra for Calculus **Credits:** 4
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits:** 4
- MTH 1400 - Precalculus Mathematics **Credits:** 4
- MTH 1210 - Introduction to Statistics **Credits:** 4  
(This course is a pre-requisite for ECO 3150 and ECO 3160)

Note:

MTH 1210 will also fulfill General Studies Quantitative Literacy requirement.

## Additional Content Courses for Secondary Social Studies Licensure: 27 credits

All students must complete nine Social Science courses for this concentration. Note that twelve credits below can also satisfy General Studies requirements in these categories: Historical (3 credits); Natural and Physical Sciences (3 credits); Social and Behavioral Sciences (6 credits).

- HIS 1030 - World History to 1500 **Credits:** 3
- HIS 1040 - World History since 1500 **Credits:** 3
- HIS 1210 - American History to 1865 **Credits:** 3
- HIS 1220 - American History since 1865 **Credits:** 3
- GEG 1000 - World Regional Geography **Credits:** 3
- GEG 1100 - Introduction to Physical Geography **Credits:** 3
- ANT 2330 - Cross-Cultural Communication **Credits:** 3
- PSC 1010 - American National Government **Credits:** 3
- PSC 2230 - Introduction to International Relations **Credits:** 3

## Foundations and Strategies for Secondary Teaching: 28 credits

- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits: 4 \***
- EDS 3140 - First Field Experience in Secondary Education **Credits: 1 \***
- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits: 3 \***
- EDT 3010 - Integrating Educational Technology into Teaching **Credits: 3**
- SED 3600 - Exceptional Learners in the Classroom **Credits: 3**
- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**
- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools **Credits: 3 \*\***
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools **Credits: 1 \*\***
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits: 3 \*\***
- HIS 4010 - Methods of Teaching Social Science: Secondary School **Credits: 3 \*\***
- HIS 4020 - Field Experience in Teaching Social Studies in Secondary Schools **Credits: 1 (60-hour field experience)\*\***

Note:

\* Requires at least provisional admission to the School of Education

\*\*Requires formal admission to the School of Education

## Senior Experience: 12 credits

Student Teaching offers an essential conclusion to this degree program. Typically, students should complete 12 credits of EDS 4290 in their final semester.

- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 **Credits: 6,12**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Economics Major Core	15 credits
Economics Major Electives	15 credits
Required Math Courses	8 credits

Additional Content Courses Secondary Social Studies Licensure	27 credits
Foundation and Strategies for Secondary Teaching Courses	28 credits
Senior Experience	12 credits
<b>Total for the Economics Major, B.A. with Secondary Social Studies Teacher Licensure Concentration</b>	<b>Minimum of 123 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

**Up to 15 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.**

## Economics Major, B.S.

[Department of Economics](#)

Available Program Format(s): [In-Person](#), [Online](#), [Hybrid](#)

[College of Business](#)

## About the Program

Economics extends beyond just the concepts of money, profits, and the stock market. It provides a unique lens-focusing on incentives, choices, and markets-to discern the root causes and uncover solutions for enduring societal challenges. Through this lens, we can illuminate pressing topics like production, education, crime, the environment, international trade, immigration, health care, economic growth, poverty, and beyond.

The Bachelor of Science in Economics is structured around essential economic theories and empirical methods. It equips students entering careers in the private, non-profit, and public sectors with the tools essential for their professional roles.

Beyond the foundational Business and Economics courses, the program boasts ten distinctive interdisciplinary concentrations. These concentrations empower students to mold the curriculum in alignment with their policy interests and post-graduate industry aspirations.

## Student Outcomes

Although many positions as a professional economist necessitate graduate training, the BS in Economics offers students a robust, interdisciplinary education. This equips them with foundational knowledge and sharp analytical and quantitative skills. Graduates are well-prepared for diverse careers in various sectors and industries.

Additionally, they are positioned favorably for admission into graduate programs in fields such as economics, entrepreneurship, finance, political science, sociology, or law.

Upon completing the B.S. in Economics, students will be able to:

1. **Apply** economic reasoning and interdisciplinary tools to **interpret** social phenomena, **pinpoint** the root causes of enduring societal challenges, and **propose** informed solutions.
2. **Locate, organize, and analyze** relevant data employing statistical analysis and causal inference methods to **uncover** and **predict** economic relationships and phenomena.
3. **Articulate** research findings effectively to diverse audiences, including academics, the business community, policymakers, and the general public.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Science degree in Economics, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL and a course number of 2000 or higher. A student must complete at least twelve (12) upper-division semester hours in Economics at MSU Denver.
- A 2.0 GPA average is required in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Students must select two concentrations and maintain a 2.0 GPA average inside each concentration. In lieu of two concentrations, students can take 6 **economics** elective courses that were **not** already taken; students must maintain a 2.0 GPA average across these 6 economics elective courses.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major.)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1310 - Finite Mathematics for the Management and Social Sciences (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major).
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
  - **Recommended:** ECO 2020 - Principles of Microeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies and Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## General Studies Notes:

Please note the following courses are also recommended meet General Studies requirements:

Quantitative Literacy:

MTH 1111 - College Algebra for Calculus with Laboratory or MTH 1311 - Finite Mathematics for the Management and Social Sciences with Laboratory

#### Historical:

ECO 1776 - Global Economic History: The Origins of Growth

#### Global Diversity:

ECO 1776 - Global Economic History: The Origins of Growth

ECO 3800 - Development Economics

## College of Business Additional Requirements: 7 credits

- COMM 1010 - Presentational Speaking **Credits: 3**  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**
- MTH 1110 - College Algebra for Calculus **Credits: 4**  
or
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits: 4**

## Business Core: 45 credits

All business majors require foundation course work in all significant areas of business theory and practice. The following courses are required for all students with a BS in a business discipline. Students must maintain a 2.0 average inside the **Business Core**.

- ACC 2010 - Principles of Accounting I **Credits: 3**
- ACC 2020 - Principles of Accounting II **Credits: 3**
- BUS 1850 - Introduction to Business **Credits: 3 \***
- BUS 1950 - Business Communication **Credits: 3**
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits: 3**  
or
- ACC 4440 - Accounting Ethics and Professionalism **Credits: 3**  
or  
Enrollment in the MPAcc 3+2 Program
- CIS 2010 - Foundations of Information Systems **Credits: 3**
- CIS 2320 - Descriptive and Predictive Analytics **Credits: 3**
- CIS 3320 - Prescriptive Analytics **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- FIN 3300 - Managerial Finance **Credits: 3**
- MKT 3000 - Principles of Marketing **Credits: 3**

- MGT 2210 - Legal Environment of Business I **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**
- MGT 4950 - Strategic Management **Credits: 3 \*\***

*\* Transfer students that transfer in 6 or more credits of business courses will not need to take BUS 1850 but may take any other College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.*

*\*\* "C-" or better must be earned in MGT 4950.*

## Economics Major Core: 9 credits

Students must maintain a 2.0 GPA average inside the Economics major core.

- ECO 3010 - Intermediate Microeconomics **Credits: 3**  
AND
- ECO 3020 - Intermediate Macroeconomic Theory **Credits: 3**  
AND
- ECO 3150 - Econometrics **Credits: 3**  
OR
- ECO 3160 - Business and Economic Forecasting **Credits: 3**

## Concentration Requirements: 18 or 19 credits

Students must select two concentrations and maintain a 2.0 GPA average inside each concentration. In lieu of two concentrations, students can take 6 **economics** elective courses that were **not** already taken; students must maintain a 2.0 GPA average across these 6 economics elective courses.

### Environmental Policy Concentration: 9 credits

Students can earn an Environmental Policy concentration by completing all three courses.\* Students must maintain a 2.0 GPA average inside the concentration.

*\*ECO 3980 - Internship in Economics can be used to replace one course if the internship is connected to Environmental Policy.*

- ECO 3450 - Environmental Economics **Credits: 3**  
AND
- SOC 3770 - Society and the Environment **Credits: 3**  
AND
- PSC 3230 - Environmental Politics **Credits: 3**
- ECO 3980 - Internship in Economics **Credits: 1-15 \*\***

### Urban Policy Concentration: 9 credits

Students can earn an Urban Policy concentration by completing all three courses. Students must maintain a 2.0 GPA average inside the concentration.\*

*\*ECO 3980 - Internship in Economics can be used to replace one course if the internship is connected to Urban Policy.*

- ECO 3384 - Urban Economics **Credits:** 3  
AND
- SOC 3090 - Urban Sociology **Credits:** 3  
AND
- PSC 3010 - Urban Politics **Credits:** 3
- ECO 3980 - Internship in Economics **Credits:** 1-15 \*\*

## Applied Economic Policy I Concentration: 9 credits

Students can earn a concentration in Applied Economic Policy I by taking three courses **not** taken in another concentration among the following Economic courses. Students must maintain a 2.0 GPA average inside the concentration.\*

*\*ECO 3980 - Internship in Economics can be used to replace one course if the internship is in the area of one of the courses listed in Applied Economic Policy I.*

- ECO 3384 - Urban Economics **Credits:** 3
- ECO 3250 - Labor Economics **Credits:** 3
- ECO 3450 - Environmental Economics **Credits:** 3
- ECO 3500 - Managerial Economics **Credits:** 3
- ECO 3600 - Economics of Social Justice **Credits:** 3
- ECO 3790 - The Political Economy of Immigration **Credits:** 3
- ECO 4400 - Industrial Organization and Public Policy **Credits:** 3
- ECO 3980 - Internship in Economics **Credits:** 1-15 \*

## Applied Economic Policy II Concentration: 9 credits

Students can earn a concentration in Applied Economic Policy II by taking three courses **not** taken in another concentration among the following Economic courses. Students must maintain a 2.0 GPA average inside the concentration.\*

*\*ECO 3980 - Internship in Economics can be used to replace one course if the internship is in the area of one of the courses listed in Applied Economic Policy II.*

- ECO 3459 - Policy Debates in the History of Economic Thought **Credits:** 3
- ECO 3800 - Development Economics **Credits:** 3
- ECO 4750 - The Economic Approach to Politics **Credits:** 3
- ECO 4800 - Economic Policy Analysis **Credits:** 3
- ECO 3980 - Internship in Economics **Credits:** 1-15 \*

## Applied Economic Policy III Concentration: 9 credits

Students can earn a concentration in Applied Economic Policy III by taking three courses **not** taken in another concentration among the following Economic courses. Students must maintain a 2.0 GPA average inside the concentration.\*

*\*ECO 3980 - Internship in Economics can be used to replace one course if the internship is in the area of one of the courses listed in Applied Economic Policy III.*

- ECO 3100 - Money and Banking **Credits:** 3
- ECO 3200 - Economic History of the U S **Credits:** 3
- ECO 3397 - Culture and Economy **Credits:** 3
- ECO 3550 - Global Economics and International Trade **Credits:** 3
- ECO 4300 - Public Finance **Credits:** 3
- ECO 4700 - Law and Economics **Credits:** 3
- ECO 3980 - Internship in Economics **Credits:** 1-15 \*

## Business and Economic Analytics Concentration: 10 credits

Students must maintain a 2.0 GPA inside the concentration.\*

*\*ECO 3980 - Internship in Economics can be used to replace one course if the internship involved engaging in Business or Economic Analytics in the private or public sector.*

- MTH 2520 - R Programming **Credits:** 4 Recommended for ECO 3150 or ECO 3160  
OR
- MTH 2540 - Scientific Computing with Python **Credits:** 4 Recommended for CIS 3350  
AND
- ECO 3150 - Econometrics **Credits:** 3  
OR
- ECO 3160 - Business and Economic Forecasting **Credits:** 3  
AND
- CIS 3350 - Knowledge Discovery and Data Mining **Credits:** 3

- ECO 3980 - Internship in Economics **Credits:** 1-15 \*

## Diversity, Equity, and Inclusion Policy

### Concentration: 9 credits

Students can earn a concentration in DEI policy by picking 1 course in each discipline. Students must maintain a 2.0 GPA average within the concentration.\*

*\*ECO 3980 - Internship in Economics can be used to replace one course if the internship is in the area of Diversity, Equity, and Inclusion policy.*

- ECO 3600 - Economics of Social Justice **Credits:** 3  
AND
- PSC 2200 - Politics and Black People **Credits:** 3  
OR
- PSC 3365 - Structural Violence, Poverty and Human Rights **Credits:** 3  
OR
- PSC 3530 - Gender and Global Politics **Credits:** 3  
AND
- SOC 3220 - Prejudice and Discrimination **Credits:** 3
- ECO 3980 - Internship in Economics **Credits:** 1-15 \*

## Money, Banking, and Finance Concentration: 9 credits

Students must maintain a 2.0 GPA average inside the concentration.\*

*\*ECO 3980 - Internship in Economics can be used to replace one course if the internship is in the area of Money, Banking, and Finance.*

- ECO 3100 - Money and Banking **Credits:** 3  
AND
- FIN 3010 - Financial Markets and Institutions **Credits:** 3  
AND
- ECO 3160 - Business and Economic Forecasting **Credits:** 3
- ECO 3980 - Internship in Economics **Credits:** 1-15 \*

## Law, Economics, and Society Concentration: 9 credits

Students must maintain a 2.0 GPA average inside the concentration.\*

*\*ECO 3980 - Internship in Economics can be used to replace one course if the internship is in the area of Legal studies, the Law, or Public Administration.*

- PSC 3150 - Law and Society **Credits:** 3  
OR
- ECO 4700 - Law and Economics **Credits:** 3  
AND
- ECO 3200 - Economic History of the U S **Credits:** 3  
AND
- ECO 4750 - The Economic Approach to Politics **Credits:** 3
- ECO 3980 - Internship in Economics **Credits:** 1-15 \*

## Government Public Finance Concentration: 9 credits

Students must maintain a 2.0 GPA average inside the concentration.\*

*\*ECO 3980 - Internship in Economics can be used to replace one course if the internship is in the area of Public Finance.*

- ECO 4300 - Public Finance **Credits:** 3  
AND
- ECO 4750 - The Economic Approach to Politics **Credits:** 3  
AND
- PSC 3000 - American State and Local Government **Credits:** 3
- ECO 3980 - Internship in Economics **Credits:** 1-15 \*

## Business and Globalization Concentration: 9 credits

Students must maintain a 2.0 GPA average inside the concentration.\*

*\*ECO 3980 - Internship in Economics can be used to replace one course if the internship is for a business with an international division or an international non-governmental organization.*

- ECO 3397 - Culture and Economy **Credits:** 3  
OR
- ECO 3550 - Global Economics and International Trade **Credits:** 3  
AND
- FIN 3100 - International Money and Finance **Credits:** 3  
AND
- MGT 3820 - International Business **Credits:** 3
- ECO 3980 - Internship in Economics **Credits:** 1-15 \*

## Senior Experience: 3 credits

- MGT 4950 - Strategic Management **Credits:** 3 (this course is also required and counted in the Business Core)



## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
College of Business Additional Requirements	7 credits
Business Core	45 credits
Major Requirements	9 credits
Concentration Option	18-19 credits
Senior Experience	(counted in business core)
Unrestricted Electives	4-23 credits
<b>Total for the Economics Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Economics Minor

The Economics Minor provides students with an opportunity to acquire a general knowledge of the operation of economic systems and institutions, as well as the quantitative tools necessary for analytical research and thought. At least 9 credits of economics courses in the minor must be completed in residency at MSU Denver. Business majors who choose the Economics Minor will have ECO 2010 and ECO 2020 waived from the College of Business and departmental requirements. *A 2.0 GPA is required in the minor courses.* Students should note that programs differ in the minimum grade required.

### Required Courses:

- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- ECO 3010 - Intermediate Microeconomics **Credits: 3**  
-or-
- ECO 3020 - Intermediate Macroeconomic Theory **Credits: 3**
- Upper-division electives: 9 credit hours

Total Hours Required for Economics Minor:  
18

## Department of Finance

Location: Administration Building, Suite 500N

Phone: 303-615-0707

E-Mail: [FIN@msudenver.edu](mailto:FIN@msudenver.edu)

Website: [Finance Department Website](#)

## Affordable Housing Management Certificate

The Affordable Housing Management Certificate in the College of Business at Metropolitan State University of Denver delivers the knowledge and skills required to ensure students are prepared to work with and manage both social and real estate aspects of affordable housing units.

The social work component of this certificate introduces the student of social work and other aligned health, human, and social services to the required knowledge and skills in the property management field. For the student in the property management or real estate field, the social work component is designed to give the student the professional knowledge and skills to work more effectively with social workers to better serve residents in affordable housing programs.

The real estate portion of this certificate introduces the student of social work and other aligned health, human, and social services to the principles of real estate investment management and residential property management. In particular, students will apply these principles to the affordable housing industry. The courses in real estate provide students of social work the knowledge and skills to work more effectively with real estate investors and residential property managers in affordable housing programs.

### Admission and Graduation Requirements

This certificate program is open to all undergraduate, degree-seeking students and to non-degree seeking students. To be awarded the program certificate, the student must meet the following requirements:

- Review the certificate program plan with an advisor prior to or after enrollment.
- Earn at least a "C" or better in each of the certificate courses.

- No more than 40% of required courses can be fulfilled through transfer credits. At least 60% of required courses in the certificate must be completed at MSU Denver.

## Advising and Contact Information

Individuals interested in this certificate program should contact the Academic Advisor in the College of Business at 303-615-0197 or utilize EAB Navigate to schedule an appointment for an advising session (<https://msudenver.campus.eab.com/>).

## Required Courses

The Certificate requires the five listed courses below, plus one elective (see "Electives" section). Total for certificate is 18 hours. Students must earn at least a "C" or better in each of the certificate courses.

- CPM 1100 - Introduction to Facilities Management **Credits: 3**
- REL 2200 - Real Estate Principles **Credits: 3**
- REL 3000 - Residential Property Management **Credits: 3**
- SWK 1010 - Introduction to Social Work **Credits: 3**
- SWK 1600 - Community Engagement and Civic Responsibility **Credits: 3**
- Subtotal: 15 credits**

## Elective Courses

This certificate also requires any ONE three (3) hour Social Work (SWK) elective.

- SWK 3010 - Social Work Practice with Children and Youth **Credits: 3**
- SWK 3030 - Social Work with Older People **Credits: 3**
- SWK 3040 - Creative Approaches to Change **Credits: 3**
- SWK 3070 - Environmental Justice in Social Work **Credits: 3**
- SWK 4430 - Partnering with Families for Change **Credits: 3**
- SWK 3100 - Child Welfare and the Law **Credits: 3**
- SWK 3130 - Social Work and Criminal Justice Issues **Credits: 3**
- SWK 3150 - Social Work and Child Maltreatment **Credits: 3**
- SWK 3400 - Leadership and Program Administration in Social Work **Credits: 3**
- SWK 3500 - Social Work Practice with LGBTQ People **Credits: 3**
- SWK 3510 - Spirituality and Religion in Social Work **Credits: 3**
- SWK 3530 - Being Well in a Profession of Well-Being **Credits: 3**

- SWK 3550 - Social Work Practice with Grief and Loss **Credits: 3**
- SWK 3590 - Centering Black Experiences in Social Work Practice **Credits: 3**
- SWK 3600 - Gender in Social Work Practice **Credits: 3**
- Subtotal: 3 credits**

**Total for Affordable Housing Management Certificate: 18 credits**

## Appraisal and Title Minor

Students in the Appraisal and Title minor will learn to appropriately apply real estate appraisal methods and to apply due diligence in real estate evaluation and environmental assessments.

A minimum grade of "C-" is required in all minor courses. At least 9 credits of courses in the minor must be completed in residency at MSU Denver.

## Required Courses

- CET 3320 - Environmental Impact Statements **Credits: 3**
- FIN 3800 - Real Estate Practice and Law **Credits: 3**
- FIN 3810 - Advanced Real Estate Practice and Law **Credits: 3**
- REL 2200 - Real Estate Principles **Credits: 3**
- REL 4200 - Appraisal Principles, Procedures, and Ethics **Credits: 3**
- REL 4300 - Real Estate Finance and Investment **Credits: 3**
- REL 4400 - Principles and Issues in Real Estate Title and Title Insurance **Credits: 3**

**Total Credit Hours: 21**

## Banking Minor

This minor offers a focused education in Banking and gives students the tools to pursue a career in banking, lending, and other financial services.

A minimum grade of "C-" is required in all Banking minor courses. Students should note that programs differ in the minimum grade required. A business major seeking a minor in Banking may have ACC 2010 - Principles of Accounting I waived from the Business Core requirements. At least 9 credits of courses in the minor must be completed in residency at MSU Denver.

## Required Courses

- ACC 2010 - Principles of Accounting I **Credits: 3**
- FIN 2700 - Introduction to Banking **Credits: 3**

- FIN 3500 - Management of Banking Operations **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- FIN 3010 - Financial Markets and Institutions **Credits: 3**

## One of the following

- ACC 3300 - Accounting Information Systems **Credits: 3**
- FIN 3550 - Culture and Practice of Compliance **Credits: 3**
- FIN 3910 - Regulatory Environment of Banking **Credits: 3**
- FIN 4620 - Risk Analysis for Financial Services Organizations **Credits: 3**
- FIN 4720 - Case Studies in Compliance **Credits: 3**
- CIS 2500 - Security Essentials **Credits: 3**
- FIN 3100 - International Money and Finance **Credits: 3**
- FIN 4200 - Financial Modeling with Spreadsheets **Credits: 3**
- FIN 4600 - Security Analysis and Portfolio Management **Credits: 3**
- MGT 3530 - Human Resources Management **Credits: 3**
- MKT 3250 - Professional Selling **Credits: 3**
- MKT 3300 - Marketing of Services **Credits: 3**
- MKT 3310 - Consumer Behavior **Credits: 3**

Total Credits: 21

## *Finance Major, B.S.*

[Department of Finance](#)

[College of Business](#)

Available Program Format(s): [In-Person](#)

## About the Program

The Finance Degree is a Bachelor of Science Program within the College of Business. Students will complete all Finance Core classes and choose a required concentration in General Finance, Financial Services, or Banking. Students may add an optional International Business Concentration to their degree.

## Student Outcomes

Students will receive a broad education in finance, the financial industry, and related regulatory institutions. Our curriculum is driven with purpose to make you a well-rounded, objective, and analytical financial authority with the managerial skills that can help you achieve a long and lucrative career.

1. Demonstrate proficiency in core knowledge required of finance students.
2. Demonstrate ability to organize, analyze and draw appropriate conclusions from financial information.

3. Apply foundation knowledge and skills necessary to identify problems and generate feasible alternatives.
4. Demonstrate ability to apply financial information to recommend and justify solutions to financial problems.

The College of Business B.S. programs, including Finance, share a common set of four cross-disciplinary core competencies, knowledge, and skills.

**Competency 1: Communication** - Business students will be able to:

- 1.1 - Communicate effectively through writing.
- 1.2 - Communicate effectively through speaking.

**Competency 2: Business Solutions** - Business students will be able to analyze a business situation and recommend effective solutions utilizing:

- 2.1 - appropriate technological frameworks.
- 2.2 - appropriate ethical frameworks.
- 2.3 - appropriate global frameworks.

**Competency 3: Technological Agility** - Business students will be able to:

- 3.1 - understand the impact of current technology on the business environment.

**Competency 4: Core Knowledge** - Business students will demonstrate competence in required business topics, including accounting, computer information systems, data analytics, economics, ethics, finance, marketing, management, and business law.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Science degree in Finance, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL. A student must complete at least twelve (12) upper-division semester hours in Finance at MSU Denver.
- In order to graduate, students must maintain a 2.0 average inside the **Business Core**.

- **In order to graduate, students must earn a "C" or better in Finance Major required courses and elective courses.**
- In order to graduate, a grade of "C-" or better is required in MGT 4950.
- Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major.)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1310 - Finite Mathematics for the Management and Social Sciences (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major).
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
  - **Recommended:** ECO 2020 - Principles of Microeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies and Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## College of Business Additional Requirements: 7 credits

- COMM 1010 - Presentational Speaking **Credits: 3**  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**
- MTH 1110 - College Algebra for Calculus **Credits: 4**  
or
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits: 4**

## Business Core: 45 credits

All business majors require foundation course work in all significant areas of business theory and practice. The following courses are required for all students with a BS in a business discipline. Students must maintain a 2.0 average inside the **Business Core**.

- ACC 2010 - Principles of Accounting I **Credits: 3**
- ACC 2020 - Principles of Accounting II **Credits: 3**
- BUS 1850 - Introduction to Business **Credits: 3 \***
- BUS 1950 - Business Communication **Credits: 3**
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits: 3**  
or
- ACC 4440 - Accounting Ethics and Professionalism **Credits: 3**  
or  
Enrollment in the MPAcc 3+2 Program
- CIS 2010 - Foundations of Information Systems **Credits: 3**
- CIS 2320 - Descriptive and Predictive Analytics **Credits: 3**
- CIS 3320 - Prescriptive Analytics **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- FIN 3300 - Managerial Finance **Credits: 3**
- MKT 3000 - Principles of Marketing **Credits: 3**
- MGT 2210 - Legal Environment of Business I **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**
- MGT 4950 - Strategic Management **Credits: 3 \*\***

*\* Transfer students that transfer in 6 or more credits of business courses will not need to take BUS 1850 but may*

*take any other College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.*

*\*\* "C-" or better must be earned in MGT 4950.*

## Finance Major Required Courses: 15 credits

A grade of C or better is required for each course in this program (i.e., major courses required, concentration courses, and elective courses) to count toward the bachelor's degree.

Finance students will complete four Finance Core classes and a required concentration in either Financial Services or General Finance. The concentration includes two Upper Division (3000- or 4000-level) Finance electives, one 4000-level Finance elective, and a Finance Concentration capstone (FIN 4950, Financial Strategies and Policies, for General Finance and FIN 4600, Securities Analysis and Portfolio Management, for Financial Services).

- FIN 3010 - Financial Markets and Institutions **Credits: 3**
- FIN 3150 - Personal Financial Planning **Credits: 3**
- FIN 3600 - Investments **Credits: 3**
- FIN 3850 - Intermediate Finance **Credits: 3**
- FIN 4200 - Financial Modeling with Spreadsheets **Credits: 3**

## Concentration Options (select one): 12-15 credits

### Banking Concentration: 15 credits

The Banking Concentration provides courses with a broad education in banking and finance, the banking industry, and related regulatory institutions. Our curriculum is driven with purpose to make you a well-rounded, objective, and analytical banking authority with the managerial skills that can help you achieve a long and lucrative career.

### Required Courses: 15 credits

- FIN 2700 - Introduction to Banking **Credits: 3**
- FIN 3500 - Management of Banking Operations **Credits: 3**
- FIN 4500 - Analysis of Financial Statements **Credits: 3**
- FIN 4620 - Risk Analysis for Financial Services Organizations **Credits: 3**
- FIN 3910 - Regulatory Environment of Banking **Credits: 3**

### Financial Services Concentration: 12 credits

In consultation with the Finance Department, students will complete three upper division Finance electives and FIN 4600, Securities Analysis and Portfolio Management, or FIN 4750, Seminar in Personal Financial Planning, (when offered). At least one Finance

elective must be a 4000-level course. Upper Division Finance internships approved for academic credit will come in as FIN 3980. Students interested in pursuing a financial services career should consider taking FIN 3420, Principles of Insurance; FIN 3450, Retirement Planning and Employee Benefits; and FIN 4400, Estate Planning.

### Required Course: 3 credits

- FIN 4600 - Security Analysis and Portfolio Management **Credits: 3**  
or
- FIN 4750 - Seminar in Personal Financial Planning **Credits: 3**

### Approved Electives: 9 credits

Finance electives include:

- FIN 3100 - International Money and Finance **Credits: 3**
- FIN 3320 - Entrepreneurial Finance **Credits: 3**
- FIN 3420 - Principles of Insurance **Credits: 3**
- FIN 3450 - Retirement Planning and Employee Benefits **Credits: 3**
- FIN 3800 - Real Estate Practice and Law **Credits: 3**
- FIN 3810 - Advanced Real Estate Practice and Law **Credits: 3**
- FIN 3980 - Internship in Finance **Credits: 1-15**
- FIN 4200 - Financial Modeling with Spreadsheets **Credits: 3**
- FIN 4400 - Estate Planning **Credits: 3**
- FIN 4500 - Analysis of Financial Statements **Credits: 3**
- FIN 4660 - Advanced Investment Management **Credits: 3**
- FIN 4700 - Special Topics in Finance **Credits: 3**
- FIN 4950 - Financial Strategies and Policies **Credits: 3**

### General Finance Concentration: 12 credits

In consultation with the Finance Department, students will complete three upper division Finance electives and FIN 4950, Financial Strategies and Policies. At least one Finance elective must be a 4000-level course. Upper Division Finance internships approved for academic credit will come in as FIN 3980.

### Required Course: 3 credits

- FIN 4950 - Financial Strategies and Policies **Credits: 3**

### Approved Electives: 9 credits

- FIN 3100 - International Money and Finance **Credits: 3**
- FIN 3320 - Entrepreneurial Finance **Credits: 3**

- FIN 3420 - Principles of Insurance **Credits: 3**
- FIN 3450 - Retirement Planning and Employee Benefits **Credits: 3**
- FIN 3800 - Real Estate Practice and Law **Credits: 3**
- FIN 3810 - Advanced Real Estate Practice and Law **Credits: 3**
- FIN 3980 - Internship in Finance **Credits: 1-15**
- FIN 4200 - Financial Modeling with Spreadsheets **Credits: 3**
- FIN 4400 - Estate Planning **Credits: 3**
- FIN 4500 - Analysis of Financial Statements **Credits: 3**
- FIN 4600 - Security Analysis and Portfolio Management **Credits: 3**
- FIN 4660 - Advanced Investment Management **Credits: 3**
- FIN 4700 - Special Topics in Finance **Credits: 3**
- FIN 4750 - Seminar in Personal Financial Planning **Credits: 3**
- FIN 4950 - Financial Strategies and Policies **Credits: 3**

## Senior Experience: 3 credits

- MGT 4950 - Strategic Management **Credits: 3** (this course is also required and counted in the Business Core)

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
College of Business Additional Requirements	7 credits
Business Core	45 credits
Major Requirements	15 credits
Concentration Selection	12-15 credits
Senior Experience	(counted in business core)
Unrestricted Electives	2-20 credits
<b>Total for Finance Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Financial Services Minor

This minor offers a focused education in the financial services area emphasizing a particular field within this discipline, such as personal financial planning, investments, and financial institutions.

The Department of Finance requires 60 credits (junior standing) prior to taking upper-division finance courses. A minimum grade of "C-" is required in all finance minor courses. Students should note that programs differ in the minimum grade required. At least 9 credits of finance courses must be completed in residency at MSU Denver to satisfy the requirements of the minor.

## Required Courses:

- ACC 2010 - Principles of Accounting I **Credits: 3**
- BUS 2250 - Personal Money Management **Credits: 3**  
or
- FIN 3150 - Personal Financial Planning **Credits: 3**
- FIN 3450 - Retirement Planning and Employee Benefits **Credits: 3**
- Upper-division electives\* **Credits: 9**

**Total for Financial Services Minor: 18 credits**

## Suggested Electives for Financial Services Minor:

- FIN 3010 - Financial Markets and Institutions **Credits: 3**
- FIN 3320 - Entrepreneurial Finance **Credits: 3**
- FIN 3420 - Principles of Insurance **Credits: 3**
- FIN 3600 - Investments **Credits: 3 \*\***
- FIN 3800 - Real Estate Practice and Law **Credits: 3**
- FIN 3810 - Advanced Real Estate Practice and Law **Credits: 3**
- FIN 4400 - Estate Planning **Credits: 3**
- FIN 4600 - Security Analysis and Portfolio Management **Credits: 3 \*\***
- MKT 3000 - Principles of Marketing **Credits: 3 \*\*\***
- MKT 3250 - Professional Selling **Credits: 3 \*\*\***
- MKT 3750 - Ethnic Representations in Marketing **Credits: 3 \*\*\***

## Notes:

\*Students should select three (3) elective courses in consultation with their Finance Department advisor.

\*\*FIN 3600 has a prerequisite of FIN 3300; FIN 4600 has FIN 3600 as a prerequisite.

\*\*\*Students can count only one of the following for the minor: MKT 3000, MKT 3250, or MKT 3750.

## General Finance Minor

This minor offers a broad-based education in general finance. A particular field may be emphasized within this discipline, such as investments, managerial finance, financial institutions, or international finance. A student desiring a strong emphasis should also consider the financial services minor.

For the general finance minor, the student must have completed ACC 2010 (or the equivalent) ECO 2010, ECO 2020, and MTH 1320 which may be applied to the student's General Studies or elective requirements as applicable. The Finance Department requires 60 credit hours (junior standing) prior to taking upperdivision finance courses. A minimum grade of "C-" is required in all finance minor courses. In order to meet the 18 credit hours requirement for a minor, a business major seeking a minor in finance will have FIN 3300 waived from the Business Core requirements. Students should note that programs differ in the minimum grade required. At least 9 hours of finance courses must be completed in residency at MSU Denver to satisfy the requirements of the minor.

### Required Courses:

- FIN 3010 - Financial Markets and Institutions **Credits: 3**
- FIN 3300 - Managerial Finance **Credits: 3**
- FIN 3600 - Investments **Credits: 3**
- Upper Division Electives\* **Credits: 9**

**Total for General Finance Minor: 18 credits**

*\*A student may select any courses in the finance program or curriculum provided they are approved by a Finance Department advisor.*

## Personal Financial Planning Certificate

Students must complete each course in the certificate program with a grade of "C" or better. The courses cannot be taken pass/fail.

### Required Courses:

- ACC 3090 - Income Tax I **Credits: 3**
- FIN 3150 - Personal Financial Planning **Credits: 3**
- FIN 3420 - Principles of Insurance **Credits: 3**
- FIN 3450 - Retirement Planning and Employee Benefits **Credits: 3**
- FIN 3600 - Investments **Credits: 3** \*
- FIN 4400 - Estate Planning **Credits: 3**

### Notes:

*\* This course has prerequisites. See catalog course description.*

Successful completion of these courses also meets the Certified Financial Planner (CFP®) Board of Standards education requirement to take the national Certified Financial Planner examination. For prerequisites and more information call the Finance Department, 303-615-0707.

## Property Management Minor

Students in the minor in Property Management will learn best practices in the management of residential and commercial property while navigating regulatory requirements.

A minimum grade of "C-" is required in all minor courses. At least 9 credits of courses in the minor must be completed in residency at MSU Denver.

### Required Courses

- FIN 3800 - Real Estate Practice and Law **Credits: 3**
- FIN 3810 - Advanced Real Estate Practice and Law **Credits: 3**
- REL 2200 - Real Estate Principles **Credits: 3**
- REL 3000 - Residential Property Management **Credits: 3**
- REL 3200 - Real Estate Market Analysis **Credits: 3**
- REL 3300 - Commercial Property Management and Leases **Credits: 3**
- REL 3400 - Real Estate Financial Modeling **Credits: 3**

**Total Credit Hours: 21**

## Real Estate Major, B.S.

[Department of Finance](#)

Available Program Format(s):

[College of Business](#)

### About the Program

The Real Estate Degree is a Bachelor of Science Program within the College of Business. Real Estate majors may either pursue a concentration in Property Management, Appraisal and Title, Real Estate Investment and Asset Management, or complete the major without a concentration by choosing from a set of courses in consultation with an advisor. The Real Estate Major, B.S., will lead to various licensure and certification options for our students. Students may add an optional International Business Concentration.

### Student Outcomes

Students will receive a broad education in real estate law, the technologies used in real estate transactions, and the management of risk in the real estate industry. Our curriculum is driven with purpose

to make you a well-rounded, objective, and analytical real-estate authority with the managerial skills that can help you achieve a long and lucrative career.

1. Demonstrate proficiency in core knowledge required of real-estate practitioners.
2. Demonstrate ability to organize, analyze and draw appropriate conclusions based on information about real estate.
3. Apply foundation knowledge and skills necessary to identify problems and generate feasible alternatives.
4. Demonstrate ability to apply information to recommend and justify solutions to problems in real-estate.

The College of Business B.S. programs, including Real Estate, share a common set of four cross-disciplinary core competencies, knowledge, and skills.

**Competency 1: Communication** - Business students will be able to:

- 1.1 - Communicate effectively through writing.
- 1.2 - Communicate effectively through speaking.

**Competency 2: Business Solutions** - Business students will be able to analyze a business situation and recommend effective solutions utilizing:

- 2.1 - appropriate technological frameworks.
- 2.2 - appropriate ethical frameworks.
- 2.3 - appropriate global frameworks.

**Competency 3: Technological Agility** - Business students will be able to:

- 3.1 - understand the impact of current technology on the business environment.

**Competency 4: Core Knowledge** - Business students will demonstrate competence in required business topics, including accounting, computer information systems, data analytics, economics, ethics, finance, marketing, management, and business law.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Science degree in Real Estate, a student must successfully complete 30 or more credit hours

of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL. A student must complete at least twelve (12) upper-division semester hours in Real Estate or Finance at MSU Denver.

- In order to graduate, students must maintain a 2.0 average inside the **Business Core**.
- A grade of "C" or better is required for each course in this program (i.e., major courses required or in concentration) to count toward the bachelor's degree.
- In order to graduate, a grade of "C-" or better is required in MGT 4950.
- Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major.)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1310 - Finite Mathematics for the Management and Social Sciences (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major).
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
  - **Recommended:** ECO 2020 - Principles of Microeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
- Global Diversity (0 or 3 credits\*\*)

**\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and**



humanities; historical; natural and physical sciences; or social and behavioral sciences.

## Ethnic Studies and Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## College of Business Additional

### Requirements: 7 credits

- COMM 1010 - Presentational Speaking **Credits: 3**  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**
- MTH 1110 - College Algebra for Calculus **Credits: 4**  
or
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits: 4**

## Business Core: 45 credits

All business majors require foundation course work in all significant areas of business theory and practice. The following courses are required for all students with a BS in a business discipline. Students must maintain a 2.0 average inside the **Business Core**.

- ACC 2010 - Principles of Accounting I **Credits: 3**
- ACC 2020 - Principles of Accounting II **Credits: 3**
- BUS 1850 - Introduction to Business **Credits: 3 \***
- BUS 1950 - Business Communication **Credits: 3**
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits: 3**  
or
- ACC 4440 - Accounting Ethics and Professionalism **Credits: 3**  
or  
Enrollment in the MPAcc 3+2 Program
- CIS 2010 - Foundations of Information Systems **Credits: 3**
- CIS 2320 - Descriptive and Predictive Analytics **Credits: 3**
- CIS 3320 - Prescriptive Analytics **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- FIN 3300 - Managerial Finance **Credits: 3**

- MKT 3000 - Principles of Marketing **Credits: 3**
- MGT 2210 - Legal Environment of Business I **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**
- MGT 4950 - Strategic Management **Credits: 3 \*\***

*\* Transfer students that transfer in 6 or more credits of business courses will not need to take BUS 1850 but may take any other College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.*

*\*\* "C-" or better must be earned in MGT 4950.*

## Required Courses: 18 credits

A minimum grade of "C" is required for courses in the major.

- CPM 1010 - Introduction to Construction Project Management **Credits: 3**
- FIN 3800 - Real Estate Practice and Law **Credits: 3**
- REL 2200 - Real Estate Principles **Credits: 3**
- REL 3200 - Real Estate Market Analysis **Credits: 3**
- REL 3400 - Real Estate Financial Modeling **Credits: 3**
- REL 4300 - Real Estate Finance and Investment **Credits: 3**

## Real Estate Approved Electives: 12 credits

A minimum grade of "C" is required for courses in the major.

- FIN 2700 - Introduction to Banking **Credits: 3**
- FIN 3010 - Financial Markets and Institutions **Credits: 3**
- FIN 3810 - Advanced Real Estate Practice and Law **Credits: 3**
- FIN 4810 - Affordable Housing Finance and Development **Credits: 3**
- MKT 3250 - Professional Selling **Credits: 3**
- REL 2400 - Introduction to Affordable Housing **Credits: 3**
- REL 3000 - Residential Property Management **Credits: 3**
- REL 3010 - Affordable Housing Property Management **Credits: 3**
- REL 3300 - Commercial Property Management and Leases **Credits: 3**
- REL 4200 - Appraisal Principles, Procedures, and Ethics **Credits: 3**
- REL 4400 - Principles and Issues in Real Estate Title and Title Insurance **Credits: 3**
- MGT 4550 - Project Management **Credits: 3**

## Senior Experience: 3 credits

- MGT 4950 - Strategic Management **Credits: 3** (this course is also required and counted in the Business Core)

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
College of Business Additional Requirements	7 credits
Business Core	45 credits
Major Requirements	18 credits
Real Estate Approved Electives	12 credits
Senior Experience	(counted in business core)
Unrestricted Electives	2-17 credits
<b>Total for the Real Estate Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

### *Real Estate Minor*

Students in the Real Estate minor will examine the business and legal environment of Real Estate.

A minimum grade of "C-" is required in all minor courses. At least 9 credits of courses in the minor must be completed in residency at MSU Denver.

### Required Courses

- FIN 3010 - Financial Markets and Institutions **Credits: 3**
- FIN 3800 - Real Estate Practice and Law **Credits: 3**
- FIN 3810 - Advanced Real Estate Practice and Law **Credits: 3**
- REL 2200 - Real Estate Principles **Credits: 3**
- REL 3000 - Residential Property Management **Credits: 3**  
or
- REL 3300 - Commercial Property Management and Leases **Credits: 3**
- REL 3400 - Real Estate Financial Modeling **Credits: 3**
- REL 4200 - Appraisal Principles, Procedures, and Ethics **Credits: 3**

Total Credits: 21

## Department of Management

Location: Administration Building, Suite 525

Phone: 303-615-0222

E-Mail:

Website: [Management Department Website](#)

### *Business Minor*

At least nine credit hours of the required courses for the general minor must be completed in residency at MSU Denver. A grade of "C-" or better is required for each course in this program to count toward the Bachelor's degree. Students earning a B.S. in a degree awarded by the College of Business, a B.A. in Entrepreneurship, or a B.A. in Global Business Studies may not minor in Business.

### Required Courses:

ACC 1010 - Fundamentals of Accounting **Credits: 3**  
or

ACC 2010 - Principles of Accounting I **Credits: 3**

CIS 2010 - Foundations of Information Systems **Credits: 3**

ECO 2020 - Principles of Microeconomics **Credits: 3**

FIN 2220 - Small Business Financing **Credits: 3**

or

FIN 3010 - Financial Markets and Institutions **Credits: 3**

MGT 3000 - Organizational Management **Credits: 3**

MKT 3000 - Principles of Marketing **Credits: 3**

**Minimum Total Hours Required for General Business Minor: 18**

### *Business Sustainability Minor*

The Business Sustainability Minor provides a foundation in business and entrepreneurship for non-business majors to help operationalize sustainable solutions that they have identified in their Major field of study. This Minor requires a total of 18 credit hours.

## Business Sustainability Minor Required Courses

These four courses are required for the Business Sustainability Minor.

- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits:** 3
- MGT 2500 - Creativity, Innovation, and Business Venturing **Credits:** 3
- MGT 3720 - The Conscious Business: Sustainable Business Strategies for the 21st Century **Credits:** 3
- MGT 3860 - Social Entrepreneurship **Credits:** 3

## Business Sustainability Minor Electives

Choose any two courses (6 credits) out of the electives listed below.

- CET 3320 - Environmental Impact Statements **Credits:** 3
- ECO 3450 - Environmental Economics **Credits:** 3
- ENV 3720 - Waste Management **Credits:** 3
- ENV 3730 - Environmental Risk Assessment **Credits:** 3
- ENV 3740 - Environmental Health **Credits:** 3
- GEG 1700 - Global Sustainability **Credits:** 3
- GEG 1910 - Global Water Concerns **Credits:** 3
- MGT 3250 - Colorado Water Law and Water Rights Administration **Credits:** 3
- MGT 3850 - Global Entrepreneurship **Credits:** 3
- MKT 3190 - Marketing for Social Good **Credits:** 3
- MTR 3100 - Air Pollution **Credits:** 3
- PSC 3230 - Environmental Politics **Credits:** 3
- SOC 3770 - Society and the Environment **Credits:** 3
- SSE 1040 - Life Cycle and Systems Engineering - An Introduction **Credits:** 3
- SSE 3500 - Humanitarian Engineering **Credits:** 3
- SSE 4200 - Sustainable Development Strategy **Credits:** 3
- HLDR 3010 - Sustainable Hospitality and Tourism **Credits:** 3
- RST 3905 - Farm to Table Sustainability **Credits:** 3

**Total: 18 Credits**

Required Courses: 12 credits

Elective Courses: 6 credits

## *Entrepreneurship Major, B.A.*

[Department of Management](#)

[College of Business](#)

Available Program Format(s): [In-Person](#)

## About the Program

The Entrepreneurship Major offers courses to learn concepts and tools that are required to start and manage own businesses in dynamic business environments.

## Student Outcomes

Students will be able to understand contexts and issues for managing own businesses and be ready to apply those understandings to businesses that they operate now or future.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Arts degree in Entrepreneurship, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL and a course number of 2000 or higher. A student must complete at least twelve (12) upper-division semester hours in business courses at MSU Denver.
- MSU Denver requires that students successfully complete thirty-nine (39) or more credit hours of upper division coursework.
- Students may take more than four entrepreneurship elective courses. Additional entrepreneurship courses will be counted as unrestricted general electives.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** Students may fulfill this requirement by taking a course listed in the College of Business Requirements such as

COMM 1010 - Presentational Speaking or  
COMM 1100 - Fundamentals of Oral  
Communication

- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** Students may fulfill this requirement by taking courses listed in the College of Business Requirements such as ECO 2010 - Principles of Macroeconomics and ECO 2020 - Principles of Microeconomics
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## College of Business Requirements: 12 credits

- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits:** 3
- COMM 1010 - Presentational Speaking **Credits:** 3  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits:** 3
- ECO 2010 - Principles of Macroeconomics **Credits:** 3
- ECO 2020 - Principles of Microeconomics **Credits:** 3

## Entrepreneurship Major Requirements: 48 credits

The Entrepreneurship Major provides students with the marketable skills needed to be successful entrepreneurs and pursue both an avocation and an occupation in some combination. The Entrepreneurship Major requirements consist of twelve required

courses (36 credit hours) and four approved entrepreneurship elective courses (12 credit hours). A minimum grade of "C-" or better is required in all entrepreneurship major courses.

## Required Courses: 36 credits

- ACC 3130 - Accounting for Entrepreneurs **Credits:** 3
- CIS 2010 - Foundations of Information Systems **Credits:** 3
- FIN 2220 - Small Business Financing **Credits:** 3
- BUS 1850 - Introduction to Business **Credits:** 3
- BUS 1950 - Business Communication **Credits:** 3
- MGT 2210 - Legal Environment of Business I **Credits:** 3
- MGT 2500 - Creativity, Innovation, and Business Venturing **Credits:** 3
- MGT 3000 - Organizational Management **Credits:** 3
- MGT 3020 - Entrepreneurship Feasibility and Analysis **Credits:** 3
- MGT 3850 - Global Entrepreneurship **Credits:** 3
- MGT 4420 - Entrepreneurial Business Planning **Credits:** 3
- MKT 3000 - Principles of Marketing **Credits:** 3

## Approved Entrepreneurship Electives: 12 credits

Select four courses from below:

- BUS 2250 - Personal Money Management **Credits:** 3
- MGT 3860 - Social Entrepreneurship **Credits:** 3  
or
- MKT 3190 - Marketing for Social Good **Credits:** 3
- MGT 3220 - Legal Environment of Business II **Credits:** 3
- MGT 3240 - Employment and Human Resource Law **Credits:** 3
- MGT 3260 - Managing Business Risk **Credits:** 3
- MGT 3530 - Human Resources Management **Credits:** 3
- MGT 3550 - Operations Management **Credits:** 3  
or
- MGT 4360 - Service Operations Management **Credits:** 3
- MGT 3980 - Internship in Management **Credits:** 1-15
- MGT 4050 - Supply Chain Management **Credits:** 3  
or
- MKT 3410 - Marketing Channels **Credits:** 3
- MGT 4550 - Project Management **Credits:** 3
- MGT 4850 - Organizational and Management Consulting **Credits:** 3
- MGT 4910 - Strategic Leadership **Credits:** 3
- MKT 3100 - Retail Marketing **Credits:** 3

- MKT 3110 - Advertising and Promotion Management **Credits: 3**
- MKT 3250 - Professional Selling **Credits: 3**
- MKT 3300 - Marketing of Services **Credits: 3**
- MKT 3310 - Consumer Behavior **Credits: 3**
- MKT 3910 - New Product Development **Credits: 3**
- MKT 4300 - Social Media Marketing **Credits: 3**

## Senior Experience: 3 credits

- MGT 4430 - Operationalizing a Small Business **Credits: 3**

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
College of Business Requirements	12 credits
Major Required Courses	36 credits
Major Electives	12 credits
Senior Experience	3 credits
Unrestricted Electives	21-33 credits
<b>Total for the Entrepreneurship Major, B.A.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Entrepreneurship Minor

The Entrepreneurship Minor provides a foundation in business and entrepreneurship for non-business majors that prepares them to start a business venture related to the area/discipline of their major course of study.

## Required Courses

- MGT 2500 - Creativity, Innovation, and Business Venturing **Credits: 3**
- MGT 3020 - Entrepreneurship Feasibility and Analysis **Credits: 3**
- MGT 4420 - Entrepreneurial Business Planning **Credits: 3**
- MKT 3000 - Principles of Marketing **Credits: 3**

CHOOSE ONE OF THE FOLLOWING:

- ACC 3130 - Accounting for Entrepreneurs **Credits: 3**  
OR
- FIN 2220 - Small Business Financing **Credits: 3**

**Subtotal: 15 credits**

## Elective Course

Plus 3 credit hours from approved entrepreneurship elective courses:

- MGT 2210 - Legal Environment of Business I **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**
- MGT 3850 - Global Entrepreneurship **Credits: 3**
- MGT 3860 - Social Entrepreneurship **Credits: 3**
- MGT 3980 - Internship in Management **Credits: 1-15**
- MGT 4430 - Operationalizing a Small Business **Credits: 3**
- MGT 4850 - Organizational and Management Consulting **Credits: 3**
- MKT 3100 - Retail Marketing **Credits: 3**
- MKT 3110 - Advertising and Promotion Management **Credits: 3**
- MKT 3190 - Marketing for Social Good **Credits: 3**
- MKT 3310 - Consumer Behavior **Credits: 3**
- MKT 3910 - New Product Development **Credits: 3**
- MKT 4300 - Social Media Marketing **Credits: 3**

**Subtotal: 3 credits**

**Total for Entrepreneurship Minor: 18 credits**

## Human Resource Management Major, B.S.

[Department of Management](#)

Available Program Format(s): [In-Person](#)

[College of Business](#)

## About the Program

People are a company's most important asset. Human Resource personnel play an important role in the recruitment, selection, retention, and training of employees to ensure a company has the best people. The program consists of required courses that build a conceptual foundation for developing a comprehensive human resource department in a company that will aid the company in developing a competitive advantage in the industry. In addition to acquiring knowledge about business functional areas and management, students will develop skills/knowledge that are necessary to be an effective human resource manager. The Human Resource Management degree helps prepare students wishing to pursue a career in the field of human resource management.

## Student Outcomes

Human Resource Management Students will demonstrate competence in the following areas:

- a. Employment Law
- b. Human Resource Management
- c. Organizational Behavior
- d. Performance Management and Rewards
- e. Employee Training and Development
- f. Employee Selection
- g. Strategic Human Resource Management

The College of Business B.S. programs, including Human Resource Management, share a common set of four cross-disciplinary core competencies, knowledge, and skills.

**Competency 1: Communication** - Business students will be able to:

- 1.1 - Communicate effectively through writing.
- 1.2 - Communicate effectively through speaking.

**Competency 2: Business Solutions** - Business students will be able to analyze a business situation and recommend effective solutions utilizing:

- 2.1 - appropriate technological frameworks.
- 2.2 - appropriate ethical frameworks.
- 2.3 - appropriate global frameworks.

**Competency 3: Technological Agility** - Business students will be able to:

- 3.1 - understand the impact of current technology on the business environment.

**Competency 4: Core Knowledge** - Business students will demonstrate competence in required business topics, including accounting, computer information systems, data analytics, economics, ethics, finance, marketing, management, and business law.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Science degree in Human Resource Management, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by

completing any business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL and a course number of 2000 or higher.

- In order to graduate, students must maintain a 2.0 average inside the **Business Core**.
- In order to graduate, a grade of "C-" or better is required for each major course to count toward the bachelor's degree.
- In order to graduate, a grade of "C-" or better is required in MGT 4950.
- Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major.)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1310 - Finite Mathematics for the Management and Social Sciences (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major).
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
  - **Recommended:** ECO 2020 - Principles of Microeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies and Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## College of Business Additional

### Requirements: 7 credits

- COMM 1010 - Presentational Speaking **Credits: 3**  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**
- MTH 1110 - College Algebra for Calculus **Credits: 4**  
or
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits: 4**

## Business Core: 45 credits

All business majors require foundation course work in all significant areas of business theory and practice. The following courses are required for all students with a BS in a business discipline. Students must maintain a 2.0 average inside the **Business Core**.

- ACC 2010 - Principles of Accounting I **Credits: 3**
- ACC 2020 - Principles of Accounting II **Credits: 3**
- BUS 1850 - Introduction to Business **Credits: 3 \***
- BUS 1950 - Business Communication **Credits: 3**
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits: 3**  
or
- ACC 4440 - Accounting Ethics and Professionalism **Credits: 3**  
or  
Enrollment in the MPAcc 3+2 Program
- CIS 2010 - Foundations of Information Systems **Credits: 3**
- CIS 2320 - Descriptive and Predictive Analytics **Credits: 3**
- CIS 3320 - Prescriptive Analytics **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- FIN 3300 - Managerial Finance **Credits: 3**
- MKT 3000 - Principles of Marketing **Credits: 3**
- MGT 2210 - Legal Environment of Business I **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**

- MGT 4950 - Strategic Management **Credits: 3 \*\***

*\* Transfer students that transfer in 6 or more credits of business courses will not need to take BUS 1850 but may take any other College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.*

*\*\* "C-" or better must be earned in MGT 4950.*

## Major Requirements: 18 credits

In order to graduate, a grade of "C-" or better is required for each major required course to count toward the bachelor's degree.

- MGT 3240 - Employment and Human Resource Law **Credits: 3**
- MGT 3530 - Human Resources Management **Credits: 3**
- MGT 4530 - Organizational Behavior **Credits: 3**
- MGT 4620 - Performance Management and Reward Systems **Credits: 3**
- MGT 4640 - Employee Training and Development **Credits: 3**
- MGT 4660 - Employee Selection **Credits: 3**

## Major Electives: 9 credits

In order to graduate, a grade of "C-" or better is required for each major elective course to count toward the bachelor's degree.

Select three of the following electives for 9 credit hours:

- MGT 3260 - Managing Business Risk **Credits: 3**
- MGT 3550 - Operations Management **Credits: 3**
- MGT 3980 - Internship in Management **Credits: 1-15**
- MGT 4550 - Project Management **Credits: 3**
- MGT 4830 - Workforce Social Justice **Credits: 3**
- MGT 4850 - Organizational and Management Consulting **Credits: 3**
- MGT 4910 - Strategic Leadership **Credits: 3**

## Senior Experience: 3 credits

- MGT 4950 - Strategic Management **Credits: 3** (this course is also required and counted in the Business Core)

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
College of Business Additional Requirements	7 credits



Business Core	45 credits
Major Requirements	18 credits
Major Electives	9 credits
Senior Experience	(counted in business core)
Unrestricted Electives	5-20 credits
<b>Total for the Human Resource Management Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## ***Human Resource Management Minor***

The Human Resource Management Minor provides non-Business majors an understanding of how to effectively maintain and enhance the organization's human resources policies, programs, and practices. Students will have the opportunity to develop the knowledge and skills necessary to hire, develop, and maintain positive relationships with others in today's increasingly diverse and dynamic work environment. (21 credit hours)

## **Required Courses**

- MGT 2210 - Legal Environment of Business I **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**
- MGT 3530 - Human Resources Management **Credits: 3**  
or
- HTE 3550 - Human Resources in Hospitality **Credits: 3**  
or
- HCM 3400 - Human Resources Management in Health Care **Credits: 3**
- MGT 3240 - Employment and Human Resource Law **Credits: 3**

**Subtotal: 12 credits**

## **Plus 9 Credit Hours from Approved Human Resource Management Elective Courses**

- MGT 3980 - Internship in Management **Credits: 1-15**
- MGT 4620 - Performance Management and Reward Systems **Credits: 3**

- MGT 4640 - Employee Training and Development **Credits: 3**
- MGT 4660 - Employee Selection **Credits: 3**
- MGT 4830 - Workforce Social Justice **Credits: 3 \***
- MGT 4850 - Organizational and Management Consulting **Credits: 3**
- MGT 4910 - Strategic Leadership **Credits: 3**

**Subtotal: 9 credits**

*\* Also approved as ESSJ and Senior Experience course*

**Total for Human Resource Management Minor: 21 credits**

## ***International Business Major, B.S.***

[Department of Management](#)

Available Program Format(s): [In-Person](#)

[College of Business](#)

## **About the Program**

The International Business Major offers courses to learn concepts and analytical tools that are required for international business operations. The Bachelor of Science in International Business prepares students with an understanding of global business and knowledge in a functional area of business. Upon graduation, students will be prepared to apply for job positions in companies that are engaged in international trade.

## **Student Outcomes**

International Business majors will demonstrate knowledge and competence in the areas of:

1. Global/International Economics
2. International Finance
3. Global Management
4. International Marketing

The College of Business B.S. programs, including International Business, share a common set of four cross-disciplinary core competencies, knowledge, and skills.

**Competency 1: Communication** - Business students will be able to:

- 1.1 - Communicate effectively through writing.
- 1.2 - Communicate effectively through speaking.

**Competency 2: Business Solutions** - Business students will be able to analyze a business situation and recommend effective solutions utilizing:



- 2.1 - appropriate technological frameworks.
- 2.2 - appropriate ethical frameworks.
- 2.3 - appropriate global frameworks.

**Competency 3: Technological Agility** - Business students will be able to:

- 3.1 - understand the impact of current technology on the business environment.

**Competency 4: Core Knowledge** - Business students will demonstrate competence in required business topics, including accounting, computer information systems, data analytics, economics, ethics, finance, marketing, management, and business law.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Science degree in International Business, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL and a course number of 2000 or higher. A student must complete at least 12 upper-division semester hours in International Business at MSU Denver.
- In order to graduate, students must maintain a 2.0 average inside the **Business Core**.
- In order to graduate, a grade of "C-" or better is required for each major course to count toward the bachelor's degree.
- In order to graduate, a grade of "C-" or better is required in MGT 4950.
- Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)

- **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major.)

- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1310 - Finite Mathematics for the Management and Social Sciences (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major).
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
  - **Recommended:** ECO 2020 - Principles of Microeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies and Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## College of Business Additional Requirements: 7 credits

- COMM 1010 - Presentational Speaking **Credits: 3**  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**
- MTH 1110 - College Algebra for Calculus **Credits: 4**  
or

- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits: 4**

## Business Core: 45 credits

All business majors require foundation course work in all significant areas of business theory and practice. The following courses are required for all students with a BS in a business discipline. Students must maintain a 2.0 average inside the **Business Core**.

- ACC 2010 - Principles of Accounting I **Credits: 3**
- ACC 2020 - Principles of Accounting II **Credits: 3**
- BUS 1850 - Introduction to Business **Credits: 3 \***
- BUS 1950 - Business Communication **Credits: 3**
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits: 3**  
or
- ACC 4440 - Accounting Ethics and Professionalism **Credits: 3**  
or  
Enrollment in the MPAcc 3+2 Program
- CIS 2010 - Foundations of Information Systems **Credits: 3**
- CIS 2320 - Descriptive and Predictive Analytics **Credits: 3**
- CIS 3320 - Prescriptive Analytics **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- FIN 3300 - Managerial Finance **Credits: 3**
- MKT 3000 - Principles of Marketing **Credits: 3**
- MGT 2210 - Legal Environment of Business I **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**
- MGT 4950 - Strategic Management **Credits: 3 \*\***

*\* Transfer students that transfer in 6 or more credits of business courses will not need to take BUS 1850 but may take any other College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.*

*\*\* "C-" or better must be earned in MGT 4950.*

## International Business Required Courses: 15 credits

A grade of C- or better is required for each course in this program (i.e., major courses required, additional requirements, and business focus area requirement) to count toward the bachelor's degree.

- ECO 3550 - Global Economics and International Trade **Credits: 3**
- FIN 3100 - International Money and Finance **Credits: 3**
- MGT 3820 - International Business **Credits: 3**
- MGT 4700 - Global Management **Credits: 3**

- MKT 3710 - International Marketing **Credits: 3**

## Additional Requirements: 3-5 credits

*Maximum of 3 credits of an international-related Internship may apply to the degree and internships require pre-approval. Select one of the following:*

- ACC 3980 - Internship in Accounting **Credits: 1-15**  
or
- CIS 3980 - Internship in Computer Information Systems **Credits: 1-15**  
or
- FIN 3980 - Internship in Finance **Credits: 1-15**  
or
- MGT 3980 - Internship in Management **Credits: 1-15**  
or
- MKT 3980 - Internship in Marketing **Credits: 1-15**  
or
- Approved business study abroad course **Credits: 3**  
or
- Foreign language course **Credits: 3-5**

## Business Focus Area Requirements: 15 credits

International Business majors are required to take a minimum of 15 credit hours of upper-division coursework within one of the eight business disciplines. Four upper-division courses should be selected from one of the following prefixes: ACC, BNK, CIS, ECO, FIN, MGT, MKT or REL.

## Senior Experience: 3 credits

- MGT 4950 - Strategic Management **Credits: 3** (this course is also required and counted in the Business Core)

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
College of Business Additional Requirements	7 credits
Business Core	45 credits
Major Required Courses	15 credits
Additional Requirement	3-5 credits

Business Focus Area	15 credits
Senior Experience	(counted in business core)
Unrestricted Electives	0-14 credits
<b>Total for the International Business Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Management Major, B.S.

[Department of Management](#)

Available Program Format(s): [Online, In-Person, Hybrid](#)

[College of Business](#)

### About the Program

The Management Major offers a general degree in Management which will provide the graduate knowledge and skills to manage and successfully lead a department, division, or company in the context of globalization. This degree prepares you for the challenges facing large and small institutions and gives you the tools to meet these challenges.

### Student Outcomes

Students who earn the B.S. in Management will demonstrate comprehension and competence in the areas of:

1. Employment Law
2. Entrepreneurship
3. Human Resources and Organizational Behavior
4. Operations Management
5. International Business

The College of Business B.S. programs, including Management, share a common set of four cross-disciplinary core competencies, knowledge, and skills.

**Competency 1: Communication** - Business students will be able to:

- 1.1 - Communicate effectively through writing.
- 1.2 - Communicate effectively through speaking.

**Competency 2: Business Solutions** - Business students will be able to analyze a business situation and recommend effective solutions utilizing:

- 2.1 - appropriate technological frameworks.
- 2.2 - appropriate ethical frameworks.
- 2.3 - appropriate global frameworks.

**Competency 3: Technological Agility** - Business students will be able to:

- 3.1 - understand the impact of current technology on the business environment.

**Competency 4: Core Knowledge** - Business students will demonstrate competence in required business topics, including accounting, computer information systems, data analytics, economics, ethics, finance, marketing, management, and business law.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Science degree in Management, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL and a course number of 2000 or higher. A student must complete at least 12 upper-division semester hours in Management at MSU Denver.
- In order to graduate, students must maintain a 2.0 average inside the **Business Core**.
- In order to graduate, a grade of "C-" or better is required for each major course (i.e., major required course) to count toward the bachelor's degree.
- In order to graduate, a grade of "C-" or better is required in MGT 4950.
- Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)

- **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major.)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1310 - Finite Mathematics for the Management and Social Sciences (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major).
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
  - **Recommended:** ECO 2020 - Principles of Microeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies and Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## College of Business Additional

### Requirements: 7 credits

- COMM 1010 - Presentational Speaking **Credits:** 3  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits:** 3
- MTH 1110 - College Algebra for Calculus **Credits:** 4  
or

- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits:** 4

## Business Core: 45 credits

All business majors require foundation course work in all significant areas of business theory and practice. The following courses are required for all students with a BS in a business discipline. Students must maintain a 2.0 average inside the **Business Core**.

- ACC 2010 - Principles of Accounting I **Credits:** 3
- ACC 2020 - Principles of Accounting II **Credits:** 3
- BUS 1850 - Introduction to Business **Credits:** 3 \*
- BUS 1950 - Business Communication **Credits:** 3
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits:** 3  
or
- ACC 4440 - Accounting Ethics and Professionalism **Credits:** 3  
or  
Enrollment in the MPAcc 3+2 Program
- CIS 2010 - Foundations of Information Systems **Credits:** 3
- CIS 2320 - Descriptive and Predictive Analytics **Credits:** 3
- CIS 3320 - Prescriptive Analytics **Credits:** 3
- ECO 2010 - Principles of Macroeconomics **Credits:** 3
- ECO 2020 - Principles of Microeconomics **Credits:** 3
- FIN 3300 - Managerial Finance **Credits:** 3
- MKT 3000 - Principles of Marketing **Credits:** 3
- MGT 2210 - Legal Environment of Business I **Credits:** 3
- MGT 3000 - Organizational Management **Credits:** 3
- MGT 4950 - Strategic Management **Credits:** 3 \*\*

*\* Transfer students that transfer in 6 or more credits of business courses will not need to take BUS 1850 but may take any other College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.*

*\*\* "C-" or better must be earned in MGT 4950.*

## Management Major Required Courses: 18 credits

A grade of "C-" or better is required for each course in this program (i. e., major courses required) to count toward the bachelor's degree.

- MGT 2500 - Creativity, Innovation, and Business Venturing **Credits:** 3
- MGT 3220 - Legal Environment of Business II **Credits:** 3
- MGT 3530 - Human Resources Management **Credits:** 3
- MGT 3550 - Operations Management **Credits:** 3
- MGT 3820 - International Business **Credits:** 3

- MGT 4530 - Organizational Behavior **Credits: 3**

## Major Electives: 9 credits

In addition to the six required courses (18 semester hours) for the Management Major, students must select three courses (or one nine credit course) from any MGT 3000- or 4000-level course, including, but not limited to:

- MGT 3230 - International Business Law **Credits: 3**
- MGT 3240 - Employment and Human Resource Law **Credits: 3**
- MGT 3250 - Colorado Water Law and Water Rights Administration **Credits: 3**
- MGT 3260 - Managing Business Risk **Credits: 3**
- MGT 3720 - The Conscious Business: Sustainable Business Strategies for the 21st Century **Credits: 3**
- MGT 3850 - Global Entrepreneurship **Credits: 3**
- MGT 3860 - Social Entrepreneurship **Credits: 3**
- MGT 3980 - Internship in Management **Credits: 1-15**
- MGT 4050 - Supply Chain Management **Credits: 3**
- MGT 4360 - Service Operations Management **Credits: 3**
- MGT 4420 - Entrepreneurial Business Planning **Credits: 3**
- MGT 4550 - Project Management **Credits: 3**
- MGT 4620 - Performance Management and Reward Systems **Credits: 3**
- MGT 4640 - Employee Training and Development **Credits: 3**
- MGT 4660 - Employee Selection **Credits: 3**
- MGT 4830 - Workforce Social Justice **Credits: 3**
- MGT 4850 - Organizational and Management Consulting **Credits: 3**
- MGT 4910 - Strategic Leadership **Credits: 3**

## Senior Experience: 3 credits

- MGT 4950 - Strategic Management **Credits: 3** (this course is also required and counted in the Business Core)

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
College of Business Additional Requirements	7 credits
Business Core	45 credits
Major Required Courses	18 credits

Major Electives	9 credits
Senior Experience	(counted in business core)
Unrestricted Electives	5-20 credits
<b>Total for the Management Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Management Minor

The management minor prepares individuals for the important tasks of supervising others, working in teams, and taking on additional responsibilities in their fields of interest. At least 9 credits of management courses in the minor must be completed in residency at MSU Denver.

## Required Courses:

- MGT 2500 - Creativity, Innovation, and Business Venturing **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**
- MGT 3530 - Human Resources Management **Credits: 3**
- MGT 3820 - International Business **Credits: 3**
- MGT 4530 - Organizational Behavior **Credits: 3**

Plus 3 hours from MGT courses, such as, but not limited to:

- MGT 2210 - Legal Environment of Business I **Credits: 3**
- MGT 3020 - Entrepreneurship Feasibility and Analysis **Credits: 3**
- MGT 3220 - Legal Environment of Business II **Credits: 3**
- MGT 3230 - International Business Law **Credits: 3**
- MGT 3240 - Employment and Human Resource Law **Credits: 3**
- MGT 3250 - Colorado Water Law and Water Rights Administration **Credits: 3**
- MGT 3260 - Managing Business Risk **Credits: 3**
- MGT 3550 - Operations Management **Credits: 3**
- MGT 3720 - The Conscious Business: Sustainable Business Strategies for the 21st Century **Credits: 3**
- MGT 3850 - Global Entrepreneurship **Credits: 3**
- MGT 3860 - Social Entrepreneurship **Credits: 3**
- MGT 3980 - Internship in Management **Credits: 1-15**
- MGT 4050 - Supply Chain Management **Credits: 3**
- MGT 4360 - Service Operations Management **Credits: 3**
- MGT 4420 - Entrepreneurial Business Planning **Credits: 3**
- MGT 4550 - Project Management **Credits: 3**

MGT 4620 - Performance Management and Reward Systems

**Credits:** 3

MGT 4640 - Employee Training and Development **Credits:** 3

MGT 4660 - Employee Selection **Credits:** 3

MGT 4830 - Workforce Social Justice **Credits:** 3 \*

MGT 4850 - Organizational and Management Consulting

**Credits:** 3

MGT 4910 - Strategic Leadership **Credits:** 3

## Total Hours Required for Management Minor: 18

### Notes:

*\*This course has been approved as a Senior Experience course.*

## Operations Management Major, B.S.

[Department of  
Management](#)

Available Program Format(s): [In-Person](#),  
[Hybrid](#)

[College of Business](#)

### About the Program

This Operations Management Major offers courses to learn concepts and analytical tools that are required to manage production of physical goods and provision of intangible services, and their delivery to customers along their supply chains. This includes the business contexts of manufacturing, service operations, and logistics. A grade of C- or better is required for each major course in this program to count toward the bachelor's degree.

### Student Outcomes

Operations Management Students will demonstrate competence in the following areas:

- Operations Management
- Supply Chain Management
- Service Operations Management
- Human Resource Management
- Project Management

The College of Business B.S. programs, including Operations Management, share a common set of four cross-disciplinary core competencies, knowledge, and skills.

**Competency 1: Communication** - Business students will be able to:

- 1.1 - Communicate effectively through writing.
- 1.2 - Communicate effectively through speaking.

**Competency 2: Business Solutions** - Business students will be able to analyze a business situation and recommend effective solutions utilizing:

- 2.1 - appropriate technological frameworks.
- 2.2 - appropriate ethical frameworks.
- 2.3 - appropriate global frameworks.

**Competency 3: Technological Agility** - Business students will be able to:

- 3.1 - understand the impact of current technology on the business environment.

**Competency 4: Core Knowledge** - Business students will demonstrate competence in required business topics, including accounting, computer information systems, data analytics, economics, ethics, finance, marketing, management, and business law.

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Science degree in Operations Management, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL and a course number of 2000 or higher.
- In order to graduate, students must maintain a 2.0 average inside the Business Core.
- In order to graduate, a grade of "C-" or better is required for each major course to count toward the bachelor's degree.
- In order to graduate, a grade of "C-" or better is required in MGT 4950.
- Students should note that programs differ in the minimum grade required.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major.)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1310 - Finite Mathematics for the Management and Social Sciences (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major).
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
  - **Recommended:** ECO 2020 - Principles of Microeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies and Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## College of Business Additional

### Requirements: 7 credits

- COMM 1010 - Presentational Speaking **Credits: 3**  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**

- MTH 1110 - College Algebra for Calculus **Credits: 4**  
or
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits: 4**

## Business Core: 45 credits

All business majors require foundation course work in all significant areas of business theory and practice. The following courses are required for all students with a BS in a business discipline. Students must maintain a 2.0 average inside the **Business Core**.

- ACC 2010 - Principles of Accounting I **Credits: 3**
- ACC 2020 - Principles of Accounting II **Credits: 3**
- BUS 1850 - Introduction to Business **Credits: 3 \***
- BUS 1950 - Business Communication **Credits: 3**
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits: 3**  
or
- ACC 4440 - Accounting Ethics and Professionalism **Credits: 3**  
or  
Enrollment in the MPAcc 3+2 Program
- CIS 2010 - Foundations of Information Systems **Credits: 3**
- CIS 2320 - Descriptive and Predictive Analytics **Credits: 3**
- CIS 3320 - Prescriptive Analytics **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- FIN 3300 - Managerial Finance **Credits: 3**
- MKT 3000 - Principles of Marketing **Credits: 3**
- MGT 2210 - Legal Environment of Business I **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**
- MGT 4950 - Strategic Management **Credits: 3 \*\***

*\* Transfer students that transfer in 6 or more credits of business courses will not need to take BUS 1850 but may take any other College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.*

*\*\* "C-" or better must be earned in MGT 4950.*

## Major Requirements: 21 credits

In order to graduate, a grade of "C-" or better is required for each major required course to count toward the bachelor's degree.

- MGT 3530 - Human Resources Management **Credits: 3**
- MGT 3550 - Operations Management **Credits: 3**
- MGT 4050 - Supply Chain Management **Credits: 3**
- MGT 4360 - Service Operations Management **Credits: 3**
- MGT 4550 - Project Management **Credits: 3**

- MKT 3300 - Marketing of Services **Credits: 3**  
or
- MKT 3610 - Business-to-Business Marketing **Credits: 3**
- MET 1310 - Principles of Quality Assurance **Credits: 3**

## Major Electives: 6 credits

In order to graduate, a grade of "C-" or better is required for each major elective course to count toward the bachelor's degree.

Select three of the following electives for 6 credit hours:

- CIS 3490 - Managing Business Information with Enterprise Systems **Credits: 3**
- CIS 4410 - Management Information Systems **Credits: 3**
- COMM 3070 - Interpersonal Negotiation **Credits: 3**
- MGT 3230 - International Business Law **Credits: 3**  
or
- MGT 3820 - International Business **Credits: 3**  
or
- MKT 3710 - International Marketing **Credits: 3**
- MGT 3260 - Managing Business Risk **Credits: 3**
- MGT 3980 - Internship in Management **Credits: 1-15**
- MGT 4830 - Workforce Social Justice **Credits: 3**
- MGT 4910 - Strategic Leadership **Credits: 3**
- MKT 3910 - New Product Development **Credits: 3**
- May include an approved study (studies) abroad.

## Senior Experience: 3 credits

- MGT 4950 - Strategic Management **Credits: 3** (this course is also required and counted in the Business Core)

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
College of Business Additional Requirements	7 credits
Business Core	45 credits
Major Requirements	21 credits
Major Electives	6 credits

Senior Experience	(counted in business core)
Unrestricted Electives	5-20 credits
<b>Total for the Operations Management Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Department of Marketing

Location: Administration Building, Suite 560

Phone: 303-615-1212

E-Mail: [MarketingDept@msudenver.edu](mailto:MarketingDept@msudenver.edu)

Website: [Marketing Department Website](#)

## Advertising and Promotion Minor

This minor is intended for students who have a non-marketing major and who want to add some study of business from a marketing perspective to their degree program. This minor introduces students to the elements of integrated marketing communications, such as advertising, sales promotions, personal selling, direct selling, and public relations. This minor will give students the opportunity to develop practical skills in advertising and promotional strategies.

Students must have a minimum cumulative GPA in the minor of 2.0. The courses cannot be taken pass/fail. Some courses in the minor have prerequisites which must be satisfied. At least nine credit hours of the required courses for this minor must be completed in residency at MSU Denver.

## Required Courses

*\*Courses may have prerequisites that must be satisfied.*

- MKT 3000 - Principles of Marketing **Credits: 3**
- MKT 3110 - Advertising and Promotion Management **Credits: 3**
- MKT 4110 - Brand Management **Credits: 3**
- MKT 4300 - Social Media Marketing **Credits: 3**

**Subtotal: 12 credits**

## Elective Courses



*\*Courses may have prerequisites that must be satisfied.*

- MKT 3190 - Marketing for Social Good **Credits:** 3
- MKT 3250 - Professional Selling **Credits:** 3
- MKT 3300 - Marketing of Services **Credits:** 3
- MKT 3310 - Consumer Behavior **Credits:** 3
- MKT 3710 - International Marketing **Credits:** 3
- MKT 3750 - Ethnic Representations in Marketing **Credits:** 3
- MKT 3980 - Internship in Marketing **Credits:** 1-15
- MKT 4200 - Content Marketing **Credits:** 3
- MKT 4520 - Student Marketing Agency **Credits:** 1-6

#### **Alternate Courses**

Students may take one of the following courses (3 credits) to replace one elective course.

- ART 1531 - Art Studio: 4D **Credits:** 3
- CDES 2222 - Fundamentals of Communication Design **Credits:** 3
- CDES 2602 - Interface Design and Development **Credits:** 3
- CDES 3625 - Animation Practices **Credits:** 3
- JMP 1000 - Introduction to Journalism and Mass Media **Credits:** 3
- JMP 2430 - Introduction to Media Production **Credits:** 3
- JMP 2700 - Fundamentals of Public Relations **Credits:** 3
- MKT 3200 - Digital Marketing Fundamentals **Credits:** 3

**Subtotal: 6 credits**

**Total for Minor: 18 credits**

## ***Business Administration Major, B.S.***

[Department of Marketing](#)

[College of Business](#)

Available Program Format(s): [In-Person](#), [Online](#)

### **About the Program**

The B.S. in Business Administration is a general business degree that enables students to build cross-functional expertise and prepares students to progress their career into multi-function business and leadership roles. The B.S. in Business Administration degree program enables students who do not need or desire deep expertise in one functional area an opportunity to create several areas of business focus which match their needs. Students will complete business core and additional requirements that provide a solid foundation across business functions. Within the major, students will select 21 credits of business coursework with a maximum of 9 credits in any one area of business, enabling students to select from a broad array of courses that support students' professional interests. Finally, students

complete the degree with a course on Strategic Leadership (MGT 4910). As part of the College of Business, the B.S. in Business Administration is accredited by AACSB.

### **Student Outcomes**

The purpose of the B.S. in Business Administration is to prepare graduates to progress their career into multi-function business and leadership roles.

**Goal 1:** Students will apply outcomes from self-assessments and knowledge from major coursework to clearly communicate career pathways.

**Goal 2:** Students will be able to integrate knowledge across business functions.

- 2.1 - Students will be able to integrate data from multiple functional areas to inform decision making.
- 2.2 - Students will demonstrate knowledge of how to interact with and manage teams in a range of functional areas.

The College of Business B.S. programs, including Business Administration, share a common set of four cross-disciplinary core competencies, knowledge, and skills.

**Competency 1: Communication** - Business students will be able to:

- 1.1 - Communicate effectively through writing.
- 1.2 - Communicate effectively through speaking.

**Competency 2: Business Solutions** - Business students will be able to analyze a business situation and recommend effective solutions utilizing:

- 2.1 - appropriate technological frameworks.
- 2.2 - appropriate ethical frameworks.
- 2.3 - appropriate global frameworks.

**Competency 3: Technological Agility** - Business students will be able to:

- 3.1 - understand the impact of current technology on the business environment.

**Competency 4: Core Knowledge** - Business students will demonstrate competence in required business topics, including accounting, computer information systems, data analytics, economics, ethics, finance, marketing, management, and business law.

## **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)

- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Science degree in Business Administration, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL and a course number of 2000 or higher. A student must complete at least 12 upper-division semester hours in Business Administration at MSU Denver.
- In order to graduate, students must maintain a 2.0 average inside the **Business Core** and also maintain a 2.0 inside **Business Administration Major required courses and elective courses**.
- In order to graduate, a grade of "C-" or better is required in MGT 4950.
- Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major.)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1310 - Finite Mathematics for the Management and Social Sciences (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major).
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics (required in the Business Core for Business students completing any Bachelor of Science major)

- **Recommended:** ECO 2020 - Principles of Microeconomics (required in the Business Core for Business students completing any Bachelor of Science major)

- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies and Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## College of Business Additional Requirements: 7 credits

- COMM 1010 - Presentational Speaking **Credits: 3**  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**
- MTH 1110 - College Algebra for Calculus **Credits: 4**  
or
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits: 4**

## Business Core: 45 credits

All business majors require foundation course work in all significant areas of business theory and practice. The following courses are required for all students with a BS in a business discipline. Students must maintain a 2.0 average inside the **Business Core**.

- ACC 2010 - Principles of Accounting I **Credits: 3**
- ACC 2020 - Principles of Accounting II **Credits: 3**
- BUS 1850 - Introduction to Business **Credits: 3 \***
- BUS 1950 - Business Communication **Credits: 3**
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits: 3**  
or
- ACC 4440 - Accounting Ethics and Professionalism **Credits: 3**  
or

## Enrollment in the MPAcc 3+2 Program

- CIS 2010 - Foundations of Information Systems **Credits: 3**
- CIS 2320 - Descriptive and Predictive Analytics **Credits: 3**
- CIS 3320 - Prescriptive Analytics **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- FIN 3300 - Managerial Finance **Credits: 3**
- MKT 3000 - Principles of Marketing **Credits: 3**
- MGT 2210 - Legal Environment of Business I **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**
- MGT 4950 - Strategic Management **Credits: 3** \*\*

*\* Transfer students that transfer in 6 or more credits of business courses will not need to take BUS 1850 but may take any other College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.*

*\*\* "C-" or better must be earned in MGT 4950.*

## Major Requirements: 24 credits

In order to graduate, students must maintain a 2.0 average inside Business Administration Major required courses.

Business Administration majors will select 21 upper-division credits (3000 or 4000 level) from College of Business prefix courses (ACC, BNK, BUS, CIS, ECO, FIN, MGT, MKT, REL); must be courses not already taken to fulfill other degree requirements. Students may take a maximum of 9 credits in any one prefix.

- MGT 4910 - Strategic Leadership **Credits: 3**

## Senior Experience: 3 credits

- MGT 4950 - Strategic Management **Credits: 3** (this course is also required and counted in the Business Core)

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
College of Business Additional Requirements	7 credits
Business Core	45 credits
Major Courses	24 credits

Senior Experience	(counted in business core)
Unrestricted Electives	8-23 credits
Total for the Business Administration Major, B.S.	120 credits

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Business Pathways Certificate

The Business Pathways Certificate is a career-focused introduction to the field of business. Introductory business classes provide students with a basic understanding of business functions and career paths, while introducing them to college-level coursework and a university environment. The program also incorporates internships, providing students with meaningful work experience. Students will earn this certificate by successfully completing three academic courses on business topics, a one-credit class on career management, and two semesters of internship.

Students must earn a "C" or better in each course for the certificate.

## Business Pathways Required Courses (10 credits)

Introductory business classes will provide students with a basic understanding of business functions and career paths, while introducing them to college-level coursework and a university environment.

- BUS 1850 - Introduction to Business **Credits: 3**
- CIS 1010 - Introduction to Computers **Credits: 3**
- BUS 1500 - Introduction to Career Management **Credits: 1**
- MKT 1260 - Customer Service **Credits: 3**  
or
- MGT 1260 - Foundations of Human Resources **Credits: 3**

## Area-specific Internship (6 credits)

Students must complete 3 credits of BUS 1980 Freshman Internship in Business, then choose one discipline-specific second semester internship, where the student can gain insights into possible career paths in their field of interest (select one: ACC, CIS, ECO, FIN, MGT, or MKT).

- BUS 1980 - Freshman Internship in Business **Credits: 1-6**
- ACC 1985 - Introduction to Business Careers Internship **Credits: 3**

- CIS 1985 - Introduction to Business Careers Internship **Credits: 3**
- ECO 1985 - Introduction to Business Careers Internship **Credits: 3**
- FIN 1985 - Introduction to Business Careers Internship **Credits: 3**
- MGT 1985 - Introduction to Business Careers Internship **Credits: 3**
- MKT 1985 - Introduction to Business Careers Internship **Credits: 3**

## ***Digital Marketing Certificate***

Digital marketing is a high-growth field focused on utilizing technology, systems, and creative content to develop relationships with current and potential customers. This certificate will enable students to create digital marketing strategies as well as gain practical skills and earn industry-relevant certifications.

Students will take 15 credits of required courses, plus 6 credits of elective courses, for a total of 21 credits for the certificate.

Students must have a minimum cumulative GPA in the certificate of 2.0. The courses cannot be taken pass/fail. Some courses in the certificate have prerequisites which must be satisfied. At least nine credit hours of the required courses for this certificate must be completed in residency at MSU Denver.

## **Required Courses**

Take each of the following (15 credits):

- MKT 3000 - Principles of Marketing **Credits: 3**
- MKT 3200 - Digital Marketing Fundamentals **Credits: 3**
- MKT 3310 - Consumer Behavior **Credits: 3**
- MKT 4200 - Content Marketing **Credits: 3**
- MKT 4540 - Digital Marketing Science **Credits: 3**

## **Electives**

Take six credits from the following:

- CDES 2222 - Fundamentals of Communication Design **Credits: 3**
- CDES 2602 - Interface Design and Development **Credits: 3**
- CDES 3625 - Animation Practices **Credits: 3**
- CIS 2110 - Structured Problem Solving in Information Systems **Credits: 3**
- JMP 2450 - Basic Media Production and Leadership **Credits: 3**
- MKT 3330 - Marketing and Sales Metrics **Credits: 3**
- MKT 3350 - Social Selling **Credits: 3**
- MKT 3980 - Internship in Marketing **Credits: 1-15**

- MKT 4110 - Brand Management **Credits: 3**
- MKT 4300 - Social Media Marketing **Credits: 3**

## ***Digital Marketing Minor***

Digital marketing is a high-growth field focused on utilizing technology, systems, and creative content to develop relationships with current and potential customers. This minor will enable students to create digital marketing strategies as well as gain practical skills and earn industry-relevant certifications.

Students will take 15 credits of required courses, plus a 3-credit elective, for a total of 18 credits for the minor.

Students must have a minimum cumulative GPA in the minor of 2.0. The courses cannot be taken pass/fail. Some courses in the minor have prerequisites which must be satisfied. At least nine credit hours of the required courses for this minor must be completed in residency at MSU Denver.

## **Required Courses**

Take each of the following courses (15 credits):

- MKT 3000 - Principles of Marketing **Credits: 3**
- MKT 3200 - Digital Marketing Fundamentals **Credits: 3**
- MKT 3310 - Consumer Behavior **Credits: 3**
- MKT 4200 - Content Marketing **Credits: 3**
- MKT 4540 - Digital Marketing Science **Credits: 3**

## **Electives**

Take three credits from the following:

- CDES 2222 - Fundamentals of Communication Design **Credits: 3**
- CDES 2602 - Interface Design and Development **Credits: 3**
- CDES 3625 - Animation Practices **Credits: 3**
- CIS 2110 - Structured Problem Solving in Information Systems **Credits: 3**
- JMP 2450 - Basic Media Production and Leadership **Credits: 3**
- MKT 3330 - Marketing and Sales Metrics **Credits: 3**
- MKT 3350 - Social Selling **Credits: 3**
- MKT 3980 - Internship in Marketing **Credits: 1-15**
- MKT 4110 - Brand Management **Credits: 3**
- MKT 4300 - Social Media Marketing **Credits: 3**

**Total Credit Hours: 18**

## ***Marketing Major, B.S.***

## About the Program

The B.S. in Marketing is a business degree that enables students to build a strong business background and marketing-specific expertise. The program prepares graduates for varied roles in marketing, spanning from brand building, digital marketing and social media, advertising and promotion, sales management, new product development, retailing and wholesaling, service management, and strategic planning, among many others, for organizations that include small local startups to major multinational corporations. Students will complete business core and additional requirements that provide a solid foundation across business functions. Within the major, students will complete required marketing coursework and choose 12 credits of upper-division marketing electives, enabling students to select from a broad array of courses that support students' professional interests. As part of the College of Business, the B.S. in Marketing is accredited by AACSB.

## Student Outcomes

Upon completion of the B.S. Marketing degree, students will be able to:

1. Identify and apply the stages of the consumer decision process.
2. Demonstrate an understanding of the elements of segmentation, targeting, and positioning as a means of making marketing decisions.
3. Identify and apply the principles of the marketing mix.
4. Demonstrate comprehension of marketing research design and processes.

The College of Business B.S. programs, including Marketing, share a common set of four cross-disciplinary core competencies, knowledge, and skills.

**Competency 1: Communication** - Business students will be able to:

- 1.1 - Communicate effectively through writing.
- 1.2 - Communicate effectively through speaking.

**Competency 2: Business Solutions** - Business students will be able to analyze a business situation and recommend effective solutions utilizing:

- 2.1 - appropriate technological frameworks.
- 2.2 - appropriate ethical frameworks.
- 2.3 - appropriate global frameworks.

**Competency 3: Technological Agility** - Business students will be able to:

- 3.1 - understand the impact of current technology on the business environment.

**Competency 4: Core Knowledge** - Business students will demonstrate competence in required business topics, including accounting, computer information systems, data analytics, economics, ethics, finance, marketing, management, and business law.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Science degree in Marketing, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL and a course number of 2000 or higher. A student must complete at least twelve (12) upper-division semester hours in Marketing at MSU Denver.
- In order to graduate, students must maintain a 2.0 average inside the **Business Core**.
- A grade of "C-" or better is required for each course in this program (i.e., major courses required) to count toward the bachelor's degree.
- In order to graduate, a grade of "C-" or better is required in MGT 4950.
- Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major.)

- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1310 - Finite Mathematics for the Management and Social Sciences (one of these courses is required in the College of Business Additional Requirements for Business students completing any Bachelor of Science major).
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
  - **Recommended:** ECO 2020 - Principles of Microeconomics (required in the Business Core for Business students completing any Bachelor of Science major)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies and Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## College of Business Additional Requirements: 7 credits

- COMM 1010 - Presentational Speaking **Credits: 3**  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**
- MTH 1110 - College Algebra for Calculus **Credits: 4**  
or
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits: 4**

## Business Core: 45 credits

All business majors require foundation course work in all significant areas of business theory and practice. The following courses are required for all students with a BS in a business discipline. Students must maintain a 2.0 average inside the **Business Core**.

- ACC 2010 - Principles of Accounting I **Credits: 3**
- ACC 2020 - Principles of Accounting II **Credits: 3**
- BUS 1850 - Introduction to Business **Credits: 3 \***
- BUS 1950 - Business Communication **Credits: 3**
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits: 3**  
or
- ACC 4440 - Accounting Ethics and Professionalism **Credits: 3**  
or  
Enrollment in the MPAcc 3+2 Program
- CIS 2010 - Foundations of Information Systems **Credits: 3**
- CIS 2320 - Descriptive and Predictive Analytics **Credits: 3**
- CIS 3320 - Prescriptive Analytics **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- FIN 3300 - Managerial Finance **Credits: 3**
- MKT 3000 - Principles of Marketing **Credits: 3**
- MGT 2210 - Legal Environment of Business I **Credits: 3**
- MGT 3000 - Organizational Management **Credits: 3**
- MGT 4950 - Strategic Management **Credits: 3 \*\***

*\* Transfer students that transfer in 6 or more credits of business courses will not need to take BUS 1850 but may take any other College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.*

*\*\* "C-" or better must be earned in MGT 4950.*

## Marketing Major Requirements: 27 credits

A grade of "C-" or better is required for each course in this program (i.e., major courses required) to count toward the bachelor's degree.

- MKT 2250 - Introduction to Sales **Credits: 3**  
or
- MKT 3250 - Professional Selling **Credits: 3**  
or
- MKT 3200 - Digital Marketing Fundamentals **Credits: 3**
- MKT 3010 - Marketing Research and Insights **Credits: 3**
- MKT 3310 - Consumer Behavior **Credits: 3**
- MKT 3710 - International Marketing **Credits: 3**
- MKT 4560 - Marketing Analysis and Strategy **Credits: 3**
- Upper-division Marketing Electives: any 3000 or 4000 level MKT courses not listed in the Business Core or Major Requirements **Credits: 12**

## Senior Experience: 3 credits

- MGT 4950 - Strategic Management **Credits: 3** (this course is also required and counted in the Business Core)

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
College of Business Additional Requirements	6-7 credits
Business Core	45 credits
Major Requirements	24 credits
Senior Experience	(counted in business core)
Unrestricted Electives	5-20 credits
<b>Total for the Marketing Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Marketing Minor

A minor in Marketing gives students a broad set of skills and knowledge that can be applied in any marketing setting.

Students must have a minimum cumulative GPA in the minor of 2.0. The courses cannot be taken pass/fail. Some courses in the minor have prerequisites which must be satisfied. At least nine credit hours of the required courses for this minor must be completed in residency at MSU Denver.

## Required Courses

- BUS 1950 - Business Communication **Credits: 3**
- MKT 3000 - Principles of Marketing **Credits: 3**
- MKT 3310 - Consumer Behavior **Credits: 3**
- 3 elective credits of any course with the MKT prefix
- 3 elective credits of any upper division course (3000 or 4000 level) with the MKT prefix
- 3 elective credits of any 4000-level course with the MKT prefix

## Total Semester Hours Required for Marketing Minor: 18

## Professional Selling Major, B.A.

[Department of Marketing](#)

[College of Business](#)

Available Program Format(s): [Online, In-Person, Hybrid](#)

## About the Program

The B.A. in Professional Selling is a specialized curriculum designed to equip students with the necessary skills to launch careers in sales. The program emphasizes the professional selling process, the importance of trust and relationships, value creation and communication, sales enablement technology, and what to expect from a career. In addition to sales-specific coursework, students will complete business courses and additional requirements that provide a background across business functions. The major offers flexibility for students to apply elective credits to a certificate or minor to specialize in an area of sales. The Center for Professional Selling is recognized as a "Top University for Sales Education" by the Sales Education Foundation and is accredited as a full member by the University Sales Center Alliance.

## Student Outcomes

Upon completion of the Professional Selling Major, B.A., students will be able to:

- Assess a sales opportunity by asking questions
- Develop appropriate responses to buyer objections
- Propose next steps to advance the close

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- To earn a Bachelor of Arts degree in Professional Selling, a student must successfully complete 30 or more credit hours of business coursework at MSU Denver. This 30-hour residency requirement can be met by completing any

business courses with the prefix ACC, ACCM, BNK, BUS, CIS, ECO, FIN, MGT, MKT, and REL. A student must complete at least twelve (12) upper-division semester hours in Marketing at MSU Denver.

- A grade point average of 2.0 or better is required for each course in this program (i.e., Professional Selling major requirements and electives) to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Recommended:** COMM 1010 - Presentational Speaking or COMM 1100 - Fundamentals of Oral Communication (one of these courses required in the prerequisites section)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1210 - Introduction to Statistics\* or MTH 1310 - Finite Mathematics for the Management and Social Sciences\* (one of these courses required in the prerequisites section)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2010 - Principles of Macroeconomics and ECO 2020 - Principles of Microeconomics (these courses required in the prerequisites section)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Prerequisites: 13 credits

- COMM 1010 - Presentational Speaking **Credits:** 3  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits:** 3
- ECO 2010 - Principles of Macroeconomics **Credits:** 3
- ECO 2020 - Principles of Microeconomics **Credits:** 3
- MTH 1210 - Introduction to Statistics **Credits:** 4  
or
- MTH 1310 - Finite Mathematics for the Management and Social Sciences **Credits:** 4

*\* MTH 1110 or MTH 1400 is acceptable for transfer students or students changing their major. Consult with the Department of Mathematics and Statistics on substitutions.*

## Professional Selling Major Requirements: 48 credits

A grade point average of 2.0 or better is required for all courses in the Professional Selling Major to count toward the bachelor's degree.

Students should note that programs differ in the minimum grade required.

- ACC 1010 - Fundamentals of Accounting **Credits:** 3  
or
- ACC 2010 - Principles of Accounting I **Credits:** 3
- BUS 1850 - Introduction to Business **Credits:** 3 \*
- BUS 1950 - Business Communication **Credits:** 3
- BUS 3040 - Global Corporate Social Responsibility and Sustainability **Credits:** 3
- CIS 2010 - Foundations of Information Systems **Credits:** 3
- FIN 3150 - Personal Financial Planning **Credits:** 3
- MGT 2210 - Legal Environment of Business I **Credits:** 3
- MGT 3000 - Organizational Management **Credits:** 3
- MKT 2250 - Introduction to Sales **Credits:** 3
- MKT 3000 - Principles of Marketing **Credits:** 3
- MKT 3160 - Sales Leadership **Credits:** 3
- MKT 3250 - Professional Selling **Credits:** 3
- MKT 3320 - Inside Sales **Credits:** 3
- MKT 3330 - Marketing and Sales Metrics **Credits:** 3
- MKT 3350 - Social Selling **Credits:** 3
- MKT 3750 - Ethnic Representations in Marketing **Credits:** 3

*\* Transfer students that transfer in 6 or more credits of business courses will not need to take BUS 1850 but may*



*take any other College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.*

## Professional Selling Elective Requirements: 12 credits

A grade point average of 2.0 or better is required for all courses in the Professional Selling Electives to count toward the bachelor's degree.

Twelve credit hours of any upper division MKT prefix courses and/or courses from the approved list:

- MKT 3000-4999 Upper Division Marketing Courses
- MKT 1260 - Customer Service **Credits: 3**
- COMM 3010 - Business and Professional Speaking **Credits: 3**
- MGT 3530 - Human Resources Management **Credits: 3**
- MGT 4050 - Supply Chain Management **Credits: 3**
- MGT 4620 - Performance Management and Reward Systems **Credits: 3**
- MGT 4640 - Employee Training and Development **Credits: 3**

## Senior Experience: 3 credits

- MKT 4250 - Advanced Selling **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Prerequisite Courses	13 credits
Major Requirements	48 credits
Major Electives	12 credits
Senior Experience	3 credits
Unrestricted Electives	8-23 credits
<b>Total for the Professional Selling Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Sales Certificate

The Sales Certificate offers marketing majors, students of all other majors and returning students (seeking professional/continued education) an opportunity to add a sales component to their degree program.

An internship is recommended for students with limited sales experience. Twelve credits of upper-division, marketing courses are required; twelve credits must be completed at MSU Denver.

## Required Courses

- MKT 3000 - Principles of Marketing **Credits: 3**
- MKT 3160 - Sales Leadership **Credits: 3**
- MKT 3250 - Professional Selling **Credits: 3**
- MKT 4250 - Advanced Selling **Credits: 3**

## Elective Courses

- MKT 1260 - Customer Service **Credits: 3**
- MKT 2250 - Introduction to Sales **Credits: 3**
- MKT 3300 - Marketing of Services **Credits: 3**
- MKT 3320 - Inside Sales **Credits: 3**
- MKT 3330 - Marketing and Sales Metrics **Credits: 3**
- MKT 3350 - Social Selling **Credits: 3**
- MKT 3610 - Business-to-Business Marketing **Credits: 3**
- MKT 3750 - Ethnic Representations in Marketing **Credits: 3**
- MKT 3981 - Internship in Sales **Credits: 1-15**

**Subtotal: 6 credits**

**Total Credits for the Sales Certificate: 18**

## Sales Minor

The sales minor is a specialized curriculum designed to equip students with the necessary skills to launch careers in sales. The program emphasizes the professional selling process, the importance of trust and relationships, value creation and communication, sales enablement technology, and what to expect from a career. The minor is for both business and non-business majors (except Professional Selling and Marketing).

Students will take four 3-credit required courses, plus two 3-credit electives, for a total of 18 credits for the minor.

Students must have a minimum cumulative GPA in the minor of 2.0.

The courses cannot be taken pass/fail. Some courses in the minor have prerequisites which must be satisfied. At least nine credit hours of

the required courses for this minor must be completed in residency at MSU Denver.

An internship is recommended for students with limited sales experience. Twelve credits of upper-division, marketing courses are required; twelve credits must be completed at MSU Denver.

## Required Courses

- MKT 3000 - Principles of Marketing **Credits:** 3
- MKT 3160 - Sales Leadership **Credits:** 3
- MKT 3250 - Professional Selling **Credits:** 3
- MKT 4250 - Advanced Selling **Credits:** 3

**Subtotal: 12 credits**

## Elective Courses

- MKT 1260 - Customer Service **Credits:** 3
- MKT 2250 - Introduction to Sales **Credits:** 3
- MKT 3300 - Marketing of Services **Credits:** 3
- MKT 3320 - Inside Sales **Credits:** 3
- MKT 3330 - Marketing and Sales Metrics **Credits:** 3
- MKT 3350 - Social Selling **Credits:** 3
- MKT 3610 - Business-to-Business Marketing **Credits:** 3
- MKT 3750 - Ethnic Representations in Marketing **Credits:** 3
- MKT 3981 - Internship in Sales **Credits:** 1-15

**Subtotal: 6 credits**

**Total for Sales Minor: 18 credits**

# College of Health and Human Sciences

## Mission

The College of Health and Human Sciences embraces inclusivity and an orientation to lifelong learning to prepare diverse students for interculturally competent practice, research, and leadership in their disciplines. Through collaboration and engagement with the community and one another, faculty, staff, and students lead transformative and justice-oriented endeavors to secure the health and well-being of people and their communities.

## Academic Departments

- [Department of Criminal Justice and Criminology](#)
- [Department of Exercise and Sport Sciences](#)
- [Department of Health Professions](#)
- [Department of Human Services and Counseling](#)
- [Department of Nursing](#)
- [Department of Nutrition](#)
- [Department of Social Work](#)
- [Department of Speech, Language, Hearing Sciences](#)

## Institutes

- [Health Institute](#)

## Department of Criminal Justice and Criminology

Location: Administration Building, Suite 310 (beginning October 2023)

Phone: 303-615-0525

E-Mail: [creddin2@msudenver.edu](mailto:creddin2@msudenver.edu)

Website: [Criminal Justice and Criminology Department Website](#)

## *Criminal Justice and Criminology Major, B.S.*

[Department of Criminal Justice and Criminology](#)

[College of Health and Human Sciences](#)

Available Program Format(s): [In-Person](#), [Online](#), [Hybrid](#)

## About the Program

The Bachelor of Science in Criminal Justice and Criminology offers an academic degree with a foundation in the liberal arts and social sciences. The mission of the program is to engage students in the scientific study of crime, criminality, other forms of social deviance, and the official response to crime by law enforcement, the court systems, and correctional systems. To that end, the department seeks to prepare students for criminal justice careers or post graduate work as liberally educated, intellectually mature, ethically aware, and culturally sensitive people. Recognizing that many students have completed coursework at the community college and already work in the criminal justice field, the department structures its curriculum to assist transfer students and adult working students. The department engages in Statewide Transfer Articulation Agreements with a number community colleges through the Colorado Department of Higher Education.

## Student Outcomes

The learning outcomes for the program are as follows:

1. Demonstrate proficiency in law enforcement through exhibiting a fundamental understanding of history, theory, practice and legal environment, police organization, discretion, and subculture.
2. Demonstrate proficiency in corrections through exhibiting a fundamental understanding of the development of correctional philosophy, incarceration, diversions, community-based corrections, and treatment of offenders.
3. Demonstrate proficiency in law adjudication through exhibiting a fundamental understanding of criminal law, criminal procedures, prosecution, defense, as well as court procedures and decision-making.
4. Demonstrate proficiency in criminology theory through exhibiting a fundamental understanding of the nature and causes of crime, social control mechanisms, typologies, offenders, and victims.
5. Demonstrate proficiency in research and analytic methods through exhibiting a fundamental understanding of quantitative (including statistics) and qualitative methods for conducting and analyzing criminal justice research.
6. Demonstrate proficiency in written and oral communication to a variety of audiences.
7. Be able to employ ethical perspectives and critical thinking in applying their newly acquired knowledge base to related problems and changing fact situations.
8. Be able to identify the effects of the criminal justice system on the lives of individuals and communities, as well as how criminal justice practitioners face the challenges of diversity in a free society.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Ancillary Course: 3 credits

- CJC 1010 - Introduction to the Criminal Justice System **Credits: 3**

## Tier I: Core Courses: 18 credits

- CJC 1450 - Introduction to Corrections **Credits: 3**
- CJC 2020 - Research Methods and Basic Statistics for Criminal Justice Professionals **Credits: 3**
- CJC 2050 - American Judicial System **Credits: 3**
- CJC 2210 - American Policing **Credits: 3**
- CJC 3400 - Criminological Theories **Credits: 3**
- CJC 3410 - Criminal Justice and the Social Structure **Credits: 3**

## Tier II: Area Electives: 15 credits

### Police (Choose one):

- CJC 3800 - Federal Law Enforcement **Credits: 3**
- CJC 4250 - Community Policing **Credits: 3**

### Courts/Law (Choose one):

- CJC 2100 - Criminal Law **Credits: 3**
- CJC 3110 - Constitutional Issues in Criminal Procedure and Evidence **Credits: 3**

### Corrections (Choose one):

- CJC 3290 - Probation and Parole **Credits: 3**
- CJC 3470 - Punishment and Society **Credits: 3**

### Administration of Justice (Choose two):

- CJC 3130 - Victimology **Credits: 3**
- CJC 3350 - Juvenile Justice and Delinquency **Credits: 3**
- CJC 4430 - Comparative Criminal Justice **Credits: 3**
- CJC 4650 - Ethics for the Criminal Justice Professional **Credits: 3**

## Tier III: CJC General Electives: 9 credits

An additional nine hours of CJC general elective credits are required. Elective courses can include any CJC course, including Tier II electives that were not previously taken. Additionally, up to six internship credits may apply here. At least six of the nine CJC general elective credits must be upper division (3000/4000 level).

## Senior Experience: 3 credits

- CJC 4700 - Capstone Seminar in Criminal Justice and Criminology **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
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ESSJ Requirement	0-3 credits
Ancillary Course	3 credits
Major Requirements	33 credits
Major Electives	9 credits
Senior Experience	3 credits
Unrestricted Electives	36-42 credits
<b>Total for Criminal Justice and Criminology Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## ***Criminal Justice and Criminology Minor***

A grade of "C" or better is required for each course in this program to count toward a minor in Criminal Justice and Criminology. Students should note that programs differ in the minimum grade required.

Total required for minor: 21 credits

## **Required Courses**

- CJC 1010 - Introduction to the Criminal Justice System **Credits: 3**
- CJC 3400 - Criminological Theories **Credits: 3**

## **Required Courses**

Police (Choose One)

- CJC 3800 - Federal Law Enforcement **Credits: 3**
- CJC 4250 - Community Policing **Credits: 3**

Courts/Law (Choose One)

- CJC 2100 - Criminal Law **Credits: 3**
- CJC 3110 - Constitutional Issues in Criminal Procedure and Evidence **Credits: 3**

Corrections (Choose One)

- CJC 3290 - Probation and Parole **Credits: 3**
- CJC 3470 - Punishment and Society **Credits: 3**

Other Electives (Choose Two)

- CJC 3130 - Victimology **Credits: 3**
- CJC 3350 - Juvenile Justice and Delinquency **Credits: 3**

- CJC 3410 - Criminal Justice and the Social Structure **Credits: 3**
- CJC 4430 - Comparative Criminal Justice **Credits: 3**
- CJC 4650 - Ethics for the Criminal Justice Professional **Credits: 3**
- CYB 2001 - Cyber Laws and Regulations **Credits: 3**

## ***Cybersecurity Major, B.S.***

[Department of Criminal Justice and Criminology](#)

[College of Health and Human Sciences](#)

Available Program  
Format(s): [In-Person](#)

## **About the Program**

The Bachelor of Sciences in Cybersecurity (CYB) is an interdisciplinary major jointly offered by the Departments of Criminal Justice and Criminology, Computer Information Systems and Business Analytics, and Computer Sciences. The B.S. in Cybersecurity is housed in and administered by the Department of Criminal Justice and Criminology. The B.S. in Cybersecurity prepares students with the knowledge and skills necessary to investigate computer crime, properly seize and recover computer evidence, and prevent cybercrimes as well as prosecute and punish cyber criminals.

## **Student Outcomes**

1. Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member, or leader, of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

## **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)

- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1112 - College Algebra Through Modeling
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** CJC 1010 - Introduction to the Criminal Justice System
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Cybersecurity Major Coursework Requirements: 54 credits

## CYB Required Courses: 9 credits

- CYB 2001 - Cyber Laws and Regulations **Credits: 3**
- CYB 2500 - Criminal Investigation **Credits: 3**
- CYB Elective (Choose from any CYB Elective) **Credits: 3**

## CJC Required Courses: 9 credits

- CJC 3210 - White-Collar Crime **Credits: 3**
- CJC 3420 - Organized Crime **Credits: 3**
- CJC 3800 - Federal Law Enforcement **Credits: 3**

## CIS Required Courses: 18 credits

- CIS 2010 - Foundations of Information Systems **Credits: 3**
- CIS 2110 - Structured Problem Solving in Information Systems **Credits: 3**
- CIS 3230 - Telecommunication Systems and Networking **Credits: 3**
- CIS 3500 - Information Systems Security **Credits: 3**
- CIS 4500 - Information Systems Security Tools and Techniques **Credits: 3**
- CIS 4550 - Information Systems Security Management and Information Assurance **Credits: 3**

## CS Required Courses: 18 credits

- CSS 2751 - Principles of Cybersecurity **Credits: 3**
- CSS 2752 - Information Assurance **Credits: 3**
- CSS 2753 - Network Security **Credits: 3**
- CSS 2754 - Host Security **Credits: 3**
- CSS 3751 - Application Security **Credits: 3**
- CSS 3752 - Computer Forensics **Credits: 3**

## Cyber Math Courses: 7 credits

- MTH 1210 - Introduction to Statistics **Credits: 4** and
- Any discrete math course (3 credit hours) as approved by cybersecurity faculty.

## Senior Experience: 3 credits

- CYB 4990 - Capstone Seminar in Cybersecurity **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits

Major Requirements	54 credits
Cyber Math Requirements	7 credits
Senior Experience	3 credits
Unrestricted Electives	20-26 credits
<b>Total for the Cybersecurity Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Department of Exercise and Sport Sciences

Location: Physical Education/Event Center (PE) 217

Phone: 303-615-1818

E-Mail: [hps@msudenver.edu](mailto:hps@msudenver.edu)

Website: [Exercise and Sport Sciences Department Website](#)

### *Exercise Science Major, B.S.*

[Department of Exercise and Sport Sciences](#)

[College of Health and Human Sciences](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

This major is designed for students interested in the fitness and exercise science professions. Examples of professions in the fitness and exercise science field include: cardiac and pulmonary rehabilitation, physical medicine clinics, research, public and private industry wellness programs, worksite health promotion, recreation center wellness, strength and conditioning, and personal training for general and special populations.

Students who are interested in careers in exercise physiology, athletic training, physical therapy, occupational therapy, or as a physician's assistant will find that the exercise science curriculum provides a solid academic foundation and includes many required prerequisites for those programs.

Exercise Science students must satisfy the General Studies, Ethnic Studies & Social Justice, Global Diversity, and major requirements described below.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- Students who are pursuing a Bachelor of Science Degree in Exercise Science (ES) are encouraged to complete a professional certification prior to graduation. The certification must come from an NCCA Accredited certifying body and be complimentary to the students career goals. Two suggested certifications are: 1) American College of Sports Medicine - Certified Exercise Physiologist and 2) National Strength and Conditioning Associations - Certified Strength and Conditioning Specialist. The ES curriculum is designed to prepare students for those certifications.
- A total of 120 semester hours are required for graduation.
- A grade of "C" (73%) or better is required for all major courses and any associated prerequisite courses to count toward the Bachelors of Science degree in Exercise Science. Students should note that programs differ in the minimum grade required.
- Students must have at least a major GPA of 2.75 and completed all Exercise Science major courses to be eligible for an internship.
- Students may opt to declare a minor as part of their program.
- The department recommends that students take ESS 2060 - Emergency Rescue/First Responder & CPR or be able to verify an equivalent certification.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)

- **Recommended:** Students may fulfill this requirement by taking courses that required for the major such as: BIO 1080 - General Biology I/ BIO 1090 - General Biology Laboratory I, and NUT 2040 - Introduction to Nutrition.
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ITP 1500 - Dynamics of Health, NUT 3101 - Body Image: Concepts and Approaches, NUT 3350 - Global Nutrition and Health, SM 2730 - Sport in Society
- Global Diversity (0 or 3 credits)\*\*

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.
  - **Recommended Courses:** HCM 3700 - Health Disparities in the U.S., NUT 3300 - Cultural Aspects of Nutrition, or ANT 3480 - Cultural Diversity in Health and Illness

## Exercise Science Major Required Courses:

### 59 credits

Students must take one of the following courses:

- EXS 4650 - Exercise Electrocardiography **Credits:** 3
- or
- EXS 4772 - Advanced Strength and Conditioning **Credits:** 3

Students must take each of the following:

- BIO 1080 - General Biology I **Credits:** 3
- BIO 1090 - General Biology Laboratory I **Credits:** 1
- BIO 2310 - Human Anatomy and Physiology I **Credits:** 4
- BIO 2320 - Human Anatomy and Physiology II **Credits:** 4
- ESS 1623 - Introductory Sports Medicine Concepts **Credits:** 3
- ESS 3110 - Medical Topics and Injury/Illness Pathophysiology for Exercise Science **Credits:** 3
- ESS 3300 - Anatomical Kinesiology **Credits:** 3
- ESS 3340 - Physiology of Exercise **Credits:** 4
- ESS 4660 - Legal Liability for Physical Educators, Coaches and Administrators **Credits:** 3

- EXS 1020 - Resistance Training Techniques **Credits:** 3
- EXS 1640 - Physical Fitness Techniques and Programs **Credits:** 3
- EXS 2680 - Group Exercise Leadership **Credits:** 3
- EXS 3841 - Comparative Fitness Programs **Credits:** 3
- EXS 4680 - Advanced Fitness Assessment and Exercise Prescription **Credits:** 4
- EXS 4780 - Community Fitness Testing and Program Planning **Credits:** 3
- EXS 4790 - Special Considerations for Exercise Assessment and Prescription **Credits:** 3
- NUT 2040 - Introduction to Nutrition **Credits:** 3
- NUT 3200 - Nutrition and Sports Performance **Credits:** 3

## Major Electives: 10 credits

Students must take 10 credit hours from the following list of courses.

- ESS 1440 - Stress Management Techniques **Credits:** 3
- ESS 2021 - Physical Literacy and Society **Credits:** 3
- ESS 2060 - Emergency Rescue/First Responder & CPR **Credits:** 3
- ESS 3220 - Behavioral Aspects of Physical Activity, Exercise, and Sport **Credits:** 3
- ESS 3250 - Fitness and Exercise Coaching **Credits:** 3
- ESS 4500 - Motor Learning and Development **Credits:** 3
- ITP 1500 - Dynamics of Health **Credits:** 3
- ITP 1700 - Medical Terminology **Credits:** 3
- ITP 3450 - Dynamics of Disease **Credits:** 3
- ITP 3700 - Physiology of Aging **Credits:** 3
- ITP 4600 - Clinical Pathophysiology **Credits:** 4
- NUT 3040 - Nutrition Concepts and Controversies **Credits:** 3
- NUT 3050 - Concepts of Lifecycle Nutrition **Credits:** 3
- NUT 3300 - Cultural Aspects of Nutrition **Credits:** 3
- NUT 3350 - Global Nutrition and Health **Credits:** 3
- PSY 1001 - Introductory Psychology **Credits:** 3
- PSY 2150 - Positive Psychology **Credits:** 3
- PSY 2210 - Psychology of Human Development **Credits:** 3
- PSY 2270 - Death, Dying, and Grieving **Credits:** 3
- PSY 2410 - Social Psychology **Credits:** 3
- PSY 3270 - Adulthood and Aging **Credits:** 3
- PSY 3410 - Health Psychology **Credits:** 3
- PSY 3620 - Psychological Disorders: Perspectives, Symptoms, and Treatment **Credits:** 3
- SM 2050 - Introduction to Sport Management **Credits:** 3
- SM 2730 - Sport in Society **Credits:** 3

## Senior Experience: 10 credits

- EXS 4880 - Internship in Exercise Science **Credits:** 10



## Unrestricted Electives: 5-20 credits

The unrestricted electives may come from any department prefix.

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Courses	59 credits
Major Electives	10 credits
Senior Experience	10 credits
Unrestricted Electives	5-20 credits
<b>Total for the Exercise Science Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Fitness and Exercise Leadership Minor*

The Fitness and Exercise Leadership minor provides students with the foundational knowledge and entry-level competencies necessary to develop evidence-based exercise leadership skills and programming for the general population to improve fitness and health outcomes. Exercise leadership and physical wellness with an emphasis on a whole-person approach to a healthy lifestyle will be emphasized. Students graduating with this minor will be prepared to study for certifying exams from nationally accredited (NCCA) fitness and health-related agencies. A minimum 3.0 GPA is required.

## Required Core:

Students must take all courses listed in this section:

- ESS 1030 - Physical Well-being **Credits: 1-2**
- ESS 3220 - Behavioral Aspects of Physical Activity, Exercise, and Sport **Credits: 3**
- ESS 3250 - Fitness and Exercise Coaching **Credits: 3**
- ESS 3990 - Field Experience **Credits: 1-3**
- EXS 1020 - Resistance Training Techniques **Credits: 3**
- EXS 1640 - Physical Fitness Techniques and Programs **Credits: 3**

Sub-total = 17 credit hours

## Electives

Students must choose one of the following courses:

- ESS 1440 - Stress Management Techniques **Credits: 3**
- ESSA 1000 - Human Performance and Leisure Activities: Variable Topics **Credits: 2**
- EXS 2890 - Personal Training Concepts and Application **Credits: 3**
- EXS 3780 - Fitness Programs for Special Populations **Credits: 2**
- NUT 2040 - Introduction to Nutrition **Credits: 3**
- NUT 3400 - Nutrition and Weight Management **Credits: 3**

Total for Minor = 19 credit hours

## *Human Performance and Sport Minor*

The human performance and sport minor concentrations are for students interested in sport coaching or exercise science. The primary objective is to provide instructional studies in a liberal arts institution in human performance and sport, thereby enhancing one's knowledge, understanding, and skillful use of this area of study to pursue a better quality of life.

Additional requirement: A grade of "C" or better is required for all human performance and sport courses taken in any major/minor concentration. Students should note that programs differ in the minimum grade required.

## Sport Coaching Concentration

Students will take the required **Core I Courses** listed then select 2 additional classes from **Core II**. If additional credits are needed, choose from the approved Sport Coaching electives to meet the minimum of 18 credit hours.

## Required Core I Courses 11-13 credits

- ESS 2720 - Fundamentals of Coaching **Credits: 2**
- ESS 3700 - Psychology of Coaching **Credits: 2**
- ESS 3720 - Science and Art of Coaching and Athletic Administration **Credits: 3**
- ESS 3990 - Field Experience **Credits: 1-3**
- NUT 3200 - Nutrition and Sports Performance **Credits: 3**

Required II Core: choose two (2) courses 6 credits

*Sport Management Majors: take EXS 1020 and ATP 1623*

*Exercise Science Majors: take SM 2050 and HPS 2730*

- ESS 1623 - Introductory Sports Medicine Concepts **Credits: 3**
- EXS 1020 - Resistance Training Techniques **Credits: 3**
- SM 2050 - Introduction to Sport Management **Credits: 3**
- SM 2730 - Sport in Society **Credits: 3**

## Approved Electives

Choose from the courses below to fulfill the credit hour requirement

- ESSA 1750 - Weight Training Level I **Credits: 2**
- ESSA 1840 - Hatha Yoga I **Credits: 2**
- ESS 2700 - Wellness Coaching I **Credits: 3**
- ESS 4660 - Legal Liability for Physical Educators, Coaches and Administrators **Credits: 3**
- NUT 2040 - Introduction to Nutrition **Credits: 3**

Total: Minimum of 18 credits

## Exercise Science Concentration

- EXS 3780 - Fitness Programs for Special Populations **Credits: 2 \***
- EXS 3790 - Fitness Programming for Children, Adolescents, and Older Adults **Credits: 3 \***
- EXS 3841 - Comparative Fitness Programs **Credits: 3 \*\***
- EXS 4680 - Advanced Fitness Assessment and Exercise Prescription **Credits: 4 #**
- ESS 3990 - Field Experience **Credits: 1-3**
- NUT 2040 - Introduction to Nutrition **Credits: 3**
- HPS Electives (selection based on exercise science needs)

\* EXS 1640 is a prerequisite

\*\* EXS 1640 and BIO 2320 are prerequisites

# EXS 3340 is a prerequisite

Total: Minimum of 18 credit hours

## *Sport Management Major, B.A.*

[Department of Exercise and Sport Sciences](#)

[College of Health and Human Sciences](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

The MSU Denver Sport Management major prepares students to work in the growing and competitive field of sport management. Content within the major covers key areas, such as sport facility and

event management, sport and social media, governance and management of amateur and professional sport, high school and collegiate athletics administration, and sport promotion and sponsorship.

The MSU Denver Sport Management program is accredited by the Commission on Sport Management Accreditation (COSMA).

## Student Outcomes

- Provide students with a core curriculum that allows students to develop the fundamental skills and knowledge required for successful management within the sport industry.
- Provide real world, hands-on experiences applying management principles and concepts within the sport industry.
- Embrace diversity, ethics, and social responsibility through course offerings and applied experiences.
- Expose students to current technology utilized in the industry and contemporary courses to better prepare them for careers in sport and/or graduate school.
- Provide students with opportunities to network into and within the sport industry and to demonstrate their understanding of current issues and expected professionalism within the industry.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- SM 4610: Students who have not fulfilled all general education requirements through courses or transfer credit should strongly consider completing these requirements prior to registering for this course.
- Students must have a 2.80 GPA in the major to be eligible for an internship.
- SM 4890 and SM 4891 must be taken concurrently. Students must have completed a minimum of 36 credit hours within the major before they will be allowed to register for SM 4890 and SM 4891.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Courses: 48 credits

- ESS 3990 - Field Experience **Credits:** 1-3 (must enroll for 3 credits)
- ESS 4660 - Legal Liability for Physical Educators, Coaches and Administrators **Credits:** 3
- SM 2050 - Introduction to Sport Management **Credits:** 3
- SM 2070 - Sport Venue Management **Credits:** 3
- SM 2300 - Sport Event Management **Credits:** 3
- SM 2730 - Sport in Society **Credits:** 3
- SM 3100 - Sport Media Operations **Credits:** 3
- SM 3200 - Sport Governance and Policy **Credits:** 3
- SM 3600 - Sport Promotion **Credits:** 3
- SM 3650 - Technology and Social Media in Sport **Credits:** 3
- SM 4600 - Organization and Administration of Sports **Credits:** 3
- SM 4610 - The Sport Enterprise **Credits:** 3
- SM 4890 - Internship for Sport Management **Credits:** 9
- SM 4891 - Professional and Career Development in Sport Management **Credits:** 3

## Approved Electives: 9 credits

9 credits approved by major advisor

- SM 3300 - Leadership and Ethics in Sport **Credits:** 3
- SM 3350 - Sport Literature and Film **Credits:** 3
- SM 3400 - Global Sport **Credits:** 3
- SM 4350 - Sport Analytics **Credits:** 3

## Senior Experience: 3 credits

- SM 4860 - Seminar in Sport Management **Credits:** 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Courses	48 credits
Major Electives	9 credits
Senior Experience	3 credits
Unrestricted Electives	24-30 credits
Total for the Sport Management Major, B.A.	120 credits

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Sport Management Minor*

The Sport Management minor prepares students for work in the growing and competitive field of sport management. Content within the minor covers key areas, such as sport facility and event management, sport social media, governance and policy, management of amateur and professional sport, high school and collegiate athletics administration, and sport promotion and sponsorship. Courses and professional experiences provided within the minor are designed to help students develop the intellectual and professional skills needed to meet the challenges of the 21st-century sport industry.

The minor requires 18 credit hours, 6 of which are elective.

## Required courses

Students are required to take SM-2050, SM-2070, SM-3600, and either SM-4600 OR SM-4610 OR SM-4860 (12 hrs)

- SM 2050 - Introduction to Sport Management **Credits: 3**
- SM 2070 - Sport Venue Management **Credits: 3**
- SM 3600 - Sport Promotion **Credits: 3**
  
- SM 4600 - Organization and Administration of Sports **Credits: 3**  
OR
- SM 4610 - The Sport Enterprise **Credits: 3**  
OR
- SM 4860 - Seminar in Sport Management **Credits: 3**

## Elective courses

Students must choose two of the following elective courses: SM-2300, SM-2730, SM-3100, SM-3200, SM-3650, HPS-3990, \*SM-4600, HPS-4660, \*SM-4610, or \*SM-4860 (6 hrs).

- SM 2300 - Sport Event Management **Credits: 3**
- SM 2730 - Sport in Society **Credits: 3**
- SM 3100 - Sport Media Operations **Credits: 3**
- SM 3200 - Sport Governance and Policy **Credits: 3**
- SM 3650 - Technology and Social Media in Sport **Credits: 3**
- ESS 3990 - Field Experience **Credits: 1-3**
- ESS 4660 - Legal Liability for Physical Educators, Coaches and Administrators **Credits: 3**

\*if not selected under required courses.

## Health Institute

### Mission

The MSU Denver Health Institute is a collaboration of ten departments that serve students entering health-related professions. Through educating Colorado's emerging health workforce, our mission is to revolutionize health in Colorado by breaking barriers, empowering communities, fostering collaboration and embracing diversity.

One of the ways we are accomplishing our mission is through breaking down silos. Interdisciplinary teamwork within the Institute provides the next generation of healthcare leaders the training required to tackle health care costs and improve outcomes. Through innovative and integrated curriculum that leverages emerging technology and real-life simulation, students gain the communication skills needed to problem-solve across disciplines, the separation of physical and mental health, and traverse the complexity of healthcare systems.

We are also blurring the lines between academia and industry. Critical community and industry partnerships in physical and behavioral health provide students with hands-on experiences in a wide range of health professions. The opportunity to co-construct best practices in building strong and vital communities and addressing the needs of underrepresented populations, produces graduates who are well prepared to enter the workforce. Students are provided with the support to successfully navigate not only their own educational experience, but to effectively move into a health career and lead the change necessary to solve difficult problems.

The Institute combines educational excellence with cutting-edge whole-person, transprofessional, and culturally inclusive skills that distinguish our Health Institute alumni as leaders in health-related fields. For example, through the study of the social determinants of health or groundbreaking coursework (such as our developing Lifestyle Medicine curriculum), students engage with evidence-based scholarship that strives to not only treat challenging health issues but to foster healthy communities and culturally inclusive well-being.

## Departments

- [Department of Biology](#)
- [Department of Chemistry and Biochemistry](#)
- [Department of Health Professions](#)
- [Department of Exercise and Sport Sciences](#)
- [Department of Human Services and Counseling](#)
- [Department of Nursing](#)
- [Department of Nutrition](#)
- [Department of Psychological Sciences](#)
- [Department of Social Work](#)
- [Department of Speech, Language, Hearing Sciences](#)

## Health Institute Initiatives and Links

[Health Institute](#)

[Health Career Opportunities Program](#)

[Health Career Interest Program](#)

[Peer Health Exchange](#)

## Department of Health Professions

Location: West Classroom #239

Phone: 303-615-1200

E-Mail: [hep@msudenver.edu](mailto:hep@msudenver.edu)

Website: [Health Professions Department Website](#)

# Aging Services Leadership Certificate

Program Format: [Online](#)

## About the Program

The Aging Services Leadership (ASL) certificate assists individuals interested in gaining knowledge pertaining to aging, eldercare, and gerontology. The certificate will prepare individuals to understand the cultural, physical, and social aspects of aging along with the aspects of how aging affect populations. The certificate will prepare individuals to apply administrative principles required in the management of aging services such as nursing home, long term care settings, and home health services. Students will gain foundational knowledge pertaining to the wellspan and healthspan, physiological, and social aspects of aging, coupled with the skills required to implement patient-centered care, including understanding the rising needs of our aging population, demographic shifts, LTC business acumen, and the role society plays in the aging process. The certificate includes required core courses along with elective courses in which students can tailor the certificate to meet specifications of their career goals.

## Program Requirements

- A total of 24 semester hours are required for completion of the Aging Services Leadership Certificate.
- A grade of C or better is required for each course in this program to count toward the certificate. Students should note that programs differ in the minimum grade required.

## Additional University requirements for all certificate programs:

- All prerequisite courses must be listed clearly,
- Prerequisite courses may be part of the certificate itself or required as ancillary courses,
- At least one-third of the overall credit hours must be upper-division courses,
- No more than 40% of the certificate may be comprised of:
  - Transfer courses,
  - Workshop or advanced workshop courses (course numbers 2888 or 4888),
  - Cooperative education courses (course numbers 2980 or 3980),
  - Field experience or internship courses (course numbers 2990 or 4990), or Senior-level topics or seminar courses (course numbers 4900)
- Only one course substitution is permitted,
- Credit hours may not be waived from certificate programs and,
- A minimum grade of "C" is required in all courses in the certificate.

## Advising

- Students can contact the Department of Health Professions at 303-615-1200 for advising.

### Important Notice:

- Completion of this certificate does not guarantee admission into any nursing or health professions undergraduate or graduate program.
- Students are responsible for contacting the nursing or health profession program to which they are applying regarding specific prerequisite courses required by that program.
- Students should also explore the requirements for Licensure as a Nursing Home Administrator in their state.

## Academic Policies

Academic policies and the Student Code of Conduct will be employed to all MSU Denver students, regardless of level. Access the Student Code of Conduct.

## Student Outcomes

Upon completion of the Aging Services Leadership Certificate, students will:

1. Identify characteristics of older adults,
2. Describe shifts in population aging,
3. Recognize stereotypes and myths surrounding ageism,
4. Evaluate programs and services for our older population,
5. Explore workforce development and career exploration in the aging services field,
6. Recognize topical issues surrounding aging and caring for our older population,
7. Evaluate characteristics required to cultivate an age-friendly society.

### Total: 24 credits

- *Some courses might require additional prerequisite(s). Please refer to the University Catalog for additional information and/or contact an AGE academic advisor.*
- *Cross-listed course credit will be granted for only one prefix: ESS or ITP.*

## Required Core Courses

### 12 Credit Hours

- AGE 1010 - Introduction to Aging and Long-Term Care Services **Credits: 3 \***
- AGE 2020 - Ageism and Ableism in Society **Credits: 3 \***
- AGE 3030 - Aging Services: Current Topics, Trends, and Future Considerations **Credits: 3**
- AGE 3800 - Long-Term Care: Managing Across the Continuum **Credits: 3**

### Subtotal: 12 credit hours

*\*Completion of AGE 1010 and AGE 2020 qualifies student for the Aging Services Digital Badge.*

## Elective Courses

12 Credit Hours Required

(3 Credit Hours Must Be Upper Division)

- ANT 3480 - Cultural Diversity in Health and Illness **Credits: 3**
- COMM 3220 - Communication and the Elderly **Credits: 3**
- EXS 3790 - Fitness Programming for Children, Adolescents, and Older Adults **Credits: 3**
- FIN 3450 - Retirement Planning and Employee Benefits **Credits: 3**
- HCM 2010 - Global Health Systems **Credits: 3**
- HCM 3030 - Health Care Jurisprudence **Credits: 3**
- HCM 3100 - Entrepreneurship in Health **Credits: 1**
- HCM 3150 - Health Care Organization and Management **Credits: 3**
- HCM 3200 - Managing Quality in Health Care **Credits: 2**
- HCM 3400 - Human Resources Management in Health Care **Credits: 3**
- HCM 3500 - Health Care Research Methods **Credits: 3**
- HCM 3550 - Leadership in Health Care **Credits: 1**
- HCM 3600 - Health Information Systems **Credits: 3**
- HCM 3700 - Health Disparities in the U.S. **Credits: 3**
- HCM 3750 - Professional Practice Management **Credits: 1**
- HCM 4030 - Financial Management in Health Care **Credits: 3**
- HCM 4040 - Health Care Economics **Credits: 3**
- HCM 4300 - Strategic Management in Health Care **Credits: 3**
- HCPS 4000 - Health Care Operations **Credits: 3**
- HCPS 4010 - Evidence Based Health Care Delivery **Credits: 3**
- HLDR 3800 - Servant Leadership in Hospitality **Credits: 3**
- HSP 2010 - Introduction to High-Impact Nonprofit Organizations **Credits: 3**
- HSP 3610 - Financial Accountability and Organizational Control in Nonprofit Organizations **Credits: 3**
- HSP 4520 - Grief Counseling **Credits: 3**
- ITP 1700 - Medical Terminology **Credits: 3**
- ITP 2700 - Holistic Dimensions of Wellness **Credits: 3**
- ITP 2820 - Anger In Men: A Whole Approach **Credits: 3**
- ITP 2950 - Wellness Coaching I **Credits: 3**
- or
- ESS 2700 - Wellness Coaching I **Credits: 3**
- ITP 3000 - Men's Health **Credits: 3**
- ITP 3100 - Health Education and Counseling **Credits: 3**
- ITP 3111 - Aging Warriors: Understanding the Health Issues of Aging Men **Credits: 3**

- ITP 3200 - Ethics in Health Care **Credits: 3**
- ITP 3700 - Physiology of Aging **Credits: 3**
- ITP 3810 - Men Across Cultures **Credits: 3**
- ITP 3850 - Lifestyle Medicine **Credits: 3**
- ITP 4100 - Women's Holistic Health **Credits: 3**
- ITP 4400 - Wellness Coaching II **Credits: 3**
- or
- ESS 4700 - Wellness Coaching II **Credits: 3**
- ITP 4800 - Lifestyle Medicine Across Gender and Lifespan **Credits: 3**
- ITP 4950 - Community Coaching for Health **Credits: 3**
- MGT 3510 - The People of Nonprofits: Staff, Board, Volunteers, Clients and You **Credits: 3**
- MKT 3190 - Marketing for Social Good **Credits: 3**
- NUT 3050 - Concepts of Lifecycle Nutrition **Credits: 3**
- PSY 1001 - Introductory Psychology **Credits: 3**
- PSY 2270 - Death, Dying, and Grieving **Credits: 3**
- PSY 3270 - Adulthood and Aging **Credits: 3**
- PUB 1000 - Principles of Public Health **Credits: 3**
- PUB 2000 - Community Health Worker Fundamentals **Credits: 3**
- PUB 3000 - Health Behavior Theory and Practice **Credits: 3**
- PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits: 3**
- PUB 3020 - Introduction to Epidemiology in Public Health **Credits: 3**
- PUB 3030 - Essentials of Environmental Health in Public Health Practices **Credits: 3**
- PUB 4000 - Health Policy - Practice and Development **Credits: 3**
- PUB 4010 - Health Program Planning, Implementation, and Evaluation **Credits: 3**
- PUB 4030 - Advanced Community Health Worker **Credits: 3**
- SOC 1010 - People, Power, and Progress **Credits: 3**
- SOC 1040 - Introduction to Social Gerontology **Credits: 3**
- SOC 3040 - Sociology of Aging **Credits: 3**
- SOC 3100 - Death and Dying **Credits: 3**
- SOC 3810 - Population Issues: Life, Death and Migration **Credits: 3**
- SWK 3030 - Social Work with Older People **Credits: 3**
- Subtotal: 12 Credit Hours**

*Note: Some courses might require additional prerequisite(s). Please refer to the University Catalog for additional information and/or an AGE faculty advisor.*

**Total credit hours: 24**

***Aging Services Leadership Major, B.S.***

## About the Program

A degree in Aging Services Leadership will provide students with a broad understanding of the field of aging services and long-term care. Aging services is the umbrella term for the field including but not limited to long-term care (LTC), senior living, eldercare, long-term services and supports (LTSS), and gerontology. By completing the Aging Services Leadership degree, students will have foundational knowledge pertaining to the wellspan and healthspan, physiological, and social aspects of aging, coupled with the skills required to implement patient-center care, including understanding the rising needs of our aging population, demographic shifts, LTC business acumen, and the role society plays in the aging process. Students will gain hands-on experiences in the aging services sector through immersive classroom experiences, expert course content, and the senior experience - all which prepare students to be advocates working towards improving the quality of life and aging experience for this growing population.

## Student Outcomes

Upon completion of the Aging Services Leadership Major, students will:

1. Identify characteristics of older adults,
2. Describe shifts in population aging,
3. Recognize stereotypes and myths surrounding ageism,
4. Investigate common health disparities in older adults,
5. Evaluate programs and services for our older population,
6. Explore workforce development and career exploration in the aging services field,
7. Recognize topical issues surrounding aging and caring for our older population,
8. Assess the knowledge and skills encompassed in the business side of providing aging and long-term care services,
9. Understand the role patient-centered care and innovation plays in the future of providing care for our older population, and
10. Evaluate characteristics required to cultivate an age-friendly society.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)

- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.
  - Students in the Aging Services Leadership major are required to take HCM 3700 - Health Disparities in the U.S. as part of the program core.

## Required Ancillary Courses: 6 credits

All students must complete the following courses. These courses can also count towards the General Studies Requirements.

- SOC 1010 - People, Power, and Progress **Credits: 3**
- PSY 1001 - Introductory Psychology **Credits: 3**

## Required Courses: 45 credits

- AGE 1010 - Introduction to Aging and Long-Term Care Services **Credits: 3**
- AGE 2020 - Ageism and Ableism in Society **Credits: 3**
- AGE 3030 - Aging Services: Current Topics, Trends, and Future Considerations **Credits: 3**
- AGE 3800 - Long-Term Care: Managing Across the Continuum **Credits: 3**
- COMM 3220 - Communication and the Elderly **Credits: 3**
- HCM 2500 - Health Care Foundations, Professionalism, and Applications **Credits: 3**
- HCM 3150 - Health Care Organization and Management **Credits: 3**
- HCM 3700 - Health Disparities in the U.S. **Credits: 3**
- ITP 3111 - Aging Warriors: Understanding the Health Issues of Aging Men **Credits: 3**
- ITP 3200 - Ethics in Health Care **Credits: 3**
- PUB 2000 - Community Health Worker Fundamentals **Credits: 3**
- PUB 4000 - Health Policy - Practice and Development **Credits: 3**
- SOC 1040 - Introduction to Social Gerontology **Credits: 3**
- SOC 3040 - Sociology of Aging **Credits: 3**
- PSY 2270 - Death, Dying, and Grieving **Credits: 3**  
or
- SOC 3100 - Death and Dying **Credits: 3**

## Restricted Electives: 12 credits

A minimum of 6 credit hours must be upper division.

- HCM 3030 - Health Care Jurisprudence **Credits: 3**
- HCM 3100 - Entrepreneurship in Health **Credits: 1**
- HCM 3200 - Managing Quality in Health Care **Credits: 2**
- HCM 3400 - Human Resources Management in Health Care **Credits: 3**
- HCM 3500 - Health Care Research Methods **Credits: 3**
- HCM 3550 - Leadership in Health Care **Credits: 1**
- HCM 3600 - Health Information Systems **Credits: 3**
- HCM 3750 - Professional Practice Management **Credits: 1**
- HCM 4030 - Financial Management in Health Care **Credits: 3**
- HCM 4040 - Health Care Economics **Credits: 3**
- HCM 4300 - Strategic Management in Health Care **Credits: 3**
- ITP 1700 - Medical Terminology **Credits: 3**
- ITP 2800 - Health, Society, and the Environment **Credits: 3**
- ITP 2950 - Wellness Coaching I **Credits: 3**
- ITP 3000 - Men's Health **Credits: 3**

- ITP 3100 - Health Education and Counseling **Credits: 3**
- ITP 3700 - Physiology of Aging **Credits: 3**
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits: 3**
- ITP 3850 - Lifestyle Medicine **Credits: 3**
- ITP 4100 - Women's Holistic Health **Credits: 3**
- ITP 4400 - Wellness Coaching II **Credits: 3**
- ITP 4700 - Community Health Education and Lifestyle Medicine **Credits: 3**
- ITP 4800 - Lifestyle Medicine Across Gender and Lifespan **Credits: 3**
- ITP 4950 - Community Coaching for Health **Credits: 3**
- HCPS 4000 - Health Care Operations **Credits: 3**
- HCPS 4010 - Evidence Based Health Care Delivery **Credits: 3**
- PUB 1000 - Principles of Public Health **Credits: 3**
- PUB 3000 - Health Behavior Theory and Practice **Credits: 3**
- PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits: 3**
- PUB 3020 - Introduction to Epidemiology in Public Health **Credits: 3**
- PUB 3030 - Essentials of Environmental Health in Public Health Practices **Credits: 3**
- PUB 4010 - Health Program Planning, Implementation, and Evaluation **Credits: 3**
- PUB 4030 - Advanced Community Health Worker **Credits: 3**

## Senior Experience: 3 credits

- HCM 4610 - Health Professions Internship **Credits: 3**  
or
- ITP 4999 - Applied Learning with Lifestyle Medicine **Credits: 3**

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Ancillary Courses	6 credits
Major Requirements	45 credits
Restricted Electives	12 credits
Senior Experience	3 credits



Unrestricted Electives	18-27 credits (Depends on if a minor is chosen or if a student has an associate's degree in a related health care field.)
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**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Aging Services Leadership Minor

The Aging Services Leadership minor assists individuals interested in gaining knowledge pertaining to aging, eldercare, and gerontology. The minor readies individuals to understand the cultural, physical, and social aspects of aging, along with the aspects of how aging affects populations. The minor prepares individuals to apply administrative principles required in the management of aging services, such as nursing homes, long-term care settings, and home health services. Students will gain foundational knowledge pertaining to the wellspan and healthspan, physiological, and social aspects of aging, coupled with the skills required to implement patient-centered care, including understanding the rising needs of our aging population, demographic shifts, LTC business acumen, and the role society plays in the aging process. The minor provides required core courses, along with elective course in which students can tailor the minor to meet specifications of career goals.

### Advising

Students can contact the Department of Health Professions for advising at 303-615-1200.

### Important Notice

Completion of this minor does not guarantee admission into any nursing or health professions graduate program. Students are responsible for contacting the nursing or health professions graduate program to which they are applying regarding specific prerequisite courses required by that program.

### Program Requirements

- A total of 18 semester hours are required for completion of the Aging Services Leadership Minor.
- Students must select 18 credit hours from the following courses including at least 3 hours of upper-division credit.
- A grade of C- or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required.

### Academic Policies

Academic policies and the Student Code of Conduct will be employed to all MSU Denver students, regardless of level. Access

the Student Code of Conduct can be found in the MSU Denver catalog.

### Student Outcomes

Upon completion of the Aging Services Leadership Minor, students will:

1. Identify characteristics of older adults,
2. Describe shifts in population aging,
3. Recognize stereotypes and myths surrounding ageism,
4. Evaluate programs and services for our older population,
5. Explore workforce development and career exploration in the aging services field,
6. Recognize topical issues surrounding aging and caring for our older population,
7. Evaluate characteristics required to cultivate an age-friendly society.

### Total: 18 credits

- *Some courses might require additional prerequisite(s). Please refer to the University Catalog for additional information and/or an AGE faculty advisor.*
- *Cross-listed course credit will be granted for only one prefix: ESS or ITP.*

### Required Courses

- AGE 1010 - Introduction to Aging and Long-Term Care Services **Credits: 3**
- AGE 2020 - Ageism and Ableism in Society **Credits: 3 \***
- AGE 3030 - Aging Services: Current Topics, Trends, and Future Considerations **Credits: 3**
- AGE 3800 - Long-Term Care: Managing Across the Continuum **Credits: 3**

#### Subtotal: 12 credits

\*Completion of AGE 1010 & AGE 2020 qualifies student for the Aging Services Digital Badge.

### Elective Courses

Choose at least 6 credits from the following (at least 3 hours must be upper division):

- ANT 3480 - Cultural Diversity in Health and Illness **Credits: 3**
- COMM 3220 - Communication and the Elderly **Credits: 3**
- FIN 3450 - Retirement Planning and Employee Benefits **Credits: 3**
- HCM 2010 - Global Health Systems **Credits: 3**
- HCM 3030 - Health Care Jurisprudence **Credits: 3**

- HCM 3100 - Entrepreneurship in Health **Credits: 1**
- HCM 3150 - Health Care Organization and Management **Credits: 3**
- HCM 3200 - Managing Quality in Health Care **Credits: 2**
- HCM 3400 - Human Resources Management in Health Care **Credits: 3**
- HCM 3550 - Leadership in Health Care **Credits: 1**
- HCM 3600 - Health Information Systems **Credits: 3**
- HCM 3700 - Health Disparities in the U.S. **Credits: 3**
- HCM 3750 - Professional Practice Management **Credits: 1**
- HCM 4030 - Financial Management in Health Care **Credits: 3**
- HCM 4300 - Strategic Management in Health Care **Credits: 3**
- HCPS 4000 - Health Care Operations **Credits: 3**
- HCPS 4010 - Evidence Based Health Care Delivery **Credits: 3**
- HLDR 3800 - Servant Leadership in Hospitality **Credits: 3**
- HSP 4520 - Grief Counseling **Credits: 3**
- ITP 1700 - Medical Terminology **Credits: 3**
- ITP 2820 - Anger In Men: A Whole Approach **Credits: 3**
- ITP 2950 - Wellness Coaching I **Credits: 3 \*\***  
OR
- ESS 2700 - Wellness Coaching I **Credits: 3 \*\***
- ITP 3000 - Men's Health **Credits: 3**
- ITP 3100 - Health Education and Counseling **Credits: 3**
- ITP 3111 - Aging Warriors: Understanding the Health Issues of Aging Men **Credits: 3**
- ITP 3200 - Ethics in Health Care **Credits: 3**
- ITP 3700 - Physiology of Aging **Credits: 3**
- ITP 3810 - Men Across Cultures **Credits: 3**
- ITP 3850 - Lifestyle Medicine **Credits: 3**
- ITP 4100 - Women's Holistic Health **Credits: 3**
- ITP 4400 - Wellness Coaching II **Credits: 3 \*\***  
OR
- ESS 4700 - Wellness Coaching II **Credits: 3 \*\***
- ITP 4800 - Lifestyle Medicine Across Gender and Lifespan **Credits: 3**
- ITP 4950 - Community Coaching for Health **Credits: 3**
- NUT 3050 - Concepts of Lifecycle Nutrition **Credits: 3**
- PSY 1001 - Introductory Psychology **Credits: 3**
- PSY 2270 - Death, Dying, and Grieving **Credits: 3**
- PSY 3270 - Adulthood and Aging **Credits: 3**
- PUB 1000 - Principles of Public Health **Credits: 3**
- PUB 2000 - Community Health Worker Fundamentals **Credits: 3**
- PUB 3000 - Health Behavior Theory and Practice **Credits: 3**

- PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits: 3**
- PUB 3020 - Introduction to Epidemiology in Public Health **Credits: 3**
- PUB 3030 - Essentials of Environmental Health in Public Health Practices **Credits: 3**
- PUB 4000 - Health Policy - Practice and Development **Credits: 3**
- PUB 4010 - Health Program Planning, Implementation, and Evaluation **Credits: 3**
- PUB 4030 - Advanced Community Health Worker **Credits: 3**
- SOC 1010 - People, Power, and Progress **Credits: 3**
- SOC 1040 - Introduction to Social Gerontology **Credits: 3**
- SOC 3040 - Sociology of Aging **Credits: 3**
- SOC 3100 - Death and Dying **Credits: 3**
- SOC 3810 - Population Issues: Life, Death and Migration **Credits: 3**
- SWK 3030 - Social Work with Older People **Credits: 3**

**Subtotal: 6 credits**

**Total: 18 credits**

*Note: Courses might require additional prerequisite(s). Please consult with an AGE academic advisor and the University catalog.*

*\*\* Credit will be granted for only one prefix: ITP or ESS.*

## ***Community Health Educator Certificate***

The MSU Denver Community Health Educator (CHE) program is housed in the public health program at the Department of Health Professions. Earning the CHE certificate signifies a high level of education and expertise, and it allows students to sit for Community Health Education Specialist (CHES) exam conducted by the National Commission for Health Education Credentialing (NCHEC). The CHES exam is required or preferred qualification in the field of community and public health/health promotion, and certification allows work in a variety of healthcare settings, such as hospitals, clinics, insurance companies, government agencies, and educational institutions like schools and universities.

The certificate totals 27 credits, with 9 required courses, 3 credit hours each. These courses align with National Commission for Health Education Credentialing's (NCHEC) competency areas. There is an optional course that students can take if they are interested in learning about Peer Health Education in the area of Public Health. Students must complete the 9 courses with a grade of "C" or better in all courses, and minimum GPA of 2.0 to earn the certificate.

### **Advising:**

Students can contact the Department of Health Professions Public Health Program at 303-615-1200 for advising support specific to this certificate program, other undergraduate degree information. Here is

link to that website: <https://www.msudenver.edu/health-professions/hep-programs/public-health/>

## Academic Policies:

Academic policies and the Student Code of Conduct will be applied to all MSU Denver students, regardless of level. Students should review the MSU Denver Student Code of Conduct website.

## Coursework

This certificate program in Public Health program help students prepare for a nationwide exam, conducted by National Commission for Health Education Credentialing (NCHEC)- a national organization. This exam indicates that a public health professional has met the academic qualifications as well as also earned a designation of Community Health Education Specialist (CHES) - by passing the competency exam. Additionally, Community Health Educators collect and analyze data to identify health status and improve quality of life of people living in the community and work at local, regional and state levels.

The certificate totals 27 credit: 9 required courses, 3 credit hours each. Students must complete the 9 courses with a grade of "C" or better and a cumulative GPA of 2.0. There is an optional course that students can take if they are interested in learning about Peer Health Education in the area of Public Health.

- HCM 3700 - Health Disparities in the U.S. **Credits: 3**
- HCM 3500 - Health Care Research Methods **Credits: 3**
- ITP 3200 - Ethics in Health Care **Credits: 3**  
or
- PUB 4020 - Peer Health Education- Field Experience **Credits: 3**
- PUB 1000 - Principles of Public Health **Credits: 3**
- PUB 3000 - Health Behavior Theory and Practice **Credits: 3**
- PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits: 3**
- PUB 3020 - Introduction to Epidemiology in Public Health **Credits: 3**
- PUB 4000 - Health Policy - Practice and Development **Credits: 3**
- PUB 4010 - Health Program Planning, Implementation, and Evaluation **Credits: 3**

Total Credit Hours: 27

## Community Health Worker Certificate

The MSU Denver Community Health Worker Certificate will provide students with the knowledge and skills needed to fulfill established Colorado Community Health Worker Core/Professional Competencies in the field and practice of Community Health Workers. Community Health Workers (CHWs) are critical members of the public health workforce that link communities to health and social programs to promote access to services and improve the quality and cultural responsiveness of care delivery.

The certificate includes 5 required courses (see below section) that align with the Colorado CHW Core/Professional Competencies. Students who complete the 5 courses will have demonstrated the acquisition of knowledge and skill in these identified competency areas. Students must maintain a "C" or better in all courses, and minimum GPA of 2.0 to earn the certificate.

The MSU Denver Community Health Worker Certificate program will be part of the Statewide CHW training structure, which will include a credentialing process. Upon completion of a credentialing exam, students may be entered into a statewide Community Health Worker Registry. For more information on this Statewide Community Health Worker structure, please visit the Colorado Department of Health & Environment, Community Health Worker Workforce website: <https://cdphe.colorado.gov/community-health-worker-workforce-development>.

## Advising:

Students should visit the Department of Health Professions Public Health Program website for advising support specific to this certificate program, other undergraduate degree information.

## Academic Policies:

Academic policies and the Student Code of Conduct will be applied to all MSU Denver students, regardless of level. Students should review the MSU Denver Student Code of Conduct website.

## Required Coursework

The following courses are required for the Community Health Worker Certificate. Based on competency/training area requirements, course substitutions will not be permitted. Students must maintain a "C" or better in all courses to earn the certificate.

- PUB 1000 - Principles of Public Health **Credits: 3**
- PUB 2000 - Community Health Worker Fundamentals **Credits: 3**
- PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits: 3**
- ITP 3450 - Dynamics of Disease **Credits: 3**
- PUB 4030 - Advanced Community Health Worker **Credits: 3**

Total Credit Hours: 15

# Health Care Information Systems, B.S.

[Department of Health Professions](#)

[College of Health and Human Sciences](#)

Available Program Format(s): [In-Person](#)

## About the Program

Health Care Information Systems (HCIS) entails a wide array of skills needed to use and support computer systems used by hospitals, clinics, and health systems to provide care to the sick and injured. The field calls for professionals with knowledge of the health care industry, network administration, database administration, data querying and analysis, and support of clinical information systems, including the electronic medical record (EMR). Graduates will be qualified to take a leadership role in the information systems services of a health care organization, a health data analysis team, or an entrepreneurial venture in the health care industry.

## Student Outcomes

- Describe the various components of the health care system in the United States and the interrelationships between such components;
- Demonstrate the ability to assess, prioritize, and formulate a management response to issues in legal compliance, human resources, financial management, and formulate a strategic plan for a health care organization;
- Define the various components of the information systems used in a health care organization, the data they gather, their use in providing patient care and supporting administrative functions, the interrelationships between applications, and how combinations of data from various applications can be used to address management challenges in today's health care organization;
- Demonstrate basic skills in computer device networking, telecommunications, information systems security, database administration, clinical information application support, and business web site design; and
- Synthesize understanding of a business or clinical issue in a health care organization and formulate a plan of action to use information systems resources to address that issue.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Students can contact the Department of Health Professions at 303-615-1200 or the Department of Computer Information Systems at 303-615-0660 for advising.
- New or transfer students interested in the Bachelor of Science in Health Care Information Systems can also seek advising through the College of Health and Human Sciences Advising Office at 303-615-1099.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Core Courses: 51 credits

- (24 semester hours from the computer information systems curriculum)
- CIS 2010 - Foundations of Information Systems **Credits: 3**

- CIS 2110 - Structured Problem Solving in Information Systems **Credits: 3**
- CIS 3030 - Business Web Page Development **Credits: 3**
- CIS 3060 - Database Management Systems **Credits: 3**
- CIS 3230 - Telecommunication Systems and Networking **Credits: 3**
- CIS 3460 - Data Warehousing and Mining **Credits: 3**
- CIS 3500 - Information Systems Security **Credits: 3**
- CIS 4030 - Web Site Administration **Credits: 3**  
and  
(27 semester hours from the health care management curriculum)
- HCM 3030 - Health Care Jurisprudence **Credits: 3**
- HCM 3150 - Health Care Organization and Management **Credits: 3**
- HCM 3400 - Human Resources Management in Health Care **Credits: 3**
- HCM 3500 - Health Care Research Methods **Credits: 3**
- HCM 3600 - Health Information Systems **Credits: 3**
- HCM 4030 - Financial Management in Health Care **Credits: 3**
- HCM 4150 - Electronic Medical Record Applications and Support **Credits: 3**
- HCM 4300 - Strategic Management in Health Care **Credits: 3**
- HCM 4350 - Health Care Information Systems Applications **Credits: 3**

## Elective Courses: 9 credits

Students select nine (9) semester hours of electives from the following list:

- CIS 3050 - Fundamentals of Systems Analysis and Design **Credits: 3 \***
- CIS 3145 - Business Application Development **Credits: 3 \***
- CIS 4060 - Advanced Database Management Systems **Credits: 3 \***
- CIS 4260 - Database Administration **Credits: 3 \***
- CIS 4280 - Network Installation and Administration **Credits: 3 \***
- CIS 4370 - Data Science and Big Data Analytics **Credits: 3 \***
- HCM 2500 - Health Care Foundations, Professionalism, and Applications **Credits: 3 \***
- HCM 3200 - Managing Quality in Health Care **Credits: 2 \***
- HCM 3550 - Leadership in Health Care **Credits: 1 \***
- AGE 3800 - Long-Term Care: Managing Across the Continuum **Credits: 3 \***

## Senior Experience: 3 credits

Students select a minimum of 3 semester hours from:

- CIS 4920 - Health Care Information Systems Internship **Credits: 3**  
or
- HCM 4920 - Health Care Information Systems Internship **Credits: 3**

*\*Courses requiring additional prerequisite*

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Core Courses	51 credits
Required Electives	9 credits
Senior Experience	3 credits
Unrestricted Electives	21-24 credits
<b>Total for the Health Care Information Systems Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Health Care Management Major, B.S.

[Department of Health Professions](#)

[College of Health and Human Sciences](#)

Available Program Format(s): [Online](#), [In-Person](#), [Hybrid](#)

## About the Program

The Health Care Management program has been an icon for excellence in health care management education for over four decades.

The program provides students with course and experiential learning. Coursework includes health care foundations, organization and management, jurisprudence, global health, aging services, and leadership. Combined with other disciplines, such as marketing, information technology, accounting, and economics, the program prepares students for direct entry into management within the health

care field, continuation to graduate school, and/or advancement within the health care field.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Students may also choose to complete the optional concentration if they want.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1210 - Introduction to Statistics
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** ECO 2020 - Principles of Microeconomics
- Global Diversity (0 or 3 credits\*\*)
  - **Recommended:** Students in the HCM major are required to take HCM 2010 - Global Health Systems as part of the major requirement and this course will satisfy this requirement.

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Prerequisites: 13 credits

These are prerequisites for the Health Care Management major courses.

- ACC 2010 - Principles of Accounting I **Credits: 3**
- ECO 2020 - Principles of Microeconomics **Credits: 3** \*\*
- MKT 3000 - Principles of Marketing **Credits: 3**
- MTH 1210 - Introduction to Statistics **Credits: 4** \*\*\*

*\*\* Meets General Studies Social and Behavioral Sciences Requirement*

*\*\*\* Meets General Studies Quantitative Literacy Requirement*

## Required Courses: 47 credits

- AGE 1010 - Introduction to Aging and Long-Term Care Services **Credits: 3**
- AGE 3800 - Long-Term Care: Managing Across the Continuum **Credits: 3**
- HCM 2010 - Global Health Systems **Credits: 3**
- HCM 2500 - Health Care Foundations, Professionalism, and Applications **Credits: 3**
- HCM 3030 - Health Care Jurisprudence **Credits: 3**
- HCM 3150 - Health Care Organization and Management **Credits: 3**
- HCM 3200 - Managing Quality in Health Care **Credits: 2**
- HCM 3400 - Human Resources Management in Health Care **Credits: 3**
- HCM 3500 - Health Care Research Methods **Credits: 3**
- HCM 3600 - Health Information Systems **Credits: 3**
- HCM 3700 - Health Disparities in the U.S. **Credits: 3** \*
- HCM 4030 - Financial Management in Health Care **Credits: 3**
- HCM 4040 - Health Care Economics **Credits: 3**
- HCM 4300 - Strategic Management in Health Care **Credits: 3**
- ITP 3200 - Ethics in Health Care **Credits: 3**
- PUB 1000 - Principles of Public Health **Credits: 3**

*\* Meets ESSJ Requirement*

## Executive Administrator Concentration (Optional): 16 credits

Optional series of courses designed to prepare students for C-suite and executive roles and thinking.

- AGE 3030 - Aging Services: Current Topics, Trends, and Future Considerations **Credits: 3**
- HCM 3550 - Leadership in Health Care **Credits: 1**
- HCM 3840 - Statistical Methods in Health Data **Credits: 3**
- HCPS 4000 - Health Care Operations **Credits: 3**
- PUB 2000 - Community Health Worker Fundamentals **Credits: 3**
- PUB 4000 - Health Policy - Practice and Development **Credits: 3**

## Senior Experience: 3 credits

- HCM 4610 - Health Professions Internship **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Support Courses	13 credits
Required Courses	47 credits
Optional Executive Administration Concentration	16 credits
Senior Experience	3 credits
Unrestricted Electives	5-33 credits
Total for the Health Care Management Major, B.S.	120 credits

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Health Care Management Minor

A grade of "C" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## Required Courses

- HCM 2010 - Global Health Systems **Credits: 3**
- HCM 3150 - Health Care Organization and Management **Credits: 3**

**Subtotal: 6 credits**

## Additional Course Requirements

Choose a minimum of 12 credits from the following electives:

- HCM 3030 - Health Care Jurisprudence **Credits: 3**
- HCM 3100 - Entrepreneurship in Health **Credits: 1**
- HCM 3200 - Managing Quality in Health Care **Credits: 2**
- HCM 3400 - Human Resources Management in Health Care **Credits: 3**
- HCM 3500 - Health Care Research Methods **Credits: 3 \*\***
- HCM 3550 - Leadership in Health Care **Credits: 1**
- HCM 3600 - Health Information Systems **Credits: 3**
- PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits: 3**
- PUB 3020 - Introduction to Epidemiology in Public Health **Credits: 3**
- PUB 3030 - Essentials of Environmental Health in Public Health Practices **Credits: 3**
- HCM 3700 - Health Disparities in the U.S. **Credits: 3 \***
- HCM 3750 - Professional Practice Management **Credits: 1**
- AGE 3800 - Long-Term Care: Managing Across the Continuum **Credits: 3**
- HCM 3830 - Analytical Methods in Health Data **Credits: 3**
- HCM 3840 - Statistical Methods in Health Data **Credits: 3**
- HCM 3850 - Database Systems in Health Care **Credits: 3**
- HCM 3860 - Health Care Business Intelligence **Credits: 3**
- HCM 4030 - Financial Management in Health Care **Credits: 3 \*\***
- HCM 4040 - Health Care Economics **Credits: 3 \*\***
- HCM 4300 - Strategic Management in Health Care **Credits: 3**

**Subtotal: 12 credits**

**Total: 18 credits**

*\* meets ESSJ requirement*

*\*\* additional prerequisites required*

## Health Care Professional Services Major, B.S.

[Department of Health Professions](#)

Available Program Format(s): [Online](#),  
[In-Person](#), [Hybrid](#)



## About the Program

The Bachelor of Science in Health Care Professional Services is a degree program designed for professionals on the front lines of health care delivery wishing to have baccalaureate level training to maintain professional certification such as in the allied health professions. Allied health professionals are involved with the delivery of health or related services pertaining to the identification, evaluation, and prevention of diseases and disorders; dietary and nutrition services; rehabilitation; and health systems management. The Bachelor of Science in Health Care Professional Services degree program provides a broad-based foundation in: 1) global and national healthcare issues, disparities, and trends, 2) ethical and legal issues, 3) health promotion and disease prevention, 4) evidence-based practice, 5) health care research, 6) health care systems management, 7) health care quality, 8) holistic health, and 9) public health. The program is designed to articulate with Associate of Arts allied health related degree programs at community colleges or student's new to the health field.

## Student Outcomes

- Acquire the skills employers demand in critical areas such as: health disparities, health care systems, health care operations management, health care jurisprudence, health care quality, health care ethics, health care leadership and public health;
- Gain knowledge on current industry insights and the latest trends in health care professional services;
- Meet societal and health care delivery demands;
- Assume supervisory, management, and/or educational positions;
- Pursue graduate education in the health care field;
- Work in a variety of settings with diverse patients, families, and communities;
- Change careers within the industry to work for insurance companies, government agencies, or non-profit associations; and contribute to the field as diverse professionals assisting in diminishing health disparities and creating a healthier nation.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Students can contact the Department of Health Professions at 303-615-1200 for advising.
- New or transfer students interested in the Bachelor of Science in Health Care Professional Services can also seek advising through the College of Health and Human Sciences Advising Office at 303-615-1099.

## Prior Learning Assessment Information

A Prior Learning Assessment (PLA) is available for HCM 3600 Health Care Information Systems and ITP 1700 Medical Terminology. The Center for Individualized Learning will work with students to understand and navigate the process. Once students have obtained permission to take the exam from the Assistant Registrar, Prior Learning Assessment, [PLA@msudenver.edu](mailto:PLA@msudenver.edu), the Application for Credit by Examination form will need to be completed. The student will take the form to the Bursar's Office to pay. After paying, the student will return with the receipt to the Center for Individualized Learning and then the student will need to set up an appointment with the MSU Denver Assessment and Testing Center. They will verify the student's identification, provide a secure, quiet space to take the exam and at a mutually acceptable time.

The test will be timed and you cannot use any materials (books, notes, Internet) while taking the exam. The test will be returned to the Department for grading. A faculty member in the Program or the Department will determine if you have passed the examination with a grade sufficient to obtain credit. Signatures are needed from the faculty member, Chair, and Dean, so that the form can be sent to the registrar to enter credit on the student's transcript. The student may take the examination a maximum of two times.

The cost of the credits is half the tuition for the course and must be paid whether or not the examination is passed. You will receive 3 credits on a pass/fail basis. These credits are treated as non-resident (transfer) credits and will not count towards the 30 minimum resident credits required for a Bachelor's degree at MSU Denver.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)



- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

### Pick One: 3 credits

- ITP 1600 - Herbal Medicine **Credits:** 3  
or
- ITP 2500 - Complementary Medicine **Credits:** 3  
or
- ITP 3810 - Men Across Cultures **Credits:** 3  
or
- ITP 2950 - Wellness Coaching I **Credits:** 3

## Health Care Professional Services Required Courses: 32 credits

- HCM 2010 - Global Health Systems **Credits:** 3
- HCM 2500 - Health Care Foundations, Professionalism, and Applications **Credits:** 3
- HCM 3150 - Health Care Organization and Management **Credits:** 3
- HCM 3700 - Health Disparities in the U.S. **Credits:** 3 (to meet the ESSJ requirement)
- AGE 3800 - Long-Term Care: Managing Across the Continuum **Credits:** 3
- PUB 2000 - Community Health Worker Fundamentals **Credits:** 3
- HCPS 4000 - Health Care Operations **Credits:** 3
- HCPS 4010 - Evidence Based Health Care Delivery **Credits:** 3
- ITP 1700 - Medical Terminology **Credits:** 3 \*\*
- ITP 2700 - Holistic Dimensions of Wellness **Credits:** 3
- ITP 3200 - Ethics in Health Care **Credits:** 3 \* (Pre-reqs Completion of General Studies requirements in Written Communication, Oral Communication)

## Electives: 3 credits

Choose one of the following:

- ANT 3480 - Cultural Diversity in Health and Illness **Credits:** 3
- HCM 3030 - Health Care Jurisprudence **Credits:** 3
- HCM 3100 - Entrepreneurship in Health **Credits:** 1
- HCM 3200 - Managing Quality in Health Care **Credits:** 2
- HCM 3400 - Human Resources Management in Health Care **Credits:** 3
- HCM 3500 - Health Care Research Methods **Credits:** 3 \* (Pre-req MTH 1210 or PSY 2310)
- HCM 3550 - Leadership in Health Care **Credits:** 1
- HCM 3600 - Health Information Systems **Credits:** 3
- PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits:** 3
- PUB 3020 - Introduction to Epidemiology in Public Health **Credits:** 3
- PUB 3030 - Essentials of Environmental Health in Public Health Practices **Credits:** 3
- HCM 3750 - Professional Practice Management **Credits:** 1
- HSP 3460 - Addiction, Immunity, and Infectious Diseases **Credits:** 2
- ITP 3700 - Physiology of Aging **Credits:** 3 \* (Pre-reqs BIO 2310 and BIO 2320)
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits:** 3 \* (Pre-reqs BIO 1080/1090, BIO 2310 and ITP 3200)
- ITP 4100 - Women's Holistic Health **Credits:** 3 \* (Pre-reqs BIO 2320 and ITP 3200)
- ITP 4400 - Wellness Coaching II **Credits:** 3 \* (Pre-req ITP 2950 or HPS 2700; ITP 3850)
- PSY 3270 - Adulthood and Aging **Credits:** 3 \* (Pre-req PSY 1001)
- SOC 3800 - Health and Healers **Credits:** 3 \* (Pre-req SOC 1010)

## Senior Experience: 3 credits

- HCM 4610 - Health Professions Internship **Credits:** 3

## Notes

- \* Indicates pre-requisite requirement. Check with academic advisor regarding pre-requisite requirement(s).
- \*\* Has a Prior Learning Assessment

## Summary of Requirements

General Studies Requirements	33 credits
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ESSJ Requirements	0-3 credits
Selected Course	3 credits
Required Courses	33 credits
Required Elective Courses	3 credits
Senior Experience	3 credits
Unrestricted Electives	42-48 credits
<b>Total for the Health Care Professional Services Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## *Health Data Science Certificate*

Health Data Science is a field that focuses on applying information science methods to analyze and understand health care information, to progress from raw data to knowledge for improved decision-making and care delivery. Health Data Science uses interactive data analytic tools to explore large sets of health data to improve patient care and outcomes, improve effectiveness and efficiency of health operations, decrease costs and risk, and manage the health of populations.

Students with a background in Health Data Science may find opportunities in the following fields:

- Higher Education
- Research
- For-Profit Hospital systems
- Governmental Organizations
- Public Health

In addition, the below occupations illustrate some of the areas that this certificate will be useful:

- Nurses, Physicians, Allied Health Professionals, Computer programmers and technology professionals.

### Admission and Graduation Requirements

This certificate program is being offered to all MSU Denver students regardless of major. The certificate will offer the enrolled student the opportunity to complete a certificate as they work towards degree completion.

To be awarded the program certificate, the student must meet the following requirements:

1. Complete 18 credit hours of courses as recommended by the certificate program
2. Achieve a GPA of 3.0 or higher in the certificate program courses
3. Earn at least a "C" or better in each of the certificate courses; and
4. Enroll in and complete a minimum of 60% of the required courses at MSU Denver.

### Advising and Contact Information

Individuals interested in this certificate program should contact the Department of Health Professions at 303-615-1200 to schedule an appointment for an advising session either in person by phone or via virtual conferencing.

## Required Courses

- HCM 3150 - Health Care Organization and Management **Credits: 3**
- HCM 3600 - Health Information Systems **Credits: 3**
- HCM 3830 - Analytical Methods in Health Data **Credits: 3**
- HCM 3840 - Statistical Methods in Health Data **Credits: 3**
- HCM 3850 - Database Systems in Health Care **Credits: 3**
- HCM 3860 - Health Care Business Intelligence **Credits: 3**

**Total for Certificate: 18 credits**

## *Integrative Health Care Major, B.S.*

### Department of Health

### Professions

### College of Health and Human Sciences

Available Program Format(s): In-Person

## About the Program

The Integrative Health Care program offers students courses that integrate the most recent scientific evidence with the oldest of healing traditions. The program draws from disciplines such as health education services, health care management, biology, chemistry, and nutrition. Students examine the diverse factors that impinge on an individual's health and well-being. Students receive a broad-based understanding of the principles of human health and disease, the theories underlying healing practices, and the scientific research methods needed to evaluate the latest techniques in this dynamic field. A minimum passing grade of C- is required for all courses.

The Integrative Health Care program offers a major, pathways, and a minor. The major is designed for students interested in working in the expanding complementary and alternative health care field. The minor/pathways are designed for students who recognize the increased emphasis on wellness in several professional fields and/or

for health-conscious individuals who wish to establish a self-enhancement program. The minor and/or pathways can complement a major that is relevant to the student's career goals, but is not required.

Minors that would complement this major include, but are not limited to, Health Care Management, Nutrition, Aging Services Leadership, Recreation Services, Journalism, Spanish, Marketing, Human Services, Anthropology, Biology, and Chemistry.

The Integrative Health Care program is housed in the Department of Health Professions. Students enrolling in the major or minor must confer with a department advisor as soon as possible. For more information, call 303-615-1200.

## Student Outcomes

The baccalaureate Integrative Health Care program has established the following outcomes for all graduates.

- Demonstrate an attitude of caring, flexibility, and self-confidence in a health care setting.
- Act in an ethical and legal manner in applying the leadership roles of collaborator, resource person, change agent, teacher, and advocate.
- Integrate a variety of communication skills, media techniques, and strategies effectively and appropriately to influence health.
- Assess health situations and recommend appropriate healing practices.
- Evaluate global health systems to identify social and health-care trends in order to anticipate the future of health care.
- Apply scientific method to health-care problems.
- Apply knowledge of natural science principles in a healing practice.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Courses with grades of less than "C-" will need to be repeated in order for the student to take any other courses for which the

first course is a prerequisite. Students should note that programs differ in the minimum grade required.

- A pathway is not required for this major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*)

*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Core Courses: 33-34

- HCM 3150 - Health Care Organization and Management **Credits: 3**  
or
- HCM 3500 - Health Care Research Methods **Credits: 3 \***
- ITP 1000 - Health Career Foundations **Credits: 3**
- ITP 1500 - Dynamics of Health **Credits: 3**
- ITP 1700 - Medical Terminology **Credits: 3**  
or
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits: 3**
- ITP 2500 - Complementary Medicine **Credits: 3**
- ITP 2700 - Holistic Dimensions of Wellness **Credits: 3**
- ITP 3000 - Men's Health **Credits: 3**

- ITP 3200 - Ethics in Health Care **Credits: 3**
- ITP 3450 - Dynamics of Disease **Credits: 3**  
or
- ITP 4600 - Clinical Pathophysiology **Credits: 4 \***
- ITP 3850 - Lifestyle Medicine **Credits: 3**
- ITP 3700 - Physiology of Aging **Credits: 3 \***  
or
- ITP 4000 - Pediatric Holistic Health **Credits: 3**  
or
- ITP 4100 - Women's Holistic Health **Credits: 3**

*\*Courses with an asterisk (\*) have additional prerequisites*

## Program Electives: 12 credits

Choose at least 12 credits for any ITP prefix course or NUT 2040 - Introduction to Nutrition

## Pathways: 18 credits

In addition to their major coursework, students in the IHC major can complete a specialized pathway. Pathway options include Complementary Medicine, Lifestyle Medicine, Men's Health, and Wellness Coaching.

### Complementary Medicine Pathway: 18 credits

Students must take the 6 courses in the Complementary Medicine Pathway unless they have been taken in the major, in which case they may replace them with any ITP prefix course.

- ITP 1600 - Herbal Medicine **Credits: 3**
- ITP 2500 - Complementary Medicine **Credits: 3**
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits: 3**
- ITP 4300 - Botanical Pharmacology **Credits: 3**

Choose 2 of the Following Courses

- ITP 2720 - Cannabis as Medicine **Credits: 3**
- ITP 2800 - Health, Society, and the Environment **Credits: 3**
- ITP 3300 - Homeopathy **Credits: 3**
- ITP 3400 - Ayurveda **Credits: 3**
- ITP 3500 - Traditional Chinese Medicine **Credits: 3**
- ITP 3600 - Energy Medicine **Credits: 3**

### Lifestyle Medicine Pathway: 18 credits

Students must take the 6 courses in the Lifestyle Medicine Pathway unless they have been taken in the major, in which case they may replace them with any ITP prefix course.

- ITP 2950 - Wellness Coaching I **Credits: 3**
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits: 3**
- ITP 3850 - Lifestyle Medicine **Credits: 3**
- ITP 4700 - Community Health Education and Lifestyle Medicine **Credits: 3**
- ITP 4800 - Lifestyle Medicine Across Gender and Lifespan **Credits: 3**
- ITP 4999 - Applied Learning with Lifestyle Medicine **Credits: 3**

### Men's Health Pathway: 18 credits

Students must take the 6 courses in the Men's Health Pathway unless they have been taken in the major, in which case they may replace them with any ITP prefix course.

- ITP 2820 - Anger In Men: A Whole Approach **Credits: 3**
- ITP 3000 - Men's Health **Credits: 3**  
or
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits: 3**
- ITP 3111 - Aging Warriors: Understanding the Health Issues of Aging Men **Credits: 3**
- ITP 3810 - Men Across Cultures **Credits: 3**
- ITP 3911 - Fathers and Health: A Global Perspective **Credits: 3**
- ITP 3850 - Lifestyle Medicine **Credits: 3**  
or
- ITP 4800 - Lifestyle Medicine Across Gender and Lifespan **Credits: 3**

### Wellness Coaching Pathway: 18 credits

Students must take the 6 courses in the Wellness Coaching Pathway unless they have been taken in the major, in which case they may replace them with any ITP prefix course.

- ITP 2950 - Wellness Coaching I **Credits: 3**
- ITP 4400 - Wellness Coaching II **Credits: 3**
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits: 3**
- ITP 3850 - Lifestyle Medicine **Credits: 3** ( if ITP 3850 taken in major than can use other ITP prefix course)
- ITP 4700 - Community Health Education and Lifestyle Medicine **Credits: 3**
- ITP 4950 - Community Coaching for Health **Credits: 3**

Students who complete the Wellness Coaching Pathway will have satisfied the curriculum requirement to take the National Board of Health and Wellness Coaches

(NBHWC) exam after also completing a coaching log. Other requirements may apply. See the NBHWC website for more information.

## Senior Experience: 3 credits

The following Senior Experiences are options, work with an advisor to choose the proper one for your pathway.

- HCM 4610 - Health Professions Internship **Credits: 3**  
or
- ITP 4900 - Theories and Application of Knowledge for Integrative Health **Credits: 3**  
or
- ITP 4950 - Community Coaching for Health **Credits: 3**  
or
- ITP 4999 - Applied Learning with Lifestyle Medicine **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirements	0-3 credits
Core Courses	33-34 credits
Program Electives	12 credits
Selected Pathway	18 credits
Senior Experience	0-3 credits
Unrestricted Electives	17-33 credits
Total for the Integrative Health Care Major, B.S.	120 credits

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Integrative Health Care Minor*

The Integrative Health Care minor offers an area of concentration for students who recognize the increased emphasis on wellness and complementary and alternative therapies, as well as for health conscious individuals who wish to establish a self-enhancement program. The minor is designed to complement a major chosen by a student that is relevant to the student's career goals. Students must earn a "C-" or better in all courses for this minor.

## Core Courses

- ITP 1500 - Dynamics of Health **Credits: 3**
- ITP 2500 - Complementary Medicine **Credits: 3**
- ITP 2700 - Holistic Dimensions of Wellness **Credits: 3**

**Total for Core Courses: 9 credits**

## Additional Courses

Choose any 12 credits with the ITP prefix and/or the following.

- HCM 3500 - Health Care Research Methods **Credits: 3**
- NUT 2040 - Introduction to Nutrition **Credits: 3**

**Total for Electives: 12 credits**

## Summary of Credits Required for Minor in Integrative Health Care Minor

Core Courses	9 credits
Program Electives	12 credits
Total for Minor	Minimum of 21 credits

## *Lifestyle Medicine Major, B.S.*

[Department of Health Professions](#)

[College of Health and Human Sciences](#)

Available Program  
Format(s): [Online, Hybrid](#)

## About the Program

The Bachelor of Science Major in Lifestyle Medicine provides students with competencies in lifestyle medicine, health navigation, and wellness coaching. Lifestyle medicine is the use of evidence-based lifestyle approaches, including healthful eating, physical activity, sleep, stress management, tobacco cessation, fostering relationships, emotional wellness, and environmental health. These approaches prevent and treat many chronic diseases, improve outcomes and quality of life, tackle health disparities, and decrease health costs. Throughout the major, themes of cultural competence, service, self-care, interdisciplinary collaboration, and whole-person health will be emphasized. The major prepares students to incorporate the principles of evidence-based lifestyle medicine in health-related careers, prepares students to obtain related certifications, and positions them as leaders in addressing national health concerns. This major also applies to students wishing to enter graduate health professional schools; however, other prerequisites will likely be necessary for admission. A minor or pathway is not

required; however, the Complementary Medicine or Men's Health Pathways are available and encouraged.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- A pathway is not required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** Students may fulfill half of this requirement by taking NUT 2040 - Introduction to Nutrition which is required for the lifestyle medicine major
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** Students may fulfill this requirement by taking ITP 1500 - Dynamics of Health and ITP 3850 - Lifestyle Medicine which are required for the lifestyle medicine major
- Global Diversity (0 or 3 credits\*)

*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Recommended: Students wishing to fulfill this requirement from a course that is an option for the major may wish to take HCM 3700 - Health Disparities in the U.S.

## Lifestyle Medicine Core: 42 credits

Core required for the Lifestyle Medicine Major

- COMM 2020 - Introduction to Health Communication **Credits: 3**  
or
- HCM 3700 - Health Disparities in the U.S. **Credits: 3**  
or
- SLHS 2990 - Introduction to Health Communication **Credits: 3**
- HCM 3150 - Health Care Organization and Management **Credits: 3**
- PUB 2000 - Community Health Worker Fundamentals **Credits: 3**
- PUB 4030 - Advanced Community Health Worker **Credits: 3**
- ITP 1000 - Health Career Foundations **Credits: 3**
- ITP 1500 - Dynamics of Health **Credits: 3**
- ESS 2700 - Wellness Coaching I **Credits: 3**  
or
- ITP 2950 - Wellness Coaching I **Credits: 3**
- ITP 3450 - Dynamics of Disease **Credits: 3**
- ITP 3850 - Lifestyle Medicine **Credits: 3**
- ITP 4700 - Community Health Education and Lifestyle Medicine **Credits: 3**
- ITP 4800 - Lifestyle Medicine Across Gender and Lifespan **Credits: 3**
- RST 3530 - Healthy International Cooking **Credits: 3**  
or
- ITP 2700 - Holistic Dimensions of Wellness **Credits: 3**  
or
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits: 3**  
or
- ESS 1030 - Physical Well-being **Credits: 1-2**  
and
- ESSA 1870 - Stress Management **Credits: 2**
- NUT 2040 - Introduction to Nutrition **Credits: 3**
- ESS 4700 - Wellness Coaching II **Credits: 3**  
or

- ITP 4400 - Wellness Coaching II **Credits: 3**

## Electives: 3 credits

Choose 3 credits

- AGE 3800 - Long-Term Care: Managing Across the Continuum **Credits: 3**
- ESS 1440 - Stress Management Techniques **Credits: 3**
- ESS 3340 - Physiology of Exercise **Credits: 4**
- EXS 1020 - Resistance Training Techniques **Credits: 3**
- EXS 1640 - Physical Fitness Techniques and Programs **Credits: 3**
- HCM 3500 - Health Care Research Methods **Credits: 3**
- HON 3910 - Honors Colloquium **Credits: 3**
- HON 4950 - Senior Honors Thesis **Credits: 3**
- HON 4951 - Paired Senior Honors Thesis **Credits: 1**
- HSP 3220 - Conflict Resolution and Decision Making **Credits: 3**
- HSP 3470 - Counseling the Substance Abuser **Credits: 4**
- HSP 3550 - Intimate Partner Violence **Credits: 3**
- HSP 3560 - Motivational Interviewing **Credits: 2**
- HSP 3575 - Motivational Interviewing for Health Professionals **Credits: 3**
- HSP 4290 - Posttraumatic Stress Disorder and Trauma Informed Care **Credits: 1**
- ITP 2800 - Health, Society, and the Environment **Credits: 3**
- ITP 2820 - Anger In Men: A Whole Approach **Credits: 3**
- ITP 3000 - Men's Health **Credits: 3**
- ITP 3100 - Health Education and Counseling **Credits: 3**
- ITP 3111 - Aging Warriors: Understanding the Health Issues of Aging Men **Credits: 3**
- ITP 3200 - Ethics in Health Care **Credits: 3**
- ITP 3700 - Physiology of Aging **Credits: 3**
- ITP 3810 - Men Across Cultures **Credits: 3**
- ITP 3911 - Fathers and Health: A Global Perspective **Credits: 3**
- ITP 4000 - Pediatric Holistic Health **Credits: 3**
- ITP 4100 - Women's Holistic Health **Credits: 3**
- ITP 4300 - Botanical Pharmacology **Credits: 3**
- ITP 4600 - Clinical Pathophysiology **Credits: 4**
- ITP 4999 - Applied Learning with Lifestyle Medicine **Credits: 3**
- NUT 3040 - Nutrition Concepts and Controversies **Credits: 3**
- NUT 3050 - Concepts of Lifecycle Nutrition **Credits: 3**
- NUT 3200 - Nutrition and Sports Performance **Credits: 3**
- NUT 3350 - Global Nutrition and Health **Credits: 3**
- NUT 3400 - Nutrition and Weight Management **Credits: 3**
- NUT 3500 - Food Safety **Credits: 3**
- PSY 2120 - Brain and Behavior **Credits: 3**

- PSY 2150 - Positive Psychology **Credits: 3**
- PSY 2210 - Psychology of Human Development **Credits: 3**
- PSY 3410 - Health Psychology **Credits: 3**
- PSY 3440 - Cravings and Addictions **Credits: 3**
- PUB 1000 - Principles of Public Health **Credits: 3**
- PUB 3000 - Health Behavior Theory and Practice **Credits: 3**
- PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits: 3**
- PUB 3020 - Introduction to Epidemiology in Public Health **Credits: 3**
- PUB 3030 - Essentials of Environmental Health in Public Health Practices **Credits: 3**
- PUB 4000 - Health Policy - Practice and Development **Credits: 3**
- PUB 4010 - Health Program Planning, Implementation, and Evaluation **Credits: 3**
- PUB 4020 - Peer Health Education- Field Experience **Credits: 3**
- RST 1550 - Food Fundamentals **Credits: 3**
- RST 3875 - Food Preservation Techniques **Credits: 3**
- SPS 4500 - Teaching Assistantship in the College of Professional Studies **Credits: 3**
- SWK 1010 - Introduction to Social Work **Credits: 3**
- SWK 1600 - Community Engagement and Civic Responsibility **Credits: 3**
- SWK 3010 - Social Work Practice with Children and Youth **Credits: 3**
- SWK 3030 - Social Work with Older People **Credits: 3**
- SWK 4430 - Partnering with Families for Change **Credits: 3**
- SWK 3120 - Unraveling Inequalities in Social Work Practice **Credits: 3**
- SWK 3150 - Social Work and Child Maltreatment **Credits: 3**
- SWK 3500 - Social Work Practice with LGBTQ People **Credits: 3**
- UA 2735 - Urban Vegetable Farming **Credits: 3**
- RST 3905 - Farm to Table Sustainability **Credits: 3**
- Any ESSA course may count for up to 4 credits of electives
- Or any ITP, HCM, HCPS, or PUB prefix course

## Optional Complementary Medicine Pathway: 18 credits

To complete the optional pathway (if desired), students can take the 3 required courses in the Complementary Medicine Pathway unless they have been taken in the major, in which case they may replace it with any ITP prefix course. They must also choose any 3 courses from the optional courses listed below.

### Required Courses

- ITP 1600 - Herbal Medicine **Credits: 3**

- ITP 2500 - Complementary Medicine **Credits: 3**
- ITP 4300 - Botanical Pharmacology **Credits: 3**

Optional Courses: Choose any 3 courses from the list below

- ITP 2720 - Cannabis as Medicine **Credits: 3**
- ITP 2800 - Health, Society, and the Environment **Credits: 3**
- ITP 3300 - Homeopathy **Credits: 3**
- ITP 3400 - Ayurveda **Credits: 3**
- ITP 3500 - Traditional Chinese Medicine **Credits: 3**
- ITP 3600 - Energy Medicine **Credits: 3**
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits: 3**

## Optional Men's Health Pathway: 18 credits

To complete the optional pathway (if desired), students can take any 6 of the courses below in the Men's Health Pathway unless they have been taken in the major, in which case they may replace it with any ITP prefix course.

- ITP 2820 - Anger In Men: A Whole Approach **Credits: 3**
- ITP 3000 - Men's Health **Credits: 3**
- ITP 3111 - Aging Warriors: Understanding the Health Issues of Aging Men **Credits: 3**
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits: 3**
- ITP 3810 - Men Across Cultures **Credits: 3**
- ITP 3850 - Lifestyle Medicine **Credits: 3**
- ITP 3911 - Fathers and Health: A Global Perspective **Credits: 3**

## Senior Experience: 3 credits

- ESS 4950 - Community Coaching for Health **Credits: 3**  
or
- ITP 4950 - Community Coaching for Health **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Core Courses	42 credits
Elective Course	3 credits
Senior Experience	3 credits

Unrestricted Electives and optional Pathway or Minor	36-48 credits
Total for the Lifestyle Medicine Major, B.S.	120 credits

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Lifestyle Medicine Minor

The Lifestyle Medicine minor assists students interested in learning how positive behavior changes to improve health and quality of life through nutritious eating, physical activity, stress reduction, sleep habits, tobacco cessation, social connection, and other health supporting behaviors. The minor will prepare students to incorporate the principals of evidence-based lifestyle medicine in health and wellness related careers. The Lifestyle Medicine minor contains required core courses along with numerous elective courses so that students can tailor the minor to meet specific career and personal goals. Potential majors to complement this minor include but are not limited to Integrative Health Care, Recreation Professions, Health Care Management, Nutrition, Health Care Professional Services, and Nursing. The minor is also applicable to individuals who plan to apply to graduate programs in healthcare.

### Advising:

Students can contact the Department of Health Professions for advising at 303-615-1200.

New or transfer students interested in the Lifestyle Medicine minor can also seek advising through the College of Health and Human Sciences Advising Office at 303-615-1099.

### Course Selection:

Students must take 18 credit hours from courses listed below: 9 required credit hours and 9 elective credit hours.

## Required Courses

- ITP 3850 - Lifestyle Medicine **Credits: 3**
- ITP 4700 - Community Health Education and Lifestyle Medicine **Credits: 3**
- ITP 4800 - Lifestyle Medicine Across Gender and Lifespan **Credits: 3**

## Lifestyle Medicine Electives

Choose at least 9 credits from the following (at least 3 hours must be upper division). Note: for ITP 2950/HPS 2700 & ITP 4400/HPS 4700 credit will only be given for one prefix: ITP or HPS



- AGE 3800 - Long-Term Care: Managing Across the Continuum **Credits: 3**
- COMM 2020 - Introduction to Health Communication **Credits: 3**
- ESS 1030 - Physical Well-being **Credits: 1-2**
- ESS 1440 - Stress Management Techniques **Credits: 3**
- ESS 2700 - Wellness Coaching I **Credits: 3**
- ESS 3340 - Physiology of Exercise **Credits: 4**
- ESS 4700 - Wellness Coaching II **Credits: 3**
- ESSA 1870 - Stress Management **Credits: 2**
- EXS 1020 - Resistance Training Techniques **Credits: 3**
- EXS 1640 - Physical Fitness Techniques and Programs **Credits: 3**
- HCM 3150 - Health Care Organization and Management **Credits: 3**
- HCM 3500 - Health Care Research Methods **Credits: 3**
- HCM 3700 - Health Disparities in the U.S. **Credits: 3**
- HON 3910 - Honors Colloquium **Credits: 3**
- HON 4950 - Senior Honors Thesis **Credits: 3**
- HON 4951 - Paired Senior Honors Thesis **Credits: 1**
- HSP 3220 - Conflict Resolution and Decision Making **Credits: 3**
- HSP 3470 - Counseling the Substance Abuser **Credits: 4**
- HSP 3550 - Intimate Partner Violence **Credits: 3**
- HSP 3575 - Motivational Interviewing for Health Professionals **Credits: 3**
- HSP 4290 - Posttraumatic Stress Disorder and Trauma Informed Care **Credits: 1**
- ITP 1000 - Health Career Foundations **Credits: 3**
- ITP 1500 - Dynamics of Health **Credits: 3**
- ITP 2700 - Holistic Dimensions of Wellness **Credits: 3**
- ITP 2800 - Health, Society, and the Environment **Credits: 3**
- ITP 2820 - Anger In Men: A Whole Approach **Credits: 3**
- ITP 2950 - Wellness Coaching I **Credits: 3**
- ITP 3000 - Men's Health **Credits: 3**
- ITP 3100 - Health Education and Counseling **Credits: 3**
- ITP 3111 - Aging Warriors: Understanding the Health Issues of Aging Men **Credits: 3**
- ITP 3200 - Ethics in Health Care **Credits: 3**
- ITP 3450 - Dynamics of Disease **Credits: 3**
- ITP 3700 - Physiology of Aging **Credits: 3**
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits: 3**
- ITP 3810 - Men Across Cultures **Credits: 3**
- ITP 3911 - Fathers and Health: A Global Perspective **Credits: 3**
- ITP 4000 - Pediatric Holistic Health **Credits: 3**
- ITP 4100 - Women's Holistic Health **Credits: 3**
- ITP 4300 - Botanical Pharmacology **Credits: 3**
- ITP 4400 - Wellness Coaching II **Credits: 3**
- ITP 4950 - Community Coaching for Health **Credits: 3**
- ITP 4999 - Applied Learning with Lifestyle Medicine **Credits: 3**
- NUT 2040 - Introduction to Nutrition **Credits: 3**
- NUT 3040 - Nutrition Concepts and Controversies **Credits: 3**
- NUT 3050 - Concepts of Lifecycle Nutrition **Credits: 3**
- NUT 3200 - Nutrition and Sports Performance **Credits: 3**
- NUT 3400 - Nutrition and Weight Management **Credits: 3**
- PSY 2120 - Brain and Behavior **Credits: 3**
- PSY 2150 - Positive Psychology **Credits: 3**
- PSY 3410 - Health Psychology **Credits: 3**
- PSY 3440 - Cravings and Addictions **Credits: 3**
- PUB 1000 - Principles of Public Health **Credits: 3**
- PUB 2000 - Community Health Worker Fundamentals **Credits: 3**
- PUB 3000 - Health Behavior Theory and Practice **Credits: 3**
- PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits: 3**
- PUB 3020 - Introduction to Epidemiology in Public Health **Credits: 3**
- PUB 3030 - Essentials of Environmental Health in Public Health Practices **Credits: 3**
- PUB 4000 - Health Policy - Practice and Development **Credits: 3**
- PUB 4010 - Health Program Planning, Implementation, and Evaluation **Credits: 3**
- PUB 4020 - Peer Health Education- Field Experience **Credits: 3**
- PUB 4030 - Advanced Community Health Worker **Credits: 3**
- RST 1550 - Food Fundamentals **Credits: 3**
- RST 3530 - Healthy International Cooking **Credits: 3**
- RST 3875 - Food Preservation Techniques **Credits: 3**
- SPS 4500 - Teaching Assistantship in the College of Professional Studies **Credits: 3**
- SWK 1010 - Introduction to Social Work **Credits: 3**
- SWK 1600 - Community Engagement and Civic Responsibility **Credits: 3**
- SWK 3010 - Social Work Practice with Children and Youth **Credits: 3**
- SWK 3030 - Social Work with Older People **Credits: 3**
- SWK 4430 - Partnering with Families for Change **Credits: 3**
- SWK 3120 - Unraveling Inequalities in Social Work Practice **Credits: 3**
- SWK 3150 - Social Work and Child Maltreatment **Credits: 3**
- SWK 3500 - Social Work Practice with LGBTQ People **Credits: 3**
- UA 2735 - Urban Vegetable Farming **Credits: 3**
- RST 3905 - Farm to Table Sustainability **Credits: 3**
- ESSA Prefix Courses: up to 4 credits

Total Credits: 18

## *Men's Health Minor*

The Men's Health Minor provides a comprehensive understanding of the health and wellness of men through evidence-based curriculum content. Students examine the diverse factors that contribute to the totality of men's health and well-being, including discernment of existing paradigms that inform men's health behaviors. Students receive a broad-based understanding of the key determinants of men's health across culture, class, and race. Students learn the disease processes affecting men across the lifespan, the theories underlying masculinity and fathering practices, and the scientific research methods needed to evaluate the latest information in this expanding field of healthcare.

The passing grade for all classes in the minor program is a C-, and the minimum GPA within the minor is 2.0.

The Men's Health minor is designed for students interested in working in the health care field, as well as fields affected by men's health. The minor can complement a major that is relevant to the student's career goals.

Majors that complement the Men's Health minor include, but are not limited to: Integrative Health Care, Lifestyle Medicine, Health Care Management, Public Health, Healthcare Professional Services, Human Services and Counseling, Nutrition, Human Performance and Sport, Psychology, Gender/Women/Sexualities Studies, Sociology, Criminal Justice and Journalism.

## Core Classes

- ITP 2820 - Anger In Men: A Whole Approach **Credits: 3**
  - ITP 3000 - Men's Health **Credits: 3**
  - ITP 3111 - Aging Warriors: Understanding the Health Issues of Aging Men **Credits: 3**
  - ITP 3810 - Men Across Cultures **Credits: 3**
  - ITP 3911 - Fathers and Health: A Global Perspective **Credits: 3**
- Sub-total: 15 credits

## Elective Courses

Choose 6 credits from the list of electives.

- ITP 3850 - Lifestyle Medicine **Credits: 3**
- ITP 4000 - Pediatric Holistic Health **Credits: 3**
- ITP 4100 - Women's Holistic Health **Credits: 3**
- ITP 4800 - Lifestyle Medicine Across Gender and Lifespan **Credits: 3**
- ITP 4999 - Applied Learning with Lifestyle Medicine **Credits: 3**
- HCM 2010 - Global Health Systems **Credits: 3**

- HCM 3100 - Entrepreneurship in Health **Credits: 1**
  - HCM 3550 - Leadership in Health Care **Credits: 1**
  - PUB 1000 - Principles of Public Health **Credits: 3**
  - PUB 3000 - Health Behavior Theory and Practice **Credits: 3**
  - PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits: 3**
- Total Credits for the Minor: 21

## *Pre-Healthcare Minor*

The Pre-Healthcare Minor provides background knowledge for individuals interested in healthcare. This includes, but is not limited to, individuals who plan to apply to a clinical education program, a graduate program in healthcare management, or a pre-licensure nursing program, including, but not limited to, the MSU Denver Nursing Program.

Potential majors to complement this minor include, but are not limited to, Anthropology, Biology, Health Care Management, Health Care Professional Services, Integrative Healthcare, Lifestyle Medicine, Psychology, Public Health, and Sociology.

## Advising

- Students planning to transfer into an undergraduate nursing program should contact the Department of Nursing at 303-615-1600.
- Students planning to complete a bachelor's degree before applying to the MSU Denver Accelerated Nursing Program should contact the Department of Nursing at 303-615-1600.
- Students can also see their major advisor for assistance with this program.
- Students with majors in the health professions should contact the Department of Health Professions at 303-615-1200.
- Students with a major in Nutrition should contact the Department of Nutrition at 303-615-0990.

## Important Notice

- Completion of this minor does not guarantee admission into any nursing or health professions graduate program.
- Students are responsible for contacting the nursing or health professions graduate program to which they are applying regarding specific prerequisite courses required by that program.

A grade of "C-" or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required.

## Required Courses

Choose at least 3 courses from this list.

- BIO 2310 - Human Anatomy and Physiology I **Credits: 4 \***
- BIO 2320 - Human Anatomy and Physiology II **Credits: 4**
- ITP 2700 - Holistic Dimensions of Wellness **Credits: 3 \***
- ITP 3000 - Men's Health **Credits: 3**
- ITP 3200 - Ethics in Health Care **Credits: 3**
- ITP 3850 - Lifestyle Medicine **Credits: 3**

## Elective Courses

Choose at least 10 credit hours from the following list and/or any other Health Professions courses (Prefix HCM, PUB, HCPS, AGE and ITP):

- AGE 3800 - Long-Term Care: Managing Across the Continuum **Credits: 3**
- ANT 3480 - Cultural Diversity in Health and Illness **Credits: 3**
- BIO 1080 - General Biology I **Credits: 3**
- BIO 1090 - General Biology Laboratory I **Credits: 1**
- BIO 1081 - General Biology II **Credits: 3 \***
- BIO 1091 - General Biology Laboratory II **Credits: 1 \***
- BIO 2400 - General Microbiology **Credits: 5 \***
- BIO 3050 - Cell Biology **Credits: 4 \***
- BIO 3320 - Advanced Human Physiology **Credits: 4 \***
- BIO 3330 - Advanced Human Cadaver Anatomy **Credits: 5**
- BIO 3350 - Immunology **Credits: 3 \***
- BIO 3471 - Biology of Women **Credits: 3 \***
- BIO 3600 - General Genetics **Credits: 4 \***
- BIO 398A - Internship in Medicine **Credits: 1-12**
- BIO 4450 - Pathogenic Microbiology **Credits: 5 \***
- CHE 1100 - Principles of Chemistry **Credits: 4**
- CHE 1150 - Principles of Chemistry Laboratory **Credits: 1**
- CHE 1800 - General Chemistry I **Credits: 4**
- CHE 1801 - General Chemistry I Laboratory **Credits: 1**
- CHE 1810 - General Chemistry II **Credits: 4 \***
- CHE 1811 - General Chemistry II Laboratory **Credits: 1 \***
- CHE 2100 - Introduction to Organic and Biological Chemistry **Credits: 4 \***
- CHE 2150 - Introduction to Organic and Biological Chemistry Laboratory **Credits: 1**
- CHE 3100 - Organic Chemistry I **Credits: 4 \***
- CHE 3110 - Organic Chemistry II **Credits: 4 \***
- CHE 3120 - Organic Chemistry Laboratory I **Credits: 1 \***
- CHE 3130 - Organic Chemistry Laboratory II **Credits: 1 \***
- CHE 4310 - Biochemistry I **Credits: 4 \***
- CHE 4320 - Biochemistry II **Credits: 4 \***
- CHE 4350 - Biochemistry Laboratory **Credits: 2**
- HCM 2010 - Global Health Systems **Credits: 3**
- HCM 3150 - Health Care Organization and Management **Credits: 3**
- HCM 3200 - Managing Quality in Health Care **Credits: 2**

- HCM 3500 - Health Care Research Methods **Credits: 3 \***
- HCM 3600 - Health Information Systems **Credits: 3**
- HCM 3700 - Health Disparities in the U.S. **Credits: 3**
- HCM 3750 - Professional Practice Management **Credits: 1**
- ITP 1600 - Herbal Medicine **Credits: 3**
- ITP 1700 - Medical Terminology **Credits: 3**
- ITP 2500 - Complementary Medicine **Credits: 3**
- ITP 2700 - Holistic Dimensions of Wellness **Credits: 3 \***
- ITP 2800 - Health, Society, and the Environment **Credits: 3 \***
- ITP 2950 - Wellness Coaching I **Credits: 3 \***
- ITP 3000 - Men's Health **Credits: 3 \***
- ITP 3100 - Health Education and Counseling **Credits: 3 \***
- ITP 3111 - Aging Warriors: Understanding the Health Issues of Aging Men **Credits: 3**
- ITP 3200 - Ethics in Health Care **Credits: 3 \***
- ITP 3700 - Physiology of Aging **Credits: 3 \***
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits: 3 \***
- ITP 3850 - Lifestyle Medicine **Credits: 3 \***
- ITP 3911 - Fathers and Health: A Global Perspective **Credits: 3**
- ITP 4000 - Pediatric Holistic Health **Credits: 3 \***
- ITP 4100 - Women's Holistic Health **Credits: 3 \***
- ITP 4300 - Botanical Pharmacology **Credits: 3 \***
- MTH 1110 - College Algebra for Calculus **Credits: 4**
- MTH 1120 - College Trigonometry **Credits: 3 \***
- MTH 1210 - Introduction to Statistics **Credits: 4**
- MTH 1400 - Precalculus Mathematics **Credits: 4 \***
- MTH 1410 - Calculus I **Credits: 4 \***
- NUT 2040 - Introduction to Nutrition **Credits: 3 \***
- NUT 3050 - Concepts of Lifecycle Nutrition **Credits: 3 \***
- NUT 3200 - Nutrition and Sports Performance **Credits: 3 \***
- NUT 3300 - Cultural Aspects of Nutrition **Credits: 3 \***
- NUT 3400 - Nutrition and Weight Management **Credits: 3 \***
- NUT 3500 - Food Safety **Credits: 3**
- NUT 4210 - Community Nutrition **Credits: 3 \***
- PHI 1030 - Thinking about Ethics: Morality and the Good Life **Credits: 3**
- PHY 2010 - College Physics I **Credits: 4 \***
- PHY 2020 - College Physics II **Credits: 4 \***
- PHY 2030 - College Physics I Laboratory **Credits: 1 \***
- PHY 2040 - College Physics II Laboratory **Credits: 1 \***
- PHY 2311 - General Physics I **Credits: 4 \***
- PHY 2321 - General Physics I Laboratory **Credits: 1 \***
- PHY 2331 - General Physics II **Credits: 4 \***
- PHY 2341 - General Physics II Laboratory **Credits: 1 \***
- PSY 2120 - Brain and Behavior **Credits: 3 \***
- PSY 2150 - Positive Psychology **Credits: 3 \***
- PSY 2210 - Psychology of Human Development **Credits: 3 \***

- PSY 2310 - Statistics for the Social and Behavioral Sciences **Credits: 3**
- PSY 3270 - Adulthood and Aging **Credits: 3 \***
- PSY 3410 - Health Psychology **Credits: 3 \***
- PSY 3440 - Cravings and Addictions **Credits: 3 \***
- PSY 3620 - Psychological Disorders: Perspectives, Symptoms, and Treatment **Credits: 3 \***
- PSY 4540 - Behavioral Neuroscience **Credits: 3 \***
- PUB 1000 - Principles of Public Health **Credits: 3**
- PUB 3000 - Health Behavior Theory and Practice **Credits: 3**
- PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits: 3**
- PUB 3020 - Introduction to Epidemiology in Public Health **Credits: 3**
- PUB 3030 - Essentials of Environmental Health in Public Health Practices **Credits: 3**
- PUB 4000 - Health Policy - Practice and Development **Credits: 3**
- PUB 4010 - Health Program Planning, Implementation, and Evaluation **Credits: 3**
- PUB 4020 - Peer Health Education- Field Experience **Credits: 3**
- SPA 1004 - Conversational Spanish for Medical Professions I **Credits: 3**
- SPA 1010 - Elementary Spanish I **Credits: 5**
- May also include any course with an ITP, HCM, or PUB prefix

**Total for Minor: 19-21 credits**

*\* Courses requiring additional prerequisites.*

## ***Public Health Major, B.A.***

[Department of Health Professions](#)

[College of Health and Human Sciences](#)

Available Program Format(s): [In-Person](#)

### **About the Program**

A degree in public health will give the student a broad understanding of the public health field, while allowing students to gain experience in focused specialties of public health practice. By completing the public health core, students will have skills to understand basic public health functions such as monitoring and assessing the health of communities, identifying health problems and priorities, and implementing evidence-based strategies to promote population health. The required curriculum was designed to build student knowledge and skill in 11 Public Health Competency Domains identified by the Counsel on Public Health Education (CEPH).

Students that graduate with a major in Public Health will be prepared for many entry-level public health positions, as well as providing the background knowledge required to pursue a broad range of graduate degree programs, including a master's degree of Public Health (MPH) or a master's degree in Health Administration (MHA).

### **Student Outcomes**

The requirements for the public health major (BA) provides instruction in the following domains. The curriculum addresses these domains through any combination of learning experiences throughout the requirements for the major or concentration coursework.

- The concepts and applications of basic statistics
- The foundations of biological and life sciences and the concepts of health and disease
- The history and philosophy of public health as well as its core values, concepts, and functions across the globe and in society
- The basic concepts, methods, and tools of public health data collection, use, and analysis and why evidence-based approaches are an essential part of public health practice
- The concepts of population health, and the basic processes, approaches, and interventions that identify and address the major health-related needs and concerns of populations
- The underlying science of human health and disease including opportunities for promoting and protecting health across the life course
- The socioeconomic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities
- The fundamental concepts and features of project implementation, including planning, assessment, and evaluation
- The fundamental characteristics and organizational structures of the US health system as well as the differences in systems in other countries
- Basic concepts of legal, ethical, economic, and regulatory dimensions of health care and public health policy and the roles, influences, and responsibilities of the different agencies and branches of government
- Basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology

### **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1210 - Introduction to Statistics\*
- Arts and Humanities (6 credits)
  - **Recommended:** PHI 1030 - Thinking about Ethics: Morality and the Good Life\*
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** HCM 2010 - Global Health Systems\*\*
  - **Recommended:** ITP 1500 - Dynamics of Health\*
- Global Diversity (0 or 3 credits\*\*\*)
  - **Recommended:** HCM 2010 - Global Health Systems\*\*

\* The listed courses are suggested courses, but not required for the major.

\*\*HCM 2010 is required for the major and may also count in General Studies Social and Behavioral Science and Global Diversity.

\*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Public Health Major Core: 45 credits

These courses are required to complete the Public Health Major.

- HCM 2010 - Global Health Systems **Credits:** 3
- HCM 3700 - Health Disparities in the U.S. **Credits:** 3
- ITP 3200 - Ethics in Health Care **Credits:** 3
- ITP 3450 - Dynamics of Disease **Credits:** 3
- MTH 1210 - Introduction to Statistics **Credits:** 4  
or
- PSY 2310 - Statistics for the Social and Behavioral Sciences **Credits:** 3
- PUB 1000 - Principles of Public Health **Credits:** 3
- PUB 3000 - Health Behavior Theory and Practice **Credits:** 3
- PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits:** 3
- PUB 3020 - Introduction to Epidemiology in Public Health **Credits:** 3
- PUB 3030 - Essentials of Environmental Health in Public Health Practices **Credits:** 3
- PUB 4000 - Health Policy - Practice and Development **Credits:** 3
- PUB 4010 - Health Program Planning, Implementation, and Evaluation **Credits:** 3
- SLHS 2990 - Introduction to Health Communication **Credits:** 3

## Public Health Major Core Option

You must select from these options to complete the Public Health core coursework. This is a 5-6 credit course requirement within the core courses, and will complete the 45 credit hours for the Public Health Major core course requirements.

- AGE 3030 - Aging Services: Current Topics, Trends, and Future Considerations **Credits:** 3
- HCM 3150 - Health Care Organization and Management **Credits:** 3
- ITP 3000 - Men's Health **Credits:** 3
- ITP 3850 - Lifestyle Medicine **Credits:** 3
- ITP 4700 - Community Health Education and Lifestyle Medicine **Credits:** 3
- PUB 2000 - Community Health Worker Fundamentals **Credits:** 3
- PUB 4020 - Peer Health Education- Field Experience **Credits:** 3

## Public Health Major Electives: 3 credits

You must select one course from the following list to complete the elective course requirement. If a course was already taken in the Public Health Major Core Option, it can not be taken as a general Public Health Core elective.

- AGE 1010 - Introduction to Aging and Long-Term Care Services **Credits: 3**
- AGE 2020 - Ageism and Ableism in Society **Credits: 3**
- AGE 3030 - Aging Services: Current Topics, Trends, and Future Considerations **Credits: 3**
- AGE 3800 - Long-Term Care: Managing Across the Continuum **Credits: 3**
- HCM 3100 - Entrepreneurship in Health **Credits: 1**
- HCM 3150 - Health Care Organization and Management **Credits: 3**
- HCM 3200 - Managing Quality in Health Care **Credits: 2**
- HCM 3400 - Human Resources Management in Health Care **Credits: 3**
- HCM 3550 - Leadership in Health Care **Credits: 1**
- HLDR 1100 - Colorado Tourism and Recreation **Credits: 3**
- HSP 1010 - Introduction to Human Services and Counseling **Credits: 3**
- HSP 1020 - Introduction to Trauma Informed Care **Credits: 3**
- HSP 2010 - Introduction to High-Impact Nonprofit Organizations **Credits: 3**
- HSP 3400 - Pharmacology of Drugs and Alcohol **Credits: 3**
- HSP 3460 - Addiction, Immunity, and Infectious Diseases **Credits: 2**
- MGT 3510 - The People of Nonprofits: Staff, Board, Volunteers, Clients and You **Credits: 3**
- HSP 3560 - Motivational Interviewing **Credits: 2**
- HSP 3575 - Motivational Interviewing for Health Professionals **Credits: 3**
- HSP 3860 - Social Entrepreneurship **Credits: 3**
- FIN 4450 - Nonprofit Financial Management and Financing **Credits: 3**
- ITP 1700 - Medical Terminology **Credits: 3**
- ITP 2800 - Health, Society, and the Environment **Credits: 3**
- ITP 2950 - Wellness Coaching I **Credits: 3**
- ITP 3000 - Men's Health **Credits: 3**
- ITP 3100 - Health Education and Counseling **Credits: 3**
- ITP 3700 - Physiology of Aging **Credits: 3**
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits: 3**
- ITP 3850 - Lifestyle Medicine **Credits: 3**
- ITP 4100 - Women's Holistic Health **Credits: 3**
- ITP 4400 - Wellness Coaching II **Credits: 3**
- ITP 4700 - Community Health Education and Lifestyle Medicine **Credits: 3**

- ITP 4800 - Lifestyle Medicine Across Gender and Lifespan **Credits: 3**
- ITP 4950 - Community Coaching for Health **Credits: 3**
- NUT 2040 - Introduction to Nutrition **Credits: 3**
- NUT 3350 - Global Nutrition and Health **Credits: 3**
- NUT 3500 - Food Safety **Credits: 3**
- NUT 4210 - Community Nutrition **Credits: 3**
- PUB 2000 - Community Health Worker Fundamentals **Credits: 3**
- PUB 4020 - Peer Health Education- Field Experience **Credits: 3**
- PUB 4030 - Advanced Community Health Worker **Credits: 3**
- SLHS 3000 - Foundations of Disability Studies through Media **Credits: 3**
- SWK 1600 - Community Engagement and Civic Responsibility **Credits: 3**
- SWK 3030 - Social Work with Older People **Credits: 3**
- SWK 3120 - Unraveling Inequalities in Social Work Practice **Credits: 3**

## Senior Experience/Internship: 3 credits

The course HCM 4610 Health Professions Internship is the senior experience/internship course provided for the department, and will fulfill the public health senior experience/internship requirement.

- HCM 4610 - Health Professions Internship **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Major Requirements	45 credits
Major Elective	3 credits
Senior Experience	3 credits
Unrestricted Electives	33-48 credits
<b>Total for the Public Health Major, B.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Public Health Minor*

The undergraduate minor in Public Health will provide students with a basic understanding of the Public Health field by exploring social, cultural, and biological dimensions of health. By completing the public health minor curriculum, students will have skills that can be applied to a Public Health setting and functions such as monitoring and assessing the health of communities, identifying health problems and prioritizing them for better health outcomes, and implementing evidence-based strategies to promote population health that can be performed with a high level of expertise.

Students that graduate with a Public Health minor will be prepared for many entry-level public health positions, while also providing the background knowledge required to pursue a broad range of graduate degree programs, including a master's degree of Public Health (MPH). Providing this new minor in Public Health will build out student opportunities to connect broadly to the healthcare field, even when they are not public health majors. There are a variety of natural, social, and behavioral science fields that seek out individuals with knowledge and experience in the Public Health field as well as their specific area of training. Examples of such fields are behavioral health, social work, law and health policy, medicine, dentistry, pharmacy, nursing, health administration, and health services research.

It is highly recommended that General Studies and Support Courses be completed prior to enrolling in Public Health courses. Students must earn a grade of "C- or higher" in all courses required for the minor in order to progress through the program. Courses with grades of less than "C-" must be repeated prior to the student taking any other courses for which the first course is a prerequisite.

We recommend that you meet with a Department of Health Professions advisor once per semester, prior to registration, or, at least once a year.

Advisors can help plan your schedule or courses, review Degree Progress reports, discuss minors, assess your status regarding graduation requirements, and provide career counseling, etc.

## Required Courses

Public Health Foundation and Study in Epidemiology

- PUB 1000 - Principles of Public Health **Credits: 3**
- PUB 3020 - Introduction to Epidemiology in Public Health **Credits: 3**

## Study in Health Science

Pick one of the following course options:

- ITP 1500 - Dynamics of Health **Credits: 3**
- ITP 3450 - Dynamics of Disease **Credits: 3**

## Public Health Foci

Pick two of the following course options:

- HCM 3500 - Health Care Research Methods **Credits: 3**
- MTH 1210 - Introduction to Statistics **Credits: 4**
- PSY 2310 - Statistics for the Social and Behavioral Sciences **Credits: 3**
- PUB 2000 - Community Health Worker Fundamentals **Credits: 3**
- PUB 3000 - Health Behavior Theory and Practice **Credits: 3**
- PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits: 3**
- PUB 3030 - Essentials of Environmental Health in Public Health Practices **Credits: 3**
- PUB 4000 - Health Policy - Practice and Development **Credits: 3**
- PUB 4010 - Health Program Planning, Implementation, and Evaluation **Credits: 3**

## Social and Applied Science Suggested Electives

Pick from the following course options to complete the minor with 18 credits:

- AGE 1010 - Introduction to Aging and Long-Term Care Services **Credits: 3**
- AGE 2020 - Ageism and Ableism in Society **Credits: 3**
- AGE 3030 - Aging Services: Current Topics, Trends, and Future Considerations **Credits: 3**
- AGE 3800 - Long-Term Care: Managing Across the Continuum **Credits: 3**
- ANT 1010 - Introduction to Biological Anthropology **Credits: 3**
- BIO 1000 - Human Biology for Non-Majors **Credits: 3**
- HCM 2010 - Global Health Systems **Credits: 3**
- HCM 3100 - Entrepreneurship in Health **Credits: 1**
- HCM 3150 - Health Care Organization and Management **Credits: 3**
- HCM 3200 - Managing Quality in Health Care **Credits: 2**
- HCM 3400 - Human Resources Management in Health Care **Credits: 3**
- HCM 3500 - Health Care Research Methods **Credits: 3**
- HCM 3550 - Leadership in Health Care **Credits: 1**
- HCM 3700 - Health Disparities in the U.S. **Credits: 3**
- HLDR 1100 - Colorado Tourism and Recreation **Credits: 3**
- HSP 1010 - Introduction to Human Services and Counseling **Credits: 3**
- HSP 1020 - Introduction to Trauma Informed Care **Credits: 3**
- HSP 2010 - Introduction to High-Impact Nonprofit Organizations **Credits: 3**
- HSP 3460 - Addiction, Immunity, and Infectious Diseases **Credits: 2**
- HSP 3860 - Social Entrepreneurship **Credits: 3**

- ITP 1500 - Dynamics of Health **Credits: 3**
- ITP 1700 - Medical Terminology **Credits: 3**
- ITP 2700 - Holistic Dimensions of Wellness **Credits: 3**
- ITP 2800 - Health, Society, and the Environment **Credits: 3**
- ITP 3000 - Men's Health **Credits: 3**
- ITP 3100 - Health Education and Counseling **Credits: 3**
- ITP 3200 - Ethics in Health Care **Credits: 3**
- ITP 3450 - Dynamics of Disease **Credits: 3**
- ITP 3700 - Physiology of Aging **Credits: 3**
- ITP 3800 - Stress and Sleep: Impact on Health and Disease **Credits: 3**
- ITP 3850 - Lifestyle Medicine **Credits: 3**
- ITP 4700 - Community Health Education and Lifestyle Medicine **Credits: 3**
- MTH 1210 - Introduction to Statistics **Credits: 4**
- NUT 2040 - Introduction to Nutrition **Credits: 3**
- NUT 3350 - Global Nutrition and Health **Credits: 3**
- NUT 3500 - Food Safety **Credits: 3**
- NUT 4210 - Community Nutrition **Credits: 3**
- PSY 2310 - Statistics for the Social and Behavioral Sciences **Credits: 3**
- PUB 2000 - Community Health Worker Fundamentals **Credits: 3**
- PUB 3000 - Health Behavior Theory and Practice **Credits: 3**
- PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning **Credits: 3**
- PUB 3030 - Essentials of Environmental Health in Public Health Practices **Credits: 3**
- PUB 4000 - Health Policy - Practice and Development **Credits: 3**
- PUB 4010 - Health Program Planning, Implementation, and Evaluation **Credits: 3**
- PUB 4030 - Advanced Community Health Worker **Credits: 3**
- SLHS 2990 - Introduction to Health Communication **Credits: 3**
- SLHS 3000 - Foundations of Disability Studies through Media **Credits: 3**
- SWK 1600 - Community Engagement and Civic Responsibility **Credits: 3**

Total: 18 credits

## Department of Human Services and Counseling

Location: West Classroom, #236

Phone: 303-615-0700

E-Mail: [human-services@msudenver.edu](mailto:human-services@msudenver.edu)

Website: [Human Services & Counseling Department Website](#)

### *Fire and Emergency Response Administration Minor*

The minor requires a total of 18 credits. Students must take FER 3110 and FER 3140 and select an additional 12 credits of coursework with a FER prefix. Students must earn a "C" or higher in all classes in the minor.

### *Fire and Emergency Response Administration, B.S.*

[Department of Human Services and Counseling](#)

[College of Health and Human Sciences](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

The mission of the MSU Denver Fire and Emergency Response Administration (FERA) degree program is to promote higher education and to enhance the value of the fire and emergency response professions in order to promote a safer community and to reduce the loss of life, property, and the number of physical and emotional casualties from fire and other life-threatening events.

MSU Denver is one of only a few college and university programs in the country to carry the "Certificate of Recognition" from the National Fire Academy-Fire and Emergency Services Higher Education for every FESHE course offered by the university.

Fire and Emergency Response courses at MSU are part of a nationally standardized curriculum based on the National Fire Academy-Fire and Emergency Services Higher Education (FESHE) Model Curriculum and are intended to meet higher education criteria set forth by the National Fire Protection Association (NFPA) and the International Association of Fire Chiefs (IAFC).

### Student Outcomes

- Improve language, writing, and communication skills
- Exercise analytical and critical thinking
- Develop awareness of current global management issues in emergency services
- Develop a broad knowledge base of emergency services
- Apply management models compatible with the National Incident Management System



- Understand community risk reduction and mitigation efforts
- Understand the science and data behind fire investigations and tactical operations
- Gain insight into human behavior during emergencies
- Acquire insight into modern political and legal limitations on emergency services
- Understand the need for ethical leadership

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1110 - College Algebra for Calculus
  - **Recommended:** MTH 1210 - Introduction to Statistics
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Courses: 21 credits

- FER 3000 - Applications of Fire Research **Credits: 3**
- FER 3110 - Community Risk Reduction for Fire and Emergency Services **Credits: 3**
- FER 3140 - Fire and Emergency Services Administration **Credits: 3**
- FER 3200 - Fire Prevention, Organization, and Management **Credits: 3**
- FER 3430 - Personnel Development for Fire and Emergency Services **Credits: 3**
- FER 3460 - Political and Legal Foundations for Fire Protection **Credits: 3**
- FER 3911 - Cultural Competence for First Responders **Credits: 3**

## Electives: 16 credits

Students select 16 credits from the following:

- Any FER Course
  - Any HSP Course
  - COMM 3010 - Business and Professional Speaking **Credits: 3**
  - MGT 3000 - Organizational Management **Credits: 3**
  - MGT 4530 - Organizational Behavior **Credits: 3**
  - PSC 3020 - Introduction to Public Administration **Credits: 3**
  - PSC 3170 - Leadership Studies **Credits: 3**
- Note: Students can transfer a maximum of 6 credits from other institutions towards their electives.

## Senior Experience: 3 credits

- FER 4610 - Disaster Planning and Control **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
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ESSJ Requirement	0-3 credits
Required Courses	21 credits
Major Electives	16 credits
Senior Experience	3 credits
Unrestricted Electives	44-47 credits
<b>Total for the Fire and Emergency Response Administration, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## High Risk Youth Studies Certificate

The 16-hour Certificate of Completion in High Risk Youth Studies is a comprehensive learning opportunity for those persons who wish to learn about current practices for the prevention, intervention, and treatment of high risk youth in a wide variety of practice settings. In order to qualify for the Certificate of Completion in High Risk Youth Studies, the student must complete an application verifying 300 hours of clinical or volunteer experience working with youth at risk. Contact the Center for High Risk Youth Studies (CHRY) in the Human Services and Counseling Department at 303-615-0700 for more information. Students must complete each course in the certificate program with a grade of "C" or better.

### Required Courses:

- HSP 3230 - High Risk and Offender Youth **Credits: 3**
- HSP 3260 - Systems Serving Youth **Credits: 2**
- HSP 3490 - Multicultural Issues in Human Services **Credits: 4**
- HSP 3590 - Counseling the Resistive Adolescent Client **Credits: 2**
- HSP 4540 - Youth, Drugs, and Gangs **Credits: 2**

3 credit elective chosen from the following courses:

- CJC 3350 - Juvenile Justice and Delinquency **Credits: 3**
- SWK 3010 - Social Work Practice with Children and Youth **Credits: 3**
- SOC 3400 - Child and Adolescent Socialization **Credits: 3**
- PSY 3260 - Psychology of Adolescence **Credits: 3**
- HSP 1020 - Introduction to Trauma Informed Care **Credits: 3**
- HSP 3550 - Intimate Partner Violence **Credits: 3**
- HSP 4160 - Human Trafficking **Credits: 3**

Total hours for certificate: 16

### Notes:

*\*A three semester hour elective in a related subject area to be selected by the student in consultation with a High Risk Youth advisor. Note that CJC 3350, Juvenile Justice and Delinquency, is recommended, but other courses may be included as part of the certificate of completion as relevant to the individual student's needs, career goals and interests.*

## Human Services Major, B.S.

[Department of Human Services and Counseling](#)

[College of Health and Human Sciences](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

Human Services refers to the art and science of helping people. At MSU Denver, students get just the right mix of hands-on experience and challenging study to become consummate and compassionate professionals. The Department of Human Services and Counseling at Metropolitan State University of Denver prepares students to become competent, self-reflective practitioners in the delivery of human services. At the core of the curriculum is an emphasis on experiential learning in the classroom and through intensive field experience and study abroad opportunities. Students can focus on general human services topics, or specific areas such as trauma and high-risk youth. The program also offers a concentration in Addictions Studies which prepares students for Colorado addiction counseling certifications. The program also offers a pathway for degree completion for students who currently have paramedic certification. In addition, the department offers an "Early Entry to the Master of Science in Clinical Behavioral Health, Emphasis in Addictions Counseling Pathway" for students who wish to begin their masters program while completing their undergraduate requirements. The department is committed to supporting students to develop high ethical standards and cultural sensitivity while becoming agents for positive change in people's lives and in their communities.

### Student Outcomes

- Students will **evaluate** the scope of conditions that impact all levels of human systems: individual, family, group, community, and society.
- Students will **explore** the mission and services of local organizations and their role and community impact
- Students will **examine** their own culture and values as well as those of communities other than their own and the implications for working with diverse communities.

- Students will **acquire** skills necessary to facilitate change at an individual, family, group, and/or programmatic level.
- Students will **demonstrate** professional behavior and ethical decision-making skills in the context of the human services/nonprofit sector.
- Students will **develop** clear professional writing and effective verbal and interpersonal communication skills.
- Students will **apply** knowledge and skills related to effective direct service delivery and appropriate interventions in their concentration area.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- For students in the "Early Entry Master of Science Pathway" A grade of "B-" or better is required in any graduate Human Services and Counseling course to be applied towards their undergraduate and graduate degree requirements.
- Students participate in field experience as part of this major, contributing to professional experience, skill development, networking, and resume-building.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1210 - Introduction to Statistics, is recommended for students interested in pursuing a master's degree.
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)

- **Recommended:** NUT 2040 - Introduction to Nutrition is recommended
- Social and Behavioral Sciences (6 credits)
  - Recommended: HSP 1010 - Introduction to Human Services and Counseling can count towards both the major and the General Studies requirements.
  - Recommended: HSP 1020 - Introduction to Trauma Informed Care, can count towards both the major and the General Studies requirements.
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 Credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

## Major Required Courses: 46 credits

- HSP 1010 - Introduction to Human Services and Counseling **Credits: 3**
- HSP 1020 - Introduction to Trauma Informed Care **Credits: 3**
- HSP 2010 - Introduction to High-Impact Nonprofit Organizations **Credits: 3**
- HSP 2020 - Small Group Dynamics: Theory and Experience **Credits: 4**
- HSP 2030 - Theory and Practice of Counseling **Credits: 4**
- HSP 2040 - Family Systems **Credits: 4**
- HSP 2070 - Pre-Field Placement Seminar **Credits: 1**
- HSP 3220 - Conflict Resolution and Decision Making **Credits: 3**
- HSP 3330 - Ethical and Legal Issues in Human Services **Credits: 3**
- HSP 3490 - Multicultural Issues in Human Services **Credits: 4**
- HSP 3710 - Research Methods and Program Evaluation in Human Services **Credits: 4**
- HSP 3760 - Motivational Interviewing for Client Change **Credits: 3 3 credits**
- HSP 4040 - Cognitive Behavior Therapy **Credits: 3**
- HSP 4320 - Psychopathology and the Mental Health Clinician **Credits: 4**

## Electives: 9 credits

For electives, students can use any HSP course or select 9 credits from an area of focus:

Students in the Addictions Counseling and Early Entry concentrations do not complete this requirement.

Trauma Studies Area of Focus:

- HSP 2105 - Foundations of Trauma Counseling **Credits: 3**
- HSP 3105 - Exploring the Impact of Trauma Counseling **Credits: 3**
- HSP 4105 - Advanced Trauma Counseling Skills **Credits: 3**

High-Risk Youth Area of Focus:

- HSP 3230 - High Risk and Offender Youth **Credits: 3**
- HSP 3260 - Systems Serving Youth **Credits: 2**
- HSP 3590 - Counseling the Resistive Adolescent Client **Credits: 2**
- HSP 4540 - Youth, Drugs, and Gangs **Credits: 2**

## Senior Experience: 10 credits

All majors\* complete their senior experience requirement through 10 credits of the following course:

*\*Note that the Paramedic Pathways students need to complete only 5 credits of internship.*

- HSP 4840 - Human Services Internship **Credits: 5-20**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Major Required Courses	46 credits
HSP Electives	9 credits
Senior Experience	10 credits
Unrestricted Electives	19-28 credits
<b>Total for the Human Services Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Addiction Studies Concentration: 26 credits

This concentration will provide students with broad knowledge and skills that are in all behavioral health services. Upon completion of

the program, students are eligible to apply for certification in Colorado as a Certified Addiction Technician (CAT). The counseling skills, training and knowledge that students receive are on the cutting edge of evidence-based outcome studies and best practices. Graduates attain skills and attitudes necessary to function as professional addiction counselors and that may lead to national certification. These are the required courses to fulfill Colorado Behavioral Health Administration's (BHA) educational requirements for Certified Addiction Specialist (CAS).

- HSP 3425 - Pharmacology of Drugs and Related Infectious Diseases **Credits: 4**
- HSP 3470 - Counseling the Substance Abuser **Credits: 4**
- HSP 4660 - Clinical Supervision in Human Services **Credits: 3**
- HSP 4880 - Addiction Studies Internship **Credits: 5 or 15 credits**

Students need a total of 15 credits (600 hours) to meet state addictions certification requirements. These hours can be completed over 1 - 3 semesters.

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Major Required Courses	46 credits
Addiction Studies Concentration	26 credits
Senior Experience	10 credits
Unrestricted Electives	2-11 credits
<b>Total for the Human Services Major, B.S., Addiction Studies Concentration</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Pathway for Current Paramedics: 24 credits

The Pathway for Current Paramedics is designed for students interested in combining their previous paramedic training with additional academic course work. Students with a current and valid Colorado and/or national Paramedic Certification will receive 24 credits towards their degree requirements.

The following courses are required but are taken during the major required courses.

- HSP 2020 - Small Group Dynamics: Theory and Experience **Credits: 4**
- HSP 2030 - Theory and Practice of Counseling **Credits: 4**
- HSP 2040 - Family Systems **Credits: 4**
- HSP 4320 - Psychopathology and the Mental Health Clinician **Credits: 4**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Major Required Courses	46 credits
Major Electives	9 credits
Additional Required Human Services Courses	counted in major
Paramedic Certification	24 credits
Senior Experience	5 credits
Unrestricted Electives	0-9 credits
<b>Total for the Human Services Major, B.S., Paramedic Pathway</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Early Entry to Master in Clinical Behavioral Health, Emphasis in Addictions Counseling Pathway

This pathway allows students to begin their graduate work while completing their undergraduate requirements. Students may apply to the Early Entry Master of Health in Clinical Behavioral Health, Emphasis in Addictions Counseling program after completing 59-65 credit hours in their bachelor's program including all General Studies requirements (33 credits) and specified courses in the department (32 credits). Any graduate level course counting towards either the undergrad or graduate degree must be completed with a 'B-' or higher. Students may complete their bachelor's degree at 120 credits (through our department if all requirements have been met, or through the Individualized Degree Program, if applicable).

## Pre-Application to Master's Program: 32 credits

Students need to complete all of their general studies courses (33) plus 32 credits of department courses. HSP 1010 and 1020 can be used to fulfill 3-6 credits of General Studies (Social and Behavioral Sciences).

- HSP 1010 - Introduction to Human Services and Counseling **Credits: 3**
- HSP 1020 - Introduction to Trauma Informed Care **Credits: 3**
- HSP 2030 - Theory and Practice of Counseling **Credits: 4**
- HSP 2040 - Family Systems **Credits: 4**
- HSP 3220 - Conflict Resolution and Decision Making **Credits: 3**
- HSP 3330 - Ethical and Legal Issues in Human Services **Credits: 3**
- HSP 3470 - Counseling the Substance Abuser **Credits: 4**
- HSP 3490 - Multicultural Issues in Human Services **Credits: 4**
- HSP 4320 - Psychopathology and the Mental Health Clinician **Credits: 4**

## Application and Bridge Semester: 13 credits

After completing 65 credits and the required course work, students may apply for the Early Entry master's program. Students complete the regular master's application. Students should take the following courses during the semester in which their application is being reviewed.

- HSP 2010 - Introduction to High-Impact Nonprofit Organizations **Credits: 3**
- HSP 2070 - Pre-Field Placement Seminar **Credits: 1**
- HSP 4040 - Cognitive Behavior Therapy **Credits: 3**
- Elective Courses: 6 credits

## Undergraduate Status Taking Masters Courses: 19-31 credits

Students who are accepted into the program can start taking "dual use" master's classes which will count towards both an undergraduate and graduate degree. Students will remain classified as undergraduate but pay graduate tuition rates for any master's level course. Courses designated (dual purpose) will count towards undergraduate and graduate degree requirements. BHAM courses without this designation (dual purpose) will count only towards graduate degree requirements. Students need a B- or higher in all BHAM courses to count towards both undergraduate and graduate degree requirements.

Students should consult the graduate catalog for further information regarding course information and program requirements at the graduate level.

- BHAM 5001 Advanced Ethical Practice **Credits: 3**

- BHAM 5002 Social and Cultural Foundations **Credits: 3**
- BHAM 5003 Development Across the Lifespan (dual purpose) **Credits: 3**
- BHAM 5004 Career Counseling Theory and Techniques (dual purpose) **Credits: 3**
- BHAM 5005 Theory and Techniques in Helping Relationships **Credits: 3**
- BHAM 5006 Group Counseling Theory and Techniques (dual purpose) **Credits: 3**
- BHAM 5008 Research and Evaluation (dual purpose) **Credits: 3**
- BHAM 5009 Addiction Counseling, Intervention and Prevention I **Credits: 3**
- BHAM 5010 Addiction Counseling, Intervention and Prevention II (dual purpose) **Credits: 3**
- BHAM 5014 Psychopharmacology, Neurobiology, and Infectious Diseases (dual purpose) **Credits: 4**

## Senior Experience: 10 credits

Students complete their Senior Experience course through:

- HSP 4840 - Human Services Internship **Credits: 5-20**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Preapplication Courses	32 credits
Application and Bridge Courses	13 credits
Dual Purpose Courses	19 credits
Senior Experience	10 credits
Unrestricted Electives	10-19 credits
<b>Total for the Human Services Major, B.S. Early Entry Pathway</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Human Services Minor*

The minor in Human Services complements majors such as Psychology, Human Development, Criminal Justice, Sociology,

Chicano Studies, African American Studies and Women's Studies by providing the practical, applied knowledge and skills to work with a variety of client populations. The minor in Human Services is designed to allow you to choose courses that meet your educational and career goals.

18 credits are required for the minor and must include HSP 1010 - Introduction to Human Services and Counseling and HSP 2030 - Theory and Practice of Counseling. The remaining credits are any HSP elective, 6 credits need to be upper division (3000 or 4000). A grade of "C" or better is required for each course in this program to count towards the bachelor's degree.

Please see a department advisor to discuss your goals and select classes for your minor.

## Human Services Minor (18 credits)

- HSP 1010 - Introduction to Human Services and Counseling **Credits: 3**
- HSP 2030 - Theory and Practice of Counseling **Credits: 4**
- HSP Elective Credits: 11 (6 credits must be 3000 or 4000 level)

Total: 18 credits

## *Trauma Studies Minor*

The minor in Trauma Studies complements majors such as Psychology, Fire and Emergency Response, Human Development, Criminal Justice, and Sociology by providing practical knowledge and skills necessary for careers that serve a client population that has experienced trauma. Students will learn about trauma and complex trauma, the impact trauma has on overall functioning as well as treatment interventions and supportive activities for practitioners who work with this population. The minor in Trauma Studies is designed to allow the student to choose courses that meet their educational and career goals as well as prepare them well for graduate study. The student must meet the University's graduation requirements for a baccalaureate degree. A letter grade of "C" or better is required in each Human Services and Counseling course.

## Trauma Minor (18 - 20 credits)

Required courses of Minor in Trauma Studies (16 credits)

- HSP 1010 - Introduction to Human Services and Counseling **Credits: 3**
- HSP 1020 - Introduction to Trauma Informed Care **Credits: 3**
- HSP 2030 - Theory and Practice of Counseling **Credits: 4**
- HSP 2105 - Foundations of Trauma Counseling **Credits: 3**
- HSP 3105 - Exploring the Impact of Trauma Counseling **Credits: 3**

## Suggested Electives (choose 1 course)

- HSP 3450 - Crisis Intervention **Credits:** 3
- HSP 3490 - Multicultural Issues in Human Services **Credits:** 4
- HSP 3550 - Intimate Partner Violence **Credits:** 3
- HSP 3940 - Victim Advocacy for Survivors of Interpersonal Violence **Credits:** 3
- HSP 4105 - Advanced Trauma Counseling Skills **Credits:** 3
- HSP 4160 - Human Trafficking **Credits:** 3
- HSP 4200 - Child Abuse and Neglect **Credits:** 2
- HSP 4320 - Psychopathology and the Mental Health Clinician **Credits:** 4
- HSP 4540 - Youth, Drugs, and Gangs **Credits:** 2

## Totals

Required Credits	16
HSP Electives	2-4
Total Credits	18-20

## Department of Nursing

Location: West Classroom, #247

Phone: 303-615-1600

E-Mail: [nursingadvising@msudenver.edu](mailto:nursingadvising@msudenver.edu)

Website: [Nursing Department Website](#)

## *Nursing Major - Accelerated Nursing Option, B.S.N.*

[Department of Nursing](#)

[College of Health and Human Sciences](#)

Available Program Format(s): [In-Person](#)

## About the Program

The **Accelerated Nursing Option (ANO)** is a second-degree program for students with a previous non-nursing, baccalaureate degree. This program concludes with a Bachelor of Science Degree in Nursing (B.S.N) and provides the required supervised practice hours to fulfill the experiential requirements to be eligible to take the

National Council Licensure Examination (NCLEX) and earn the Registered Nurse (RN) license.

## Accreditation

The MSU Denver Nursing Program is accredited by the Commission on Collegiate Nursing Education and is approved by the Colorado State Board of Nursing.

## Mission

The mission of the department of Nursing is to provide a high-quality, accessible, enriching interprofessional baccalaureate nursing education. Our learning community cultivates graduates who are prepared with the knowledge, skill, and competencies to advance professional nursing practice in a diverse, global and technological society. The goal of the nursing program is to prepare a diverse and inclusive generalist professional nurse who provides equitable care for patients in current and future healthcare delivery systems.

## Application Deadline

Applications are accepted multiple times throughout the year. Information regarding the application process and deadlines is available through the Department of Nursing. Please refer to the MSU Denver nursing program website for information about program-specific policies and procedures at: [msudenver.edu/nursing](http://msudenver.edu/nursing).

## Student Outcomes

- Communicate effectively with patients and interprofessional health care teams to enhance patient outcomes
- Integrate evidence, clinical judgment, interprofessional perspectives and patient preference in providing patient care
- Evaluate patient care environments for use of appropriate quality safety indicators
- Apply leadership and management principles to manage resources and achieve optimal patient outcomes
- Exhibit the knowledge, skills and attributes of a professional nurse

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements



- A minimum of 120 semester hours are required for graduation.
- A grade of "C" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Student must be accepted separately into the Nursing program. This is a very competitive process. Contact the Department of Nursing with questions on this process.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

General Studies requirements for this program are met through the student's previous Bachelor's degree.

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Prerequisite Courses: 31-32 credits

All students must complete the following courses.

- BIO 2310 - Human Anatomy and Physiology I **Credits: 4**
- BIO 2320 - Human Anatomy and Physiology II **Credits: 4**
- BIO 2000 - Introductory Microbiology for Nursing **Credits: 4**  
or
- BIO 2400 - General Microbiology **Credits: 5**
- CHE 1100 - Principles of Chemistry **Credits: 4**  
and
- CHE 1150 - Principles of Chemistry Laboratory **Credits: 1**  
or
- CHE 1800 - General Chemistry I **Credits: 4**  
and
- CHE 1801 - General Chemistry I Laboratory **Credits: 1**
- ITP 4600 - Clinical Pathophysiology **Credits: 4**
- MTH 1210 - Introduction to Statistics **Credits: 4**
- NUT 2040 - Introduction to Nutrition **Credits: 3**
- PSY 2210 - Psychology of Human Development **Credits: 3**

## Required Courses: 58 credits

- NURA 3020 - Foundations of Professional Nursing Practice **Credits: 6**

- NURA 3160 - Ethics and Professional Nursing Practice **Credits: 3**
- NURA 3400 - Evidence Based Practice Through Nursing Research **Credits: 3**
- NURA 3410 - Clinical Pharmacology **Credits: 4**
- NURA 3500 - Mental Health Nursing **Credits: 5**
- NURA 3700 - Nursing Health Assessment **Credits: 3**
- NURA 3810 - Medical Surgical Nursing Care I **Credits: 6**
- NURA 4000 - Community Health Nursing **Credits: 6**
- NURA 4030 - Nursing Care of the Childbearing Family **Credits: 5**
- NURA 4040 - Quality Care and Patient Safety Using Nursing Informatics **Credits: 3**
- NURA 4110 - Medical Surgical Nursing Care II **Credits: 6**
- NURA 4200 - Child and Family Health Nursing **Credits: 5**
- NURA 4300 - Leadership and Management in Professional Nursing Practice **Credits: 3**

## Senior Experience: 5 credits

- NURA 4850 - Nursing Senior Experience **Credits: 5**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Prerequisite Courses	31-32 credits
Required Courses	58 credits
Senior Experience	5 credits
Unrestricted Electives	0-2 credits
<b>Total for the Accelerated Nursing Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Nursing Major - Baccalaureate Registered Nurse Completion Option, B.S.N.*

[Department of Nursing](#)

[College of Health and Human Sciences](#)

Available Program  
Format(s): [Online](#)



## About the Program

The **Baccalaureate Registered Nurse Completion (BRNCO)** program concludes with a Bachelor of Science Degree in Nursing (B.S.N). This fully online program serves 1) RNs who wish to go back to school to get a Bachelor of Science degree, and 2) students currently enrolled in an Associate Degree in Nursing program and want to get a head start in a B.S.N. program.

## Accreditation

The MSU Denver Nursing Program is accredited by the Commission on Collegiate Nursing Education and is approved by the Colorado State Board of Nursing.

## Mission

The mission of the department of Nursing is to provide a high quality, accessible, enriching interprofessional baccalaureate nursing education. Our learning community cultivates graduates who are prepared with the knowledge, skill, and competencies to advance professional nursing practice in a diverse, global and technological society. The goal of the nursing program is to prepare a diverse and inclusive generalist professional nurse who provides equitable care for patients in current and future healthcare delivery systems.

## Application Deadline

Information regarding the application process and deadlines is available through the Department of Nursing.

## Prior Learning Assessment

Twenty semester hours of lower-division credit will be given for prior nursing education and ten semester hours of upper-division credit will be awarded for having a valid RN license.

## Student Outcomes

- Communicate effectively with patients and interprofessional health care teams to enhance patient outcomes
- Integrate evidence, clinical judgment, interprofessional perspectives and patient preference in providing patient care
- Evaluate patient care environments for use of appropriate quality safety indicators
- Apply leadership and management principles to manage resources and achieve optimal patient outcomes
- Exhibit the knowledge, skills and attributes of a professional nurse

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Students must be accepted separately into the Nursing program.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

- It is recommended that students fulfill this requirement with NUR 3810 - Multicultural Care of Patients and Their Families, which is required by the Nursing, Baccalaureate Registered Nurse Completion Option, major.

## Required Courses: 57 credits

- Nursing Awarded Credit: 30 credit hours (see note in program information)
- NUR 3120 - Introduction to Exemplary Professional Practice **Credits: 3**
- NUR 3160 - Ethics and Professional Nursing Practice **Credits: 3**
- NUR 3400 - Evidence Based Practice Through Nursing Research **Credits: 3**
- NUR 3770 - Nursing Care Coordination of Acute and Chronic Disease Management **Credits: 3**
- NUR 3810 - Multicultural Care of Patients and Their Families **Credits: 3**
- NUR 4010 - Population Health Nursing I **Credits: 3**
- NUR 4020 - Population Health Nursing Practicum **Credits: 3**
- NUR 4040 - Quality Care and Patient Safety Using Nursing Informatics **Credits: 3**
- NUR 4310 - Transformational Nursing Leadership **Credits: 3**

## Required Support Course: 3-4 credits

- Introductory Statistics Course<sup>1</sup> (To be approved by the Nursing Department.)

## Senior Experience: 3 credits

- NUR 4860 - Nursing Capstone: Culmination of the Magnet Journey **Credits: 3**

## Note:

<sup>1</sup> The Introductory Statistics course satisfies the General Studies - Quantitative Literacy requirement.

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Support Course	3-4 credits
Major Requirements	57 credits
Senior Experience Course	3 credits
Unrestricted Electives	20-27 credits
<b>Total for the Nursing Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Nursing Major - Traditional Nursing Option, B.S.N.*

[Department of Nursing](#)

[College of Health and Human Sciences](#)

Available Program Format(s): [In-Person](#)

## About the Program

The **Traditional Nursing Option (TNO)** is a program for students without a previous baccalaureate degree. This program concludes with a Bachelor of Science Degree in Nursing (B.S.N.) and provides the required supervised practice hours to fulfill the experiential requirements to be eligible to take the National Council Licensure Examination (NCLEX) and earn the Registered Nurse (RN) license.

## Accreditation

The MSU Denver Nursing Program is accredited by the Commission on Collegiate Nursing Education and is approved by the Colorado State Board of Nursing.

## Mission

The mission of the department of Nursing is to provide a high-quality, accessible, enriching interprofessional baccalaureate nursing education. Our learning community cultivates graduates who are prepared with the knowledge, skill, and competencies to advance professional nursing practice in a diverse, global and technological society. The goal of the nursing program is to prepare a diverse and inclusive generalist professional nurse who provides equitable care for patients in current and future healthcare delivery systems.

## Application Deadline

Applications are accepted multiple times throughout the year. Information regarding the application process and deadlines is available through the Department of Nursing. Please refer to the MSU Denver nursing program website for information about program-specific policies and procedures at: [msudenver.edu/nursing](http://msudenver.edu/nursing).

## Student Outcomes

- Communicate effectively with patients and interprofessional health care teams to enhance patient outcomes

- Integrate evidence, clinical judgment, interprofessional perspectives and patient preference in providing patient care
- Evaluate patient care environments for use of appropriate quality safety indicators
- Apply leadership and management principles to manage resources and achieve optimal patient outcomes
- Exhibit the knowledge, skills and attributes of a professional nurse

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Student must be accepted separately into the Nursing program. This is very competitive process. Contact the Department of Nursing with questions on this process.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1210 - Introduction to Statistics \*
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** BIO 1080 - General Biology I/ BIO 1090 - General Biology Laboratory I, prerequisites for BIO 2310 and BIO 2400 or BIO 2000\* and CHE 1100/ CHE 1150, prerequisite for BIO 2400 or BIO 2000\* or CHE 1800/CHE 1801, prerequisite for BIO 2400 or BIO 2000\*
- Social and Behavioral Sciences (6 credits)

- **Recommended:** PSY 1001 - Introductory Psychology, prerequisite for PSY 2210

- Global Diversity (0 or 3 credits\*\*)

*\* The listed courses are prerequisites for required prerequisite courses for the major and can also fulfill general studies requirements*

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Prerequisite Courses: 31-32 credits

All students must complete the following courses. These courses can also count towards the General Studies Requirements.

- BIO 2310 - Human Anatomy and Physiology I **Credits: 4**
- BIO 2320 - Human Anatomy and Physiology II **Credits: 4**
- BIO 2000 - Introductory Microbiology for Nursing **Credits: 4**  
OR
- BIO 2400 - General Microbiology **Credits: 5**
- CHE 1100 - Principles of Chemistry **Credits: 4**  
AND
- CHE 1150 - Principles of Chemistry Laboratory **Credits: 1**  
OR
- CHE 1800 - General Chemistry I **Credits: 4**  
AND
- CHE 1801 - General Chemistry I Laboratory **Credits: 1**
- ITP 4600 - Clinical Pathophysiology **Credits: 4**
- MTH 1210 - Introduction to Statistics **Credits: 4**
- NUT 2040 - Introduction to Nutrition **Credits: 3**
- PSY 2210 - Psychology of Human Development **Credits: 3**

## Required Courses: 58 credits

- NURS 3020 - Foundations of Professional Nursing Practice **Credits: 6**
- NURS 3160 - Ethics and Professional Nursing Practice **Credits: 3**

- NURS 3400 - Evidence Based Practice Through Nursing Research **Credits: 3**
- NURS 3410 - Clinical Pharmacology **Credits: 4**
- NURS 3500 - Mental Health Nursing **Credits: 5**
- NURS 3700 - Nursing Health Assessment **Credits: 3**
- NURS 3810 - Medical Surgical Nursing Care I **Credits: 6**
- NURS 4000 - Community Health Nursing **Credits: 6**
- NURS 4030 - Nursing Care of the Childbearing Family **Credits: 5**
- NURS 4040 - Quality Care and Patient Safety Using Nursing Informatics **Credits: 3**
- NURS 4110 - Medical Surgical Nursing Care II **Credits: 6**
- NURS 4200 - Child and Family Health Nursing **Credits: 5**
- NURS 4300 - Leadership and Management in Professional Nursing Practice **Credits: 3**

## Senior Experience: 5 credits

- NURS 4850 - Nursing Senior Experience **Credits: 5**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Prerequisite Courses	31-32 credits
Required Courses	58 credits
Senior Experience	5 credits
Unrestricted Electives	0-2 credits
<b>Total for the Traditional Nursing Major, B.S.</b>	<b>Minimum of 120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Department of Nutrition

Location: West Classroom 254

Phone: 303-615-0990

E-Mail: [nutrition@msudenver.edu](mailto:nutrition@msudenver.edu)

Website: [Nutrition Department Website](#)

## Didactic Program in Dietetics Post-Baccalaureate Certificate

The Didactic Program in Dietetics (DPD) Certificate provides students with the knowledge and skills required to pursue a dietetic internship to ultimately become a registered dietitian nutritionist (RDN). Students with a bachelor's degree who have not already obtained a DPD verification statement are eligible to enroll in the Certificate Program. To obtain a DPD verification statement through this Certificate Program, a total of 73 credits are required. 23 credits of coursework must be taken at MSU Denver (see "core courses") and the remaining courses can be transferred from another institution. Students must maintain a cumulative GPA of 3.0 or above with a minimum grade of C in all required courses for successful completion of the certificate. This is an academic certificate only and not to be used for practice or for seeking employment. Successful completion of the certificate requirements will permit a student to earn a DPD Verification Statement to become eligible to pursue supervised practice toward becoming a registered dietitian nutritionist.

\*Note that as of January 1, 2024, a master's degree is also required to pursue the RDN credential. Please see the Department of Nutrition for guidance on the best program for you.

## Prerequisite Courses

These courses are required for the DPD certificate program but may be transferred from another institution.

- BIO 1080 - General Biology I **Credits: 3**
- BIO 1090 - General Biology Laboratory I **Credits: 1**
- BIO 2310 - Human Anatomy and Physiology I **Credits: 4**
- BIO 2320 - Human Anatomy and Physiology II **Credits: 4**
- CHE 1100 - Principles of Chemistry **Credits: 4**
- CHE 1150 - Principles of Chemistry Laboratory **Credits: 1**
- CHE 2100 - Introduction to Organic and Biological Chemistry **Credits: 4**
- CHE 2150 - Introduction to Organic and Biological Chemistry Laboratory **Credits: 1**
- MTH 1210 - Introduction to Statistics **Credits: 4**
- NUT 2040 - Introduction to Nutrition **Credits: 3**
- NUT 3300 - Cultural Aspects of Nutrition **Credits: 3**
- NUT 3400 - Nutrition and Weight Management **Credits: 3**
- NUT 3500 - Food Safety **Credits: 3**
- NUT 3700 - Nutrition Education and Counseling **Credits: 3**
- PSY 1001 - Introductory Psychology **Credits: 3**
- RST 1200 - Basic Cooking Skills **Credits: 3**
- HCM 3150 - Health Care Organization and Management **Credits: 3**

## Core Courses

These courses must be taken through MSU Denver to obtain the DPD verification statement.

- NUT 1800 - Careers in Nutrition and Dietetics **Credits:** 1
- NUT 3150 - Advanced Nutrition - Macronutrients **Credits:** 3
- NUT 3160 - Advanced Nutrition - Micronutrients **Credits:** 3
- NUT 4160 - Empowered Leadership in Nutrition **Credits:** 3
- NUT 4200 - Lifecycle Nutrition for Majors **Credits:** 3
- NUT 4210 - Community Nutrition **Credits:** 3
- NUT 4720 - Nutrition Capstone **Credits:** 3
- NUT 4800 - Medical Nutrition Therapy **Credits:** 4

Total for Program: 73 credits

## *Nutrition and Dietetics Major, B.S.*

[Department of Nutrition](#)

[College of Health and Human Sciences](#)

Available Program Format(s): [In-Person](#)

### About the Program

Metropolitan State University of Denver (MSU Denver) offers a Bachelor of Science degree with a major in Nutrition and Dietetics (NUD). The major includes a didactic program in dietetics (DPD) that has been granted Accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, 312-899-0040 ext. 5400, [acend@eatright.org](mailto:acend@eatright.org).

Students may choose to be enrolled in both the Nutrition and Dietetics major **and** the DPD **or** they may choose to be only enrolled in the Nutrition and Dietetics major or the DPD certificate program alone (this requires a bachelor's degree).

To become a registered dietitian nutritionist (RDN), students must complete a bachelor's degree and a master's degree. The accelerated BS to MS concentration is for students who plan on pursuing a Master of Science in Nutrition at MSU Denver. This option allows for 9 credits of coursework to meet the requirements of both the bachelor's and master's degrees and expedites program completion.

The mission of the MSU Denver Department of Nutrition is to prepare diverse students from the Denver Metropolitan area for successful careers in food, nutrition and dietetics by providing quality education that is culturally sensitive and instills a desire for life-long learning.

### Student Outcomes

- Integrate scientific information and translate research into practice.
- Demonstrate attitudes, values and behaviors aligned with nutrition and dietetics practice.
- Develop and deliver information, products and services to individuals, groups and populations.
- Strategically apply principles of management and systems in the provision of services to individuals and organizations.
- Demonstrate skills and knowledge relevant to leadership potential and professional growth in the field of nutrition and dietetics.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** It is recommended that students fulfill this requirement with MTH 1210 - Introduction to Statistics, which is required by the Nutrition and Dietetics major.
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** It is recommended that students fulfill this requirement by taking BIO 1080 - General Biology I, BIO 1090 - General Biology Laboratory I, CHE 1100 - Principles of Chemistry, and/or CHE 1150 - Principles of

Chemistry Laboratory, all of which are required by the Nutrition and Dietetics major.

- Social and Behavioral Sciences (6 credits)
  - **Recommended:** It is recommended that students take PSY 1001 - Introductory Psychology, which is required by the Nutrition and Dietetics major.
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

### Required Courses: 70 credits

- BIO 1080 - General Biology I **Credits:** 3
- BIO 1090 - General Biology Laboratory I **Credits:** 1
- BIO 2310 - Human Anatomy and Physiology I **Credits:** 4
- BIO 2320 - Human Anatomy and Physiology II **Credits:** 4
- CHE 1100 - Principles of Chemistry **Credits:** 4
- CHE 1150 - Principles of Chemistry Laboratory **Credits:** 1
- CHE 2100 - Introduction to Organic and Biological Chemistry **Credits:** 4
- CHE 2150 - Introduction to Organic and Biological Chemistry Laboratory **Credits:** 1
- HCM 3150 - Health Care Organization and Management **Credits:** 3
- MTH 1210 - Introduction to Statistics **Credits:** 4
- NUT 1800 - Careers in Nutrition and Dietetics **Credits:** 1
- NUT 2040 - Introduction to Nutrition **Credits:** 3
- NUT 3150 - Advanced Nutrition - Macronutrients **Credits:** 3
- NUT 3160 - Advanced Nutrition - Micronutrients **Credits:** 3
- NUT 3200 - Nutrition and Sports Performance **Credits:** 3
- OR
- NUT 3400 - Nutrition and Weight Management **Credits:** 3
- NUT 3300 - Cultural Aspects of Nutrition **Credits:** 3
- NUT 3500 - Food Safety **Credits:** 3
- NUT 3700 - Nutrition Education and Counseling **Credits:** 3

- NUT 4160 - Empowered Leadership in Nutrition **Credits:** 3
- NUT 4200 - Lifecycle Nutrition for Majors **Credits:** 3
- NUT 4210 - Community Nutrition **Credits:** 3
- NUT 4800 - Medical Nutrition Therapy **Credits:** 4
- RST 1200 - Basic Cooking Skills **Credits:** 3
- PSY 1001 - Introductory Psychology **Credits:** 3

## Accelerated BS to MS Concentration: 9 credits

This concentration allows students in the Bachelor of Science in Nutrition and Dietetics program who are planning to pursue the Master of Science in Nutrition program to take 9 credits of graduate program credit to accelerate the graduate program. See Department of Nutrition for additional information regarding the Accelerated BS to MS Program.

- NUT 5100 Introduction to Nutrition Research **Credits:** 3
- NUT 5110 Macronutrients in Health and Disease **Credits:** 3
- NUT 5120 Vitamins, Minerals, and Bioactive Compounds in Health and Disease **Credits:** 3

## Senior Experience: 3 credits

- NUT 4720 - Nutrition Capstone **Credits:** 3

## Summary of Requirements

### Without Concentration

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Major Requirements	70 credits
Senior Experience	3 credits
Unrestricted Electives	11-26 credits
<b>Total for the Nutrition and Dietetics Major, B.S.</b>	<b>120 Credits</b>

### With Concentration

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Major Requirements	70 credits



Concentration Courses	9 credits
Senior Experience	3 credits
Unrestricted Electives	2-17 credits
<b>Total for the Nutrition and Dietetics Major, B.S.</b>	<b>120 Credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## ***Nutrition Minor***

The minor in nutrition is designed to complement a major chosen by a student and/or for individuals who wish to establish a basic understanding of nutrition. A minimum of 18 semester hours is required to complete the minor. A letter grade of at least "C-" must be attained in each of the courses in the Nutrition Minor. Students should note that programs differ in the minimum grade required.

The Nutrition Minor will not meet educational requirements for qualification as a Registered Dietitian Nutritionist (RDN). A major in nutrition from an accredited institution, an approved internship, and passing a national exam are all requirements to obtain the RDN credential.

### **Required Courses:**

- NUT 2040 - Introduction to Nutrition **Credits: 3**
- NUT 3040 - Nutrition Concepts and Controversies **Credits: 3**
- NUT 3050 - Concepts of Lifecycle Nutrition **Credits: 3**

### **Elective Courses**

Select 9 credits of courses with the NUT prefix.

**Total for minor: 18**

## ***Nutrition Science Major, B.S.***

[Department of Nutrition](#)

[College of Health and Human Sciences](#)

Available Program Format(s): [In-Person](#)

### **About the Program**

Students who attain a Bachelor of Science degree with a major in Nutrition Science will be prepared for graduate level nutrition/food science study or professional health programs (e.g. physician assistant, medical doctor, physical therapy).

Students must earn a grade of "C-" or better in all courses required for the major in order to progress through the program. Courses with grades less than "C-" will need to be repeated in order for the student to take any other courses for which the first course is a prerequisite. All general requirements of the University for a Bachelor of Science degree must be met prior to graduation. In addition, students must maintain a minimum cumulative GPA of 2.0 or higher in the Bachelor of Science degree with a major in Nutrition Science.

### **Student Outcomes**

1. Demonstrate critical thinking skills and analytical abilities to identify and solve problems in the nutrition sciences.
2. Critique and effectively communicate nutrition information.
3. Demonstrate an understanding of the functions and interrelationships of nutrients and food in human health, disease prevention, and disease states.
4. Integrate the biological, behavioral, socioeconomic and environmental factors related to food and nutrient intakes and needs across the lifespan.
5. Demonstrate effective and professional technical and scientific communication skills using current technologies.

## **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## **Program Requirements**

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## **General Studies Requirements: 33 credits**

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)

- Quantitative Literacy (3 credits)
- **Recommended:** It is recommended that students fulfill this requirement with MTH 1210 - Introduction to Statistics, which is required by the Nutrition Science major.
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- **Recommended:** It is recommended that students fulfill this requirement by taking BIO 1080 - General Biology I, BIO 1090 - General Biology Laboratory I; CHE 1800 - General Chemistry I and/or CHE 1801 - General Chemistry I Laboratory, all of which are required by the Nutrition Science major.
- Social and Behavioral Sciences (6 credits)
- **Recommended:** It is recommended that students take PSY 1001 - Introductory Psychology, which is required by the Nutrition Science major.
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

## Required Courses: 86 credits

- BIO 1080 - General Biology I Credits: 3
- BIO 1081 - General Biology II Credits: 3
- BIO 1090 - General Biology Laboratory I Credits: 1
- BIO 1091 - General Biology Laboratory II Credits: 1
- BIO 2310 - Human Anatomy and Physiology I Credits: 4
- BIO 2320 - Human Anatomy and Physiology II Credits: 4
- CHE 1800 - General Chemistry I Credits: 4
- CHE 1801 - General Chemistry I Laboratory Credits: 1
- CHE 1810 - General Chemistry II Credits: 4
- CHE 1811 - General Chemistry II Laboratory Credits: 1
- CHE 3100 - Organic Chemistry I Credits: 4
- CHE 3120 - Organic Chemistry Laboratory I Credits: 1
- CHE 3110 - Organic Chemistry II Credits: 4
- CHE 3130 - Organic Chemistry Laboratory II Credits: 1
- CHE 4310 - Biochemistry I Credits: 4
- MTH 1110 - College Algebra for Calculus Credits: 4
- MTH 1120 - College Trigonometry Credits: 3
- MTH 1210 - Introduction to Statistics Credits: 4

- NUT 2040 - Introduction to Nutrition Credits: 3
- NUT 3150 - Advanced Nutrition - Macronutrients Credits: 3
- NUT 3160 - Advanced Nutrition - Micronutrients Credits: 3
- NUT 4200 - Lifecycle Nutrition for Majors Credits: 3
- NUT 4800 - Medical Nutrition Therapy Credits: 4
- PHY 2010 - College Physics I Credits: 4
- PHY 2030 - College Physics I Laboratory Credits: 1
- PHY 2020 - College Physics II Credits: 4
- PHY 2040 - College Physics II Laboratory Credits: 1
- PSY 1001 - Introductory Psychology Credits: 3

### Select Two of the Following:

- NUT 3200 - Nutrition and Sports Performance Credits: 3
- NUT 3300 - Cultural Aspects of Nutrition Credits: 3
- NUT 3350 - Global Nutrition and Health Credits: 3
- NUT 3400 - Nutrition and Weight Management Credits: 3
- NUT 3500 - Food Safety Credits: 3
- NUT 3700 - Nutrition Education and Counseling Credits: 3

## Senior Experience: 3 credits

Select One of the Following:

- NUT 4720 - Nutrition Capstone Credits: 3
- CHE 4960 - Senior Experience in Biochemistry Credits: 3
- HON 4950 - Senior Honors Thesis Credits: 3

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Major Requirement	86 credits
Senior Experience	3 credits
Unrestricted Electives	0-10 credits
<b>Total for the Nutrition Science Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Nutrition Studies Major, B.S.*



## About the Program

The Nutrition Studies baccalaureate degree is a degree option for students wishing to study of the science of nutrition without pursuing the registered dietitian nutritionist (RDN) credentials.

This B.S. degree is intended for students who are interested in the scientific foundation of nutrition principles. The program is comprised of a 53 credit Nutrition core, which provides students with the nutrition knowledge necessary to be nutrition professionals, including nutrition biochemistry and metabolism, food safety, nutrition education and counseling and nutrition research and evaluation, among others. Students have the flexibility to choose electives and/or a minor program that align with their interests. This is a major for those who are not pursuing dietetic registration. A grade of C- or better is required in all major courses.

## Student Outcomes

- Integrate scientific information and translate research into practice.
- Demonstrate attitudes, values and behaviors aligned with nutrition practice.
- Critique and effectively communicate nutrition information to a wide range of audiences.
- Demonstrate an understanding of the functions and interrelationships of nutrients and food in human health, disease prevention, and disease states.
- Integrate the biological, behavioral, socioeconomic and environmental factors related to food and nutrient intakes and needs across populations and life stages.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** BIO 1080 - General Biology I, BIO 1090 - General Biology Laboratory I, CHE 1100 - Principles of Chemistry, CHE 1150 - Principles of Chemistry Laboratory which are all required in the major.
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

## Required Courses: 53 credits

- BIO 1080 - General Biology I Credits: 3
- BIO 1090 - General Biology Laboratory I Credits: 1
- BIO 2310 - Human Anatomy and Physiology I Credits: 4
- BIO 2320 - Human Anatomy and Physiology II Credits: 4
- CHE 1100 - Principles of Chemistry Credits: 4
- CHE 1150 - Principles of Chemistry Laboratory Credits: 1
- CHE 2100 - Introduction to Organic and Biological Chemistry Credits: 4
- CHE 2150 - Introduction to Organic and Biological Chemistry Laboratory Credits: 1
- NUT 1800 - Careers in Nutrition and Dietetics Credits: 1
- NUT 2040 - Introduction to Nutrition Credits: 3
- NUT 3040 - Nutrition Concepts and Controversies Credits: 3

- NUT 3050 - Concepts of Lifecycle Nutrition Credits: 3
- NUT 3150 - Advanced Nutrition - Macronutrients Credits: 3
- NUT 3160 - Advanced Nutrition - Micronutrients Credits: 3
- NUT 3300 - Cultural Aspects of Nutrition Credits: 3
- NUT 3500 - Food Safety Credits: 3
- NUT 3700 - Nutrition Education and Counseling Credits: 3
- NUT 3850 - Nutrition and Chronic Disease Credits: 3
- NUT 4210 - Community Nutrition Credits: 3

## Major Electives: 6 credits

Select 6 credits from the following list

- HCM 3150 - Health Care Organization and Management Credits: 3
- NUT 3000 - Nutrition: Past and Present Credits: 3
- NUT 3101 - Body Image: Concepts and Approaches Credits: 3
- NUT 3200 - Nutrition and Sports Performance Credits: 3
- NUT 3350 - Global Nutrition and Health Credits: 3
- NUT 3400 - Nutrition and Weight Management Credits: 3
- NUT 3810 - Nutrition and Social Media Credits: 1
- NUT 3820 - Plant Based Nutrition Credits: 1
- NUT 4300 - Management in Dietetics Credits: 3
- NUT 4800 - Medical Nutrition Therapy Credits: 4
- RST 1200 - Basic Cooking Skills Credits: 3

## Senior Experience: 3 credits

- NUT 4720 - Nutrition Capstone Credits: 3

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Major Requirement	53 credits
Major Electives	6 credits
Senior Experience	3 credits
Unrestricted Electives	22-37 credits
<b>Total for the Nutrition Studies Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree.

**Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Pathway 2 Lactation Consultant Training Certificate

The Pathway 2 Lactation Consultant Training Certificate Program is an undergraduate certificate for students who wish to receive the necessary education and skills to be an International Board Certified Lactation Consultant (IBCLC). Students need to complete the required pre-reqs prior to applying for the certificate program.

The minimum passing grade for all courses included in this certificate is an earned grade of "C".

## Pre-requisites

Courses required as pre-requisites for entry into the lactation consultant training program undergraduate certificate (alternate courses may be considered)

- BIO 1080 - General Biology I Credits: 3
- BIO 2310 - Human Anatomy and Physiology I Credits: 4
- BIO 2320 - Human Anatomy and Physiology II Credits: 4
- ITP 1700 - Medical Terminology Credits: 3
- NUT 2040 - Introduction to Nutrition Credits: 3
- NUT 3300 - Cultural Aspects of Nutrition Credits: 3
- NUT 3700 - Nutrition Education and Counseling Credits: 3
- NUT 4040 - Nutrition Research Design and Evaluation Credits: 3
- NUT 4200 - Lifecycle Nutrition for Majors Credits: 3
- NUT 4800 - Medical Nutrition Therapy Credits: 4

## Required Courses

- NUT 4950 - Lactation Management Credits: 3
- NUT 4970 - Clinical Skills for Breastfeeding Support Credits: 3
- NUT 4990 - Clinical Lactation Practicum Credits: 1-8 (must complete 12 credits)

**Total: 18 credits**

## Department of Social Work

Location: Central Classroom Building, Suite 201

Phone: 303-615-0555

E-Mail: [socialwork@msudenver.edu](mailto:socialwork@msudenver.edu)

Website: [Social Work Department Website](#)

# Social Work Major, B.S.

[Department of Social Work](#)

[College of Health and Human Sciences](#)

Available Program Format(s): [Online](#),  
[In-Person](#), [Hybrid](#)

## About the Program

The undergraduate social work program at MSU Denver is about empowering change and transforming lives. Our program is dedicated to preparing the next generation of professionals to tackle today's complex social challenges with innovation, resilience, and a solid foundation of social work skills. The BSSW program at MSU Denver believes that social work is more than a profession - it is a passion for justice and a commitment to change and wellness in our communities. Our program provides a comprehensive education, blending rigorous academics with experiential learning in community-based organizations. Program highlights include a curriculum rooted in a commitment to anti-racism, diversity, equity, and inclusion; experienced faculty who bring a wealth of knowledge and experience to student learning; and dedicated advisors, mentors, and peer networks here to help you succeed. Students may complete the BSSW degree fully online or in the mixed delivery program, which consists of a variety of options including on campus, hybrid and online. Online courses often require synchronous activity with a set meeting time each week.

Social work is a continually growing field, so the job market is good for social workers right now. The US Bureau of Labor Statistics expects social work jobs to grow by 7% by 2032, which is faster than the national average growth rate. Because social work is such a diverse field, there are many opportunities for individuals with a degree in social work. Social workers can find jobs in a variety of settings including non-profits, schools, governmental agencies, hospitals, and mental health centers.

## Accreditation

The Bachelor of Science in Social Work (BSSW) Program has been continuously accredited since 1997 by the Council on Social Work Education, the sole accrediting body for social work programs in the U.S. Accreditation assures that professional standards are met in curriculum content and delivery. Accredited programs periodically undergo rigorous review by CSWE in order to ensure compliance with educational standards.

## Student Outcomes

The goal of the BSSW Program is to prepare students for generalist social work practice in professional settings, as is congruent with our accreditation standards. More specifically, students who graduate from our program will be able to:

- Demonstrate ethical and professional behavior
- Advance human rights and social, racial, economic, and environmental justice
- Engage anti-racism, diversity, equity, and inclusion (ADEI) in practice
- Engage in practice-informed research and research-informed practice
- Engage in policy practice
- Engage with individuals, families, groups, organizations and communities
- Assess individuals, families, groups, organizations and communities
- Intervene with individuals, families, groups, organizations and communities
- Evaluate practice with individuals, families, groups, organizations and communities

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each SWK course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- All ancillary courses must be completed with a grade of "D-" or better.
- The major requires 6 credits of Social Work prerequisite courses to set the foundation for coursework in the major. Students must have all prerequisite courses completed prior to entry into the major.
- Upon approaching completion of the prerequisites, students may apply to the program (a formal application is required for acceptance into the major, see below).

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- **Recommended:** ENG 1010 - Composing Arguments and ENG 1020 - Research and Argument Writing are recommended for Social Work majors.
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)

- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- **Recommended:** BIO 1000 - Human Biology for Non-Majors, BIO 1030 - General Biology for Non-Majors, or BIO 1080 - General Biology I and BIO 1090 - General Biology Laboratory I are recommended for Social Work Majors.
- Social and Behavioral Sciences (6 credits)
- **Recommended:** PSC 1010 - American National Government and PSY 1001 - Introductory Psychology are recommended for Social Work majors. One of the following courses is also recommended: SOC 1010 - People, Power, and Progress, ANT 1310 - Introduction to Cultural Anthropology, or ANT 2330 - Cross-Cultural Communication.
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

## Required Ancillary Prerequisite Courses: 18-19 credits

The following courses must be completed before students may apply to the BSSW Program. All ancillary courses must be completed with a grade of "D-" or better.

- ENG 1010 - Composing Arguments **Credits:** 3  
and
- ENG 1020 - Research and Argument Writing **Credits:** 3
- BIO 1000 - Human Biology for Non-Majors **Credits:** 3  
or
- BIO 1030 - General Biology for Non-Majors **Credits:** 4  
or
- BIO 1080 - General Biology I **Credits:** 3  
and
- BIO 1090 - General Biology Laboratory I **Credits:** 1
- PSC 1010 - American National Government **Credits:** 3
- PSY 1001 - Introductory Psychology **Credits:** 3
- SOC 1010 - People, Power, and Progress **Credits:** 3  
or
- ANT 1310 - Introduction to Cultural Anthropology **Credits:** 3  
or
- ANT 2330 - Cross-Cultural Communication **Credits:** 3

## Social Work Prerequisites: 6 credits

The following social work courses must be completed before students may apply to the BSSW Program. All social work courses must be completed with a grade of "C-" or better.

- SWK 1010 - Introduction to Social Work **Credits:** 3
- SWK 1600 - Community Engagement and Civic Responsibility **Credits:** 3

## Required Social Work Courses: 45 credits

Once a student has completed all General Studies requirements, ancillary course requirements, and social work prerequisite courses, they are eligible to apply to the BSSW program. Once admitted to the BSSW Program, students are eligible to enroll in the following required courses. Because the BSSW degree is professionally-oriented, students must pass through the curriculum in a sequential manner with lower-level courses preparing them for the work and expectations of upper-level courses. Students must adhere to the required coursework and pass all courses with a C- or better.

- SWK 3050 - Theories for Individual and Social Change **Credits:** 3
  - SWK 3090 - Critical Reflection: Exploring Social Work Thinking and Knowledge **Credits:** 3
  - SWK 3120 - Unraveling Inequalities in Social Work Practice **Credits:** 3
  - SWK 3350 - Social Work Experience, Practice and Communication **Credits:** 3
  - SWK 3780 - Social Work Policy Practice **Credits:** 3
  - SWK 3410 - Engaging for Change **Credits:** 3
  - SWK 3420 - The Power of Groups in Social Work **Credits:** 3
  - SWK 4400 - Macro Magic: Co-Creating Change in Communities and Organizations **Credits:** 3
  - SWK 4300 - Introduction to Social Work Research Methods **Credits:** 3
  - SWK 4310 - Research Applications and Data Analysis **Credits:** 3
  - SWK 4430 - Partnering with Families for Change **Credits:** 3
- BSSW students are required to take 4 upper division elective courses (12 credits). An up-to-date list of approved upper division Social Work electives can be found on our departmental website, as well as the semester the course is likely to be offered.

## Senior Experience: 6 credits

- SWK 4500 - Field Experience I **Credits:** 3
- SWK 4510 - Field Experience II **Credits:** 3

## Summary of Requirements

General Studies Requirements	33 credits
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ESSJ Requirement	0-3 credits
Required Ancillary Prerequisites	18-19 credits
Social Work Prerequisites	6 credits
Required Social Work Courses	45 credits
Senior Experience	6 credits
Unrestricted Electives	8-28 credits
<b>Total for the Social Work Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## ***Social Work Minor***

The Social Work Minor is designed for students interested in augmenting their major with social work courses. Graduates with a Minor in Social Work are not considered social workers. However, employers may value the minor, particularly if the student is pursuing a career in a helping field. Students must earn a "C-" or above to earn credit for the social work courses in the minor. Students must declare the minor using the Declaration of Major/Minor form on the Office of the Registrar's website.

## **Required Courses**

- SWK 1010 - Introduction to Social Work **Credits: 3**
- SWK 1600 - Community Engagement and Civic Responsibility **Credits: 3**
- SWK 3120 - Unraveling Inequalities in Social Work Practice **Credits: 3**
- SWK 3410 - Engaging for Change **Credits: 3**  
SWK Upper Division Elective (2 courses) **Credits: 6**

**Total for Social Work Minor: 18 credits**

## **Additional Information**

### ***Transferring to the Social Work Major from the Social Work Minor***

Current Social Work Minor students may apply as a major to the BSSW Program. Students must be formally accepted into the program in order to be considered a BSSW Major. Upon acceptance into the major, students are to meet with the BSSW Program Advisor

to receive a course of study plan. The application and admission requirements for the BSSW Major are defined above.

For further information, please visit the Department of Social Work at [www.msudenver.edu/social-work](http://www.msudenver.edu/social-work).

## **Department of Speech, Language, Hearing Sciences**

Location: Central Classroom Building, Suite 120

Phone: 303-615-0045

E-Mail: [slhs@msudenver.edu](mailto:slhs@msudenver.edu)

Website: [Speech, Language, Hearing Sciences Department Website](http://www.msudenver.edu/speech-language-hearing-sciences/)

## ***Speech, Language, Hearing Sciences - Leveling Certificate***

This certificate allows students with a bachelor's degree in a field other than speech, language, hearing sciences (SLHS) to demonstrate completion of a specific sequence of foundational courses required by most graduate programs in speech-language pathology and audiology.

MSU Denver prerequisites to SLHS 2100, SLHS 2530, and SLHS 3530 will be waived for certificate-seeking students. However, students who lack background in algebra, general biology, and/or English grammar should consider taking recommended prerequisites.

SLHS leveling courses must be taken in a prescribed sequence. Students should contact an SLHS program advisor to obtain a transcript evaluation and more information about registration procedures. Visit the department webpage to schedule an appointment with an SLHS advisor:  
<https://www.msudenver.edu/speech-language-hearing-sciences/>

Students must earn a C or better in all required courses to apply towards the SLHS Leveling Certificate.

## **Required Courses**

- SLHS 2100 - Language Acquisition and Development **Credits: 3**
- SLHS 2530 - Speech Science **Credits: 3**
- SLHS 3200 - Clinical Phonetics **Credits: 3**
- SLHS 3300 - Principles of Assessment and Intervention **Credits: 3**
- SLHS 3530 - Anatomy and Physiology of Speech and Hearing **Credits: 3**
- SLHS 3600 - Diagnostic Audiology **Credits: 3**
- SLHS 4100 - Language Disorders and Differences **Credits: 3**
- SLHS 4200 - Speech Disorders and Differences **Credits: 3**

- SLHS 4530 - Neural Bases of Communication and Its Disorders

**Credits:** 3

- SLHS 4610 - Aural Rehabilitation **Credits:** 3

Total Credits: 30

## ASHA Requirements

Students who plan to pursue graduate school in speech-language pathology or audiology should plan on taking additional courses during their undergraduate program. Students must have standalone coursework in a) statistics; b) physics or chemistry; c) biological sciences and d) social/behavioral sciences to meet clinical certification requirements of the American Speech-Language-Hearing Association.

## *Speech, Language, Hearing Sciences Major, B.A.*

[Department of Speech, Language,  
Hearing Sciences](#)

[College of Health and Human  
Sciences](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

This major provides a sound background for students pursuing careers in education, health care, and vocational rehabilitation. Graduates with the SLHS major will have the prerequisite coursework to pursue a graduate degree in speech-language pathology or audiology, which opens careers in schools, community clinics, hospitals, rehabilitation centers, and private practice. This major is also designed for students planning to work in the schools as a speech-language pathology assistant. For more information on the undergraduate program or careers within SLHS visit: <https://www.msudenver.edu/speech-language-hearing-sciences/>.

## Student Outcomes

The B.A. in SLHS is a comprehensive degree program in which knowledge of communication and its disorders is converged with everyday applications. Specific programmatic learning outcomes are:

- Explain the roles of acoustic, developmental, environmental, and neurobiopsychosocial factors in typical and atypical human communication.
- Describe how cultural and linguistic diversity, environmental, and social factors impact the assessment and intervention of human communication.
- Critically appraise peer-reviewed speech, language, hearing research.
- Demonstrate effective oral and written communication and collaborative skills required for professional pursuits.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- A graduate degree is required for entry-level practice in audiology and speech-language pathology (SLP). However, certain coursework should be completed at the undergraduate level to be eligible for clinical certification by the American Speech-Language-Hearing Association (ASHA). ASHA requires a standalone course in statistics; a college-level chemistry or physics course; a college-level course in biological science and a college-level course in social/behavioral science. For more information about the graduate program in SLP at MSU Denver visit: <https://www.msudenver.edu/speech-language-hearing-sciences/graduate-program/>

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- **Recommended:** MTH 1110 - College Algebra for Calculus or MTH 1112 - College Algebra Through Modeling (one of which is required in the Ancillary Courses)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- **Recommended:** BIO 1080 - General Biology I and BIO 1090 - General Biology Laboratory I (both courses are required in the Ancillary Courses)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*



## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

### Required Ancillary Courses: 8 credits

Required ancillary courses may be used to fulfill General Studies requirements.

- BIO 1080 - General Biology I **Credits: 3**
- BIO 1090 - General Biology Laboratory I **Credits: 1**
- MTH 1110 - College Algebra for Calculus **Credits: 4**  
or
- MTH 1112 - College Algebra Through Modeling **Credits: 4**

### Required Courses: 30 credits

- SLHS 1500 - Introduction to Communication Sciences and Disorders **Credits: 3**
- SLHS 2100 - Language Acquisition and Development **Credits: 3**
- SLHS 2530 - Speech Science **Credits: 3**
- SLHS 3200 - Clinical Phonetics **Credits: 3**
- SLHS 3300 - Principles of Assessment and Intervention **Credits: 3**
- SLHS 3530 - Anatomy and Physiology of Speech and Hearing **Credits: 3**
- SLHS 3600 - Diagnostic Audiology **Credits: 3**
- SLHS 4100 - Language Disorders and Differences **Credits: 3**
- SLHS 4200 - Speech Disorders and Differences **Credits: 3**
- SLHS 4610 - Aural Rehabilitation **Credits: 3**

### Elective Courses: 5-9 credits

Select 5-9 credits from the following courses:

- COMM 3000 - Diversity and Communication in the U.S. **Credits: 3**
- LING 2010 - Introduction to Linguistics **Credits: 4**
- LING 3011 - Analyzing English **Credits: 4**
- SLHS 1610 - American Sign Language I **Credits: 3**
- SLHS 1620 - American Sign Language II **Credits: 3**
- SLHS 2990 - Introduction to Health Communication **Credits: 3**
- SLHS 3000 - Foundations of Disability Studies through Media **Credits: 3**
- SLHS 4350 - Speech-Language Pathology Assistant Methods **Credits: 7**
- SLHS 4530 - Neural Bases of Communication and Its Disorders **Credits: 3**

### Senior Experience: 3-7 credits

- SLHS 4300 - Senior Experience in Speech, Language, Hearing Sciences **Credits: 3**  
or
- SLHS 4350 - Speech-Language Pathology Assistant Methods **Credits: 7**

### Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Ancillary Courses	8 credits
Major Required Courses	30 credits
Major Electives	5-9 credits
Senior Experience	3-7 credits
Unrestricted Electives	34-56 credits
<b>Total for the Speech, Language, Hearing Sciences Major, B.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

### *Speech, Language, Hearing Sciences Minor*

Students seeking a Speech, Language, Hearing Sciences minor are required to take a minimum of 18 semester hours, nine of which must be upper division. A grade of C or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required.

Visit the department webpage to schedule an advising appointment.

### Required Courses: 6 credits

- SLHS 1500 - Introduction to Communication Sciences and Disorders **Credits: 3**
- SLHS 3000 - Foundations of Disability Studies through Media **Credits: 3**

### Additional Elective Courses: 12 credits

Select four courses from the following list. Three courses need to be upper division.

- COMM 3000 - Diversity and Communication in the U.S. **Credits:** 3
- SLHS 1610 - American Sign Language I **Credits:** 3
- SLHS 1620 - American Sign Language II **Credits:** 3
- SLHS 2100 - Language Acquisition and Development **Credits:** 3
- SLHS 2530 - Speech Science **Credits:** 3
- SLHS 2990 - Introduction to Health Communication **Credits:** 3
- SLHS 3200 - Clinical Phonetics **Credits:** 3
- SLHS 3300 - Principles of Assessment and Intervention **Credits:** 3
- SLHS 3530 - Anatomy and Physiology of Speech and Hearing **Credits:** 3
- SLHS 3600 - Diagnostic Audiology **Credits:** 3
- SLHS 4100 - Language Disorders and Differences **Credits:** 3
- SLHS 4200 - Speech Disorders and Differences **Credits:** 3
- SLHS 4300 - Senior Experience in Speech, Language, Hearing Sciences **Credits:** 3
- SLHS 4350 - Speech-Language Pathology Assistant Methods **Credits:** 7
- SLHS 4610 - Aural Rehabilitation **Credits:** 3

*Note: Some courses require prerequisites and may need to progress in a certain order. See suggested Elective Progressions, these are not mandatory and should not replace consultation with SLHS advisor. Visit the department webpage to schedule an advising appointment.*

## Speech Elective Progression

The following Elective Progression recommendations are not mandatory but are provided to show examples of how electives can cater to a particular interest in the field. Students should consult with an SLHS advisor. Visit the department webpage to schedule an advising appointment.

- SLHS 2530 - Speech Science **Credits:** 3
- SLHS 3200 - Clinical Phonetics **Credits:** 3
- SLHS 3300 - Principles of Assessment and Intervention **Credits:** 3
- SLHS 4200 - Speech Disorders and Differences **Credits:** 3

## Language Elective Progression

- SLHS 2100 - Language Acquisition and Development **Credits:** 3
- SLHS 3300 - Principles of Assessment and Intervention **Credits:** 3
- SLHS 4100 - Language Disorders and Differences **Credits:** 3  
and
- SLHS 4300 - Senior Experience in Speech, Language, Hearing Sciences **Credits:** 3  
or
- COMM 3000 - Diversity and Communication in the U.S. **Credits:** 3

## Audiology Elective Progression

- SLHS 2530 - Speech Science **Credits:** 3
- SLHS 3530 - Anatomy and Physiology of Speech and Hearing **Credits:** 3
- SLHS 3600 - Diagnostic Audiology **Credits:** 3
- SLHS 4610 - Aural Rehabilitation **Credits:** 3

## Science Elective Progression

- SLHS 2530 - Speech Science **Credits:** 3
- SLHS 3530 - Anatomy and Physiology of Speech and Hearing **Credits:** 3
- SLHS 4530 - Neural Bases of Communication and Its Disorders **Credits:** 3  
and
- SLHS 3200 - Clinical Phonetics **Credits:** 3  
or
- SLHS 3600 - Diagnostic Audiology **Credits:** 3  
or
- SLHS 4300 - Senior Experience in Speech, Language, Hearing Sciences **Credits:** 3

Total: 18 credits

## Speech-Language Pathology Assistant Certificate

This certificate prepares students who have a bachelor's degree in a field outside of SLHS to obtain the Colorado Department of Education Authorization for Speech-Language Pathology Assistants (SLP-A).

MSU Denver prerequisites to SLHS 2100, SLHS 2530, and SLHS 3530 will be waived for post-bachelors students seeking the SLP-A certificate. However, students who lack background in algebra, general biology, and/or English grammar should consider taking the recommended prerequisites.

Certificate courses must be taken in a prescribed sequence. Students should contact an SLHS advisor to obtain a transcript evaluation and more information about registration procedures.

Entrance to the certificate's capstone course (SLHS 4350) requires a cumulative GPA of 2.5 or better and at least a C in all SLHS prerequisite courses. Students must apply to be considered for SLHS 4350. Visit the department webpage for information on what the application includes: <https://www.msudenver.edu/speech-language-hearing-sciences/undergraduateprogram/>.

## Required Courses

- SLHS 2100 - Language Acquisition and Development **Credits:** 3
- SLHS 2530 - Speech Science **Credits:** 3
- SLHS 3200 - Clinical Phonetics **Credits:** 3



- SLHS 3530 - Anatomy and Physiology of Speech and Hearing  
**Credits:** 3
- SLHS 3600 - Diagnostic Audiology **Credits:** 3
- SLHS 4100 - Language Disorders and Differences **Credits:** 3
- SLHS 4200 - Speech Disorders and Differences **Credits:** 3

- SLHS 4350 - Speech-Language Pathology Assistant Methods  
**Credits:** 7
- SLHS 4610 - Aural Rehabilitation **Credits:** 3

**Total: 31 credits**

# College of Letters, Arts and Sciences

## Vision

To provide essential, fundamental educational experiences for all students, while acknowledging and supporting their differing identities, circumstances, passions, career aspirations, and life goals.

## Mission

Our College will attract, educate and champion students from every community who are motivated by learning, discovery, and a desire to make a difference. Through expertly crafted content and hands-on learning, CLAS students attain holistic knowledge, disciplinary expertise, and advanced critical thinking skills. They understand the intersectional qualities of humanity and thought, utilizing this knowledge to thrive and succeed in life's journey.

## Principles

### *Finding Connection Points*

Our educational experiences demonstrate the need of both disciplinary and interdisciplinary outlooks and approaches.

### *Encouraging Discovery and Curiosity*

Our students engage in a robust intellectual environment, leading them to new ways of thought, creativity and problem-solving.

### *Providing Pathways*

Our faculty demonstrate an essential connection between education and opportunity; a mechanism that leads to transformative work, engaged communities, and underlying humanity.

### *Establishing Equitable Practices*

Our college aligns our educational missions with the essential work and support structures necessary to dismantle racist and overlapping systems of inequity that often serve as a barrier to greater success.

### *Ethical, Sustainable, and Progressive Support*

We invest our resources fairly and responsibly, providing the necessary capital to launch new ideas, provide growth opportunities, and ensure the disciplines within the college are fully supported.

## Academic Departments

The College of Letters, Arts and Sciences (CLAS) offers 48 undergraduate majors, 46 undergraduate minors, 5 certificates, 11 teacher preparation programs, and multiple micro-credentials. CLAS houses 3 divisions, encompassing 19 departments and 6 interdisciplinary centers, institutes and stand-alone programs. In addition to individual degree requirements, CLAS faculty teach the majority of the General Studies Program curriculum. The College promotes an interdisciplinary viewpoint, with rigorous programs of study in the fine and performing arts; humanities; social sciences; and

natural sciences. These programs prepare students for meaningful careers and a life of substance.

- [Department of Africana Studies](#)
- [Department of Art](#)
- [Department of Biology](#)
- [Department of Chemistry and Biochemistry](#)
- [Department of Chicana and Chicano Studies](#)
- [Department of Communication Studies](#)
- [Department of Earth and Atmospheric Sciences](#)
- [Department of English](#)
- [Department of History](#)
- [Department of Journalism and Media Production](#)
- [Department of Music](#)
- [Department of Philosophy](#)
- [Department of Physics](#)
- [Department of Political Science](#)
- [Department of Psychological Sciences](#)
- [Department of Sociology and Anthropology](#)
- [Department of Theatre and Dance](#)
- [Department of World Languages](#)
- [Gender Institute for Teaching and Advocacy](#)

## Department of Africana Studies

Location: Central Classroom Building, Suite 304

Phone: 303-615-0799

E-Mail: [africana-studies@msudenver.edu](mailto:africana-studies@msudenver.edu)

Website: [Africana Studies Department Website](#)

## *Africana Studies Major, B.A.*

[Department of Africana Studies](#)

[College of Letters, Arts and Sciences](#)

Program Format(s): [In-Person](#)

## About the Program

The Department of Africana Studies offers a range of courses that capture the depth and breadth of global African experiences, both historically and contemporarily. Specifically, *Africana* is an inclusive term, one that encompasses Black communities in the Caribbean, Europe, Asia and the Americas, as well as those of Continental Africa and the United States. These courses provide a comprehensive understanding of the global African heritage. Furthermore, they

illuminate contributions of Black people to the development of United States and world history; Black cultures and communities; political activity and potential; religious development and importance; community service and resource assistance; and prognosis and potential for social change. Some courses may apply toward General Studies requirements and serve as electives for graduation.

The major in Africana Studies, which leads to a Bachelor of Arts degree, and the minor program must be planned in consultation with the chair of the department. Before declaring Africana Studies as a major, the student must consult with the department chair. Students seeking secondary education social studies licensure must consult with an advisor in Africana Studies and one in Secondary Education.

## Student Outcomes

Upon completion of this program students will be able to:

1. List and identify the major contributions of African Americans over the past 400 years and of the peoples of African descent from the earliest times (from Ancient Egypt) to the present in various areas such as history, politics, arts religion, economics, etc.
2. Examine the evolution of the multidisciplinary field of Africana Studies.
3. Explore the key social, economic, political, and cultural issues and challenges facing African Americans and peoples of African descent, including those on Continental Africa.
4. Compare and contrast the similarities and differences in the experiences of African Americans and other peoples of African descent.
5. Analyze current events and social movements in Africa and the African Diaspora.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

- **Recommended:** It is recommended that students fulfill this requirement by taking one of the following courses which are part of the Africana Studies major.
  - AAS 1010 - Introduction to Africana Studies (required for major)
  - AAS 3570 - African American History I (required for major)
  - AAS 3300 - The Black Community (option for major)

## Required Courses: 21 credits

- AAS 1010 - Introduction to Africana Studies **Credits: 3**
- AAS 1130 - Survey of African History **Credits: 3**
- AAS 2000 - Social Movements and the Black Experience **Credits: 3**
- AAS 2010 - Interdisciplinary Research Methods in Social Issues **Credits: 3**
- AAS 3570 - African American History I **Credits: 3**
- AAS 3630 - The African Diaspora **Credits: 3**

## Select one from the following:

- AAS 3250 - Black Women Writers **Credits: 3**
- AAS 3300 - The Black Community **Credits: 3**
- AAS 3550 - The Black Family **Credits: 3**
- AAS 3930 - African Authors **Credits: 3**

## Elective Courses: 15 credits

Select 15 semester hours of Africana Studies electives in consultation with an advisor.

## Senior Experience: 3 credits

- AAS 4850 - Research Seminar in Africana Studies  
**Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Major Requirements	21 credits
Major Electives	15 credits
Senior Experience	3 credits
Unrestricted Electives	48-60 credits
<b>Total for the Africana Studies Major, B.A.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## *Africana Studies Major, B.A. with Secondary Social Studies Teacher Licensure Concentration*

[Department of Africana Studies](#)

[College of Letters, Arts and  
Sciences](#)

Available Program Format(s): [In-](#)  
[Person](#)

## About the Program

The African American Studies major will provide candidates with a comprehensive understanding of African heritage in this country through examination of African links; the contributions of African American people in the growth and development of the United States; African American community, culture, lifestyles, political activity, religious development, community service and resource assistance; as well as the prognosis and potential for social change.

Students interested in an Africana Studies Major only should search the catalog separately for that program.

## Student Outcomes

- List and identify the major contributions of African Americans over the past 400 years and of the peoples of African descent from the earliest times (from Ancient Egypt) to the present in various areas such as history, politics, arts religion, economics, etc.
- Define and examine the evolution of the multidisciplinary field of Africana Studies
- Explain the key social, economic, political, and cultural issues and challenges facing African Americans and peoples of African descent, including those on Continental Africa, such as slavery, racism, colonialism, political disfranchisement, economic underdevelopment, educational disparities, neo-colonialism and judicial inequalities, etc.
- Compare and contrast the similarities and differences in the experiences of African Americans and peoples of African descent, such as historical achievements, economic development, state formations, cultural achievements, slavery and freedom, colonialism, and struggles for independence and equality.
- Discuss and analyze the methodological approaches used to study Africana Studies.
- Demonstrate mastery of pedagogical strategies in Social Studies for secondary school teaching.
- Connect Literacy and Math-Utilize literacy, including Culturally and Linguistically Diverse (CLD), strategies as well as mathematics when teaching Social Studies.
- Create Inclusive Teaching Environment-Create a safe, inclusive and respectful learning environment that facilitates Social Studies learning for diverse populations, including CLD students.
- Plan and deliver effective instruction in History, Civics, and Geography.
- Demonstrate professionalism as a teacher candidate through ethical conduct, reflection, and leadership.
- Demonstrate knowledge of first and second language acquisition and teaching strategies for CLD students.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of at least 124 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. All courses required for teacher licensure must be passed with a grade of C- or higher. Students should note that programs differ in the minimum grade required.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

Courses recommended below will satisfy both General Studies and additional degree requirements below.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1610 - Integrated Mathematics I (required in the Foundations and Strategies section of the program)
- Arts and Humanities (6 credits)
- Historical (3 credits)
  - **Recommended:** HIS 1030 - World History to 1500
- Natural and Physical Sciences (6 credits)
  - **Recommended:** GEG 1100 - Introduction to Physical Geography
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** Two of the following: ANT 2330 - Cross-Cultural Communication; ECO 2010 - Principles of Macroeconomics; GEG 1000 - World Regional Geography; PSC 1010 - American National Government
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Africana Studies Major Core: 24 credits

- AAS 1010 - Introduction to Africana Studies Credits: 3
- AAS 1130 - Survey of African History Credits: 3
- AAS 2000 - Social Movements and the Black Experience Credits: 3
- AAS 2010 - Interdisciplinary Research Methods in Social Issues Credits: 3
- AAS 3570 - African American History I Credits: 3
- AAS 3630 - The African Diaspora Credits: 3
- AAS 4850 - Research Seminar in Africana Studies Credits: 3

Select one from the following:

- AAS 3250 - Black Women Writers Credits: 3
- AAS 3300 - The Black Community Credits: 3
- AAS 3550 - The Black Family Credits: 3
- AAS 3930 - African Authors Credits: 3

## Africana Studies Major Electives: 12 credits

Select 12 semester hours of Africana Studies electives in consultation with an advisor.

## Additional Content Courses Secondary Social Studies Licensure: 27 credits

All students must complete nine (9) Social Science courses for this concentration. Note that six credits below can also satisfy General Studies Social and Behavioral Science requirement. Three credits can satisfy the General Studies Historical requirement. Additionally, GEG 1100 can satisfy three credits of the General Studies Natural and Physical Science requirement.

- ANT 2330 - Cross-Cultural Communication **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**  
or
- ECO 2020 - Principles of Microeconomics **Credits: 3**
- GEG 1000 - World Regional Geography **Credits: 3**
- GEG 1100 - Introduction to Physical Geography **Credits: 3**
- HIS 1030 - World History to 1500 **Credits: 3**
- HIS 1040 - World History since 1500 **Credits: 3**
- HIS 1220 - American History since 1865 **Credits: 3**
- PSC 1010 - American National Government **Credits: 3**
- PSC 2230 - Introduction to International Relations **Credits: 3**

## Foundation and Methods for Secondary Education: 31 credits

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners Credits: 3
- EDS 3130 - Foundations of Educational Psychology and Philosophy Credits: 4
- EDS 3140 - First Field Experience in Secondary Education Credits: 1
- EDS 3150 - Critical Sociocultural Lenses for Teachers Credits: 3
- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools Credits: 3
- EDT 3010 - Integrating Educational Technology into Teaching Credits: 3
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools Credits: 1
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools Credits: 3
- SED 3600 - Exceptional Learners in the Classroom Credits: 3
- HIS 4010 - Methods of Teaching Social Science: Secondary School Credits: 3
- HIS 4020 - Field Experience in Teaching Social Studies in Secondary Schools Credits: 1
- MTH 1610 - Integrated Mathematics I Credits: 3

## Senior Experience: 12 credits

Student Teaching offers an essential conclusion to this degree program. Typically, students should register for 12 credits of EDS 4290 in their final semester. Students who register for only 6 credits of EDS 4290 should also register for 6 credits of CLD 4590 Culturally and Linguistically Diverse: ESL Student Teaching and Seminar

- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 Credits: 6,12

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Africana Studies Major Core	24 credits
Africana Studies Major Electives	12 credits
Additional Content Courses Secondary Social Studies Licensure	27 credits
Foundation and Methods for Secondary Education	31 credits
Senior Experience	12 credits

<b>Total for the Africana Studies Major, B.A. with Secondary Social Studies Licensure Total</b>	<b>Minimum of 124 credits</b>
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**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

**Up to 15 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.**

## Africana Studies Minor

The Africana Studies Minor must be planned in consultation with the chair of the department. A grade of "C-" or better is required for each course in this program to count toward the Bachelor's degree. Students should note that programs differ in the minimum grade required.

## Required Courses

- AAS 1010 - Introduction to Africana Studies Credits: 3
- AAS 2000 - Social Movements and the Black Experience Credits: 3

**Subtotal: 6 credits**

## Electives

A minimum of 15 additional semester hours is required in African American courses, 3 hours of which must be an African course, selected in consultation with and approved by the African and African American Studies advisor assigned to the student. Total hours for the minor are 21.

## Department of Art

Location: Arts Building, Suite 187

Phone: 303-615-0300

E-Mail: [artdepartment@msudenver.edu](mailto:artdepartment@msudenver.edu)

Website: [Art Department Website](#)

All students entering the department will be admitted under either the B.A. in Art or the B.A. in Art History, Theory and Criticism. After completion of the foundation courses and one other course in ART, CDES or ARTH, those wishing to pursue the B.F.A. in Art, the B.F.A. in Art Education, or the B.F.A. in Communication Design will be required to pass a formal portfolio review for admittance into those programs. The department also offers the minor in Studio Art, minor in Art History, Theory and Criticism, and the interdisciplinary Digital Media minor. Coursework leading to licensure in art

education is available for those with an approved Bachelor of Fine Arts degree. The art department's programs are accredited by the National Association of Schools of Art and Design (NASAD).

Note: Art students will be expected to purchase tools and supplies appropriate to the media in which they are working. In addition, all art courses have a program fee for consumable materials and/or modeling fees.

Note: Art majors may not apply ART 1212 - Non-Majors Ceramics: Handbuilding, ART 1213 - Non-Majors Ceramics: Wheelthrowing, ART 1251 - Jewelry and Metals for Non-Art Majors, ART 1261 - Painting for Non-Art Majors, ART 1271 - Film Photography for Non-Majors, ART 1273 - Digital Photography for Non-Art Majors, or ARTH 1500 - Art and Visual Literacy to their program requirements, but they can be included as unrestricted electives.

## ***Animation and Illustration Minor***

The minor in Animation and Illustration focuses on creative exploration, critical thinking, and visual storytelling. Students apply research in experimental projects while gaining a solid foundation in 2D and 3D animation art and digital illustration. These skills are relevant across a wide range of fields, including digital art, graphic design, marketing, business, and the humanities. Additionally, this minor provides students with insights into the professional demands of careers in animation and illustration.

A grade of "C-" or better is required in each required course before progressing to subsequent courses.

### **Required Courses: 18 credits**

- ART 1141 - Art Studio: Drawing Credits: 3
- ART 1531 - Art Studio: 4D Credits: 3
- ART 3236 - Experimental Animation Credits: 3
- ARTH 1800 - Art of the Modern and Contemporary World Credits: 3
- CDES 3263 - Digital Illustration Credits: 3
- CDES 3625 - Animation Practices Credits: 3

### **Elective Course: 3 credits**

Select one of the following courses:

- ART 2631 - Beginning Digital and Emerging Art Practices Credits: 3
- ART 2643 - Figure Drawing: Wet and Dry Credits: 3
- ART 3980 - Internship in Art Credits: 1-15
- CDES 3980 - Communication Design Junior Internship Credits: 1-4
- JMP 2480 - Introduction to Animation Credits: 3
- JMP 3485 - Motion Graphics I Credits: 3

**Total Credits: 21**

## ***Art Education Major, B.F.A.***

[Department of Art](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

### **About the Program**

The Art Education program fuses a progressive 21st century approach in the discipline of Art Education with the student's development as an artist. As a future artist-teacher, the student puts into practice informed research while working in the K-12 classroom. Combining artistic practice, educational studies, and field experience as an educator, the degree prepares students to bring about creative change in the world through the lives of students. The B.F.A. in Art Education includes K-12 Art Education licensure in the State of Colorado and is accredited by both NCATE and NASAD.

### **Student Outcomes**

- Make artworks that show evidence of intellectual inquiry and curiosity
- Convey ideas that are consistently reinforced through the execution of cohesive work(s) that are the result of the process of making
- Use effective and eloquent oral, written, and visual communication of enduring ideas
- Successfully teach in an art classroom applying and testing principles and methods of diverse age-appropriate instructional approaches and curriculum development that illustrate respect for and professionalism in the field of teaching.
- Assess aptitudes, experiential backgrounds and interests of individual and diverse groups of students, and devise learning experiences to meet assessed needs.
- Develop and present a professional portfolio of work and an art education philosophy statement that demonstrates current best practices in the field.

### **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 121 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Art Education majors who elect to take a minor may not minor in Studio Art.
- Art History, Theory and Criticism is a distinct academic discipline from Art, Art Education, or Communication Design, although all reside within the Department of Art and share common foundational requirements.
- All students entering the department wishing to pursue the Bachelor of Fine Arts (B.F.A.) in Art Education will be admitted under the B.A. in Art. Entrance into the B.F.A. program is contingent on passing a formal portfolio review upon completing 21 credits in ART, CDES, or ARTH, inclusive of the 18 hours of foundations courses required for all students in the department. Students must earn a minimum of a 2.75 G.P.A. in this coursework in the major at the time of portfolio review and have completed the Written Communication, Oral Communication, and Quantitative Literacy General Studies requirements.
- Students who are not admitted to the B.F.A. degree may reapply up to three times. Should a student not be admitted and continue in the B.A. in Art.
- Students pursuing the B.F.A. in Art Education must also achieve satisfactory scores on the state licensure examination. See your advisor for more information. Students seeking teacher licensure should read the teacher licensure sections of this Catalog.
- Students must obtain provisional admission to the teacher preparation program before they may register for their first field experience course(s).
- All teacher candidates must apply to the School of Education teacher preparation program to obtain provisional admission before they can register for EDS 3130, EDS 3140 and EDS 3150. Please Note: \*EDS 3130 and EDS 3140 are corequisites and must be taken concurrently.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1610 - Integrated Mathematics I
- Arts and Humanities (6 credits)

- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Recommended: EDS 3130 - Foundations of Educational Psychology and Philosophy\***
  - **Recommended: EDS 3150 - Critical Sociocultural Lenses for Teachers**
- Global Diversity (0 or 3 credits\*\*)

*\*EDS 3130 and EDS 3140 are corequisites and must be taken concurrently.*

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion. Many programs include courses that meet this requirement.
  - EDS 3150 - Critical Sociocultural Lenses for Teachers is suggested, since it is a requirement in the major.

## Additional Requirements: 10 credits

If EDS 3130 and EDS 3150 are not taken as part of the general studies requirements for Social and Behavioral Sciences as recommended these courses must be taken as additional requirements for the major.

Please Note: \*EDS 3130 and EDS 3140 are corequisites and must be taken concurrently.

- ART 1141 - Art Studio: Drawing Credits: 3
- EDS 3130 - Foundations of Educational Psychology and Philosophy Credits: 4
- EDS 3150 - Critical Sociocultural Lenses for Teachers Credits: 3

## Art Foundation Requirements: 18 credits

- ART 1101 - Art Studio: 2D Credits: 3
- ART 1501 - Art Studio: 3D Credits: 3
- ART 1531 - Art Studio: 4D Credits: 3
- ARTH 1600 - Art of the Ancient World Credits: 3
- ARTH 1700 - Art of the Medieval and Early Modern World Credits: 3



- ARTH 1800 - Art of the Modern and Contemporary World  
Credits: 3

## Post-foundation Courses Required for all B.F.A. in Art Education Majors: 45 credits

- ARTH 2600 - Reading and Writing Visual Culture  
**Credits: 3**  
or
- ART 2221 - Doing Theory **Credits: 3**
- ART 4101 - Advanced Interdisciplinary Studio **Credits: 3**
- ARTE 3601 - Introduction to Art Education: History and Philosophy **Credits: 3**
- ARTE 3605 - Creating an Inclusive Art Classroom: Curriculum and Instruction **Credits: 3**
- ARTE 4130 - Elementary Art Education: Curriculum and Instruction **Credits: 3**
- ARTE 4140 - Field Experience: Art Education Elementary **Credits: 1**
- ARTE 4230 - Secondary Art Education: Curriculum and Instruction **Credits: 3**
- ARTE 4240 - Field Experience: Art Education Secondary **Credits: 1**
- ARTE 4701 - Student Teaching and Seminar: Art Education K-12 **Credits: 12**
- ARTH 4480 - Art Theory and Criticism **Credits: 3**
- ARTH XXXX - Upper Division Art History Elective **Credits: 3**
- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**
- EDS 3140 - First Field Experience in Secondary Education **Credits: 1 \***
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits: 3**

*\* EDS 3130 and EDS 3140 are corequisites and must be taken concurrently.*

## Studio Emphasis: 15 credits

Complete 9 credits in one of the studio areas listed below. Complete an additional 6 credits in a complementary studio area. Students must take at least two intermediate studio courses: one in their studio emphasis and one in their complementary studio area. Please see the sections below for courses in each emphasis.

### Digital and Emerging Art Practices

The following courses are required for the emphasis (9 credits total). ART 3632 is repeatable and will be taken twice for a total of 6 credits. Students will learn new content each time they take ART 3632.

- ART 2631 - Beginning Digital and Emerging Art Practices  
Credits: 3
- ART 3632 - Intermediate Digital and Emerging Art Practices  
Credits: 3

### Sculpture Emphasis

The following courses are required for the emphasis (9 credits total). ART 3692 is repeatable and will be taken twice for a total of 6 credits. Students will learn new content each time they take ART 3692.

- ART 2691 - Beginning Sculpture Credits: 3
- ART 3692 - Intermediate Sculpture Credits: 3

### Jewelry Emphasis

The following courses are required for the emphasis (9 credits total). ART 3652 or ART 3654 are both options for the 6 credit intermediate studio requirement. Both are repeatable and can be taken twice for a total of 6 credits. Students will learn new content each time they take ART 3652 or ART 3654.

- ART 2651 - Beginning Jewelry and Metalsmithing  
**Credits: 3**  
Choose 2 of the following. Both are repeatable with new content.
- ART 3652 - Intermediate Jewelry and Metalsmithing  
**Credits: 3**
- ART 3654 - Variable Topics in Intermediate Jewelry  
**Credits: 3**

### Ceramics Emphasis

The following courses are required for the emphasis (9 credits total). ART 3612 or ART 3614 are both options for the 3 credit intermediate studio requirement.

- ART 2611 - Beginning Ceramics: Handbuilding **Credits: 3**
- ART 2613 - Beginning Ceramics: Wheelthrowing **Credits: 3**  
Take 1 of the following.
- ART 3612 - Intermediate Ceramics **Credits: 3**
- ART 3614 - Variable Topics in Intermediate Ceramics  
**Credits: 3**

### Printmaking Emphasis

ART 3682 is repeatable and will be taken twice for a total of 6 credits. Students will learn new content each time they take ART 3682.

- ART 2682 - Beginning Printmaking Credits: 3
- ART 3682 - Intermediate Printmaking Credits: 3

## Painting Emphasis

The following courses are required for the emphasis (9 credits total). ART 3662 or ART 3664 are both options for the 6 credit intermediate studio requirement. Both are repeatable and can be taken twice for a total of 6 credits. Students will learn new content each time they take ART 3662 or ART 3664.

- ART 2661 - Beginning Painting **Credits: 3**  
Choose 2 of the following. Both are repeatable with new content.
- ART 3662 - Intermediate Painting **Credits: 3**
- ART 3664 - Variable Topics in Intermediate Painting **Credits: 3**

## Photography Emphasis

ART 3672 is repeatable and will be taken twice for a total of 6 credits. Students will learn new content each time they take ART 3672.

- ART 2671 - Beginning Photography Credits: 3
- ART 3672 - Intermediate Photography Credits: 3

## Drawing Emphasis

- ART 2641 - Color Drawing: Wet and Dry Credits: 3
- ART 2643 - Figure Drawing: Wet and Dry Credits: 3
- ART 3642 - Intermediate Drawing Credits: 3

## Integrated Media Requirement: 6 credits

Complete at least six additional credit hours in courses designated as Integrated Media. Choose from:

- ART 3235 - Video Art Credits: 3
- ART 3236 - Experimental Animation Credits: 3
- ART 3301 - The Artist's Book Credits: 3
- ART 3391 - Fiber Structures Credits: 3
- ART 3393 - Electronics and Experimental Systems Credits: 3
- ART 3591 - Digital Fabrication Credits: 3
- ART 3613 - Pattern Networks Credits: 3
- ART 3637 - Socially Engaged Art Credits: 3
- ART 3639 - Performance Art Credits: 3
- ART 3640 - Installation Art Credits: 3
- ART 3920 - Variable Topics in Integrated Media Credits: 3
- ARTH 3780 - Cinema as Visual Art Credits: 3
- CDES 2222 - Fundamentals of Communication Design Credits: 3
- CDES 2302 - Interactive Systems Credits: 3
- CDES 2602 - Interface Design and Development Credits: 3

- CDES 3300 - Data-Driven Design Credits: 3
- CDES 3602 - Interactive Design I Credits: 3
- CDES 3625 - Animation Practices Credits: 3
- CDES 4251 - Designing the Human Experience Credits: 3

## Technology Requirement

A technology based studio course is required for licensure. This requirement may be applied to either emphasis or, where appropriate, to the integrated media requirement.

## Senior Experience: 3 credits

- ART 4701 - Studio Art Senior Experience: Exhibition and Thesis Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Additional Requirement	10 credits
Art Foundation Requirement	18 credits
Post Foundation Courses	45 credits
Studio Emphasis	15 credits
Integrated Media Requirement	6 credits
Technology Requirement	(counted elsewhere)
Senior Experience	3 credits
Unrestricted Electives	0-2 credits
<b>Total for the Art Education Major, B.F.A.</b>	<b>Minimum of 120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

**Up to 12 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.**

***Art History, Theory, and Criticism Major, B.A.***

## About the Program

Students examine art and visual culture from a broad variety of cultures and time periods while also learning critical and theoretical frameworks through which to study them. As a liberal arts degree, this major provides students with opportunities to gain research and critical thinking skills as well as learn to do close visual analysis, which are all useful in a variety of career applications, creative industries, and graduate studies. The Department of Art and MSU Denver are accredited by the National Association of Schools of Art and Design.

## Student Outcomes

- Locate and synthesize a range of scholarly sources of sufficient breadth and depth to thoroughly investigate an art historical problem.
- Apply appropriate art historical methods and theoretical frameworks to analyze an art historical problem.
- Develop and support a clear, logical thesis derived from an art historical study that is eloquently articulated in both oral and written formats.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Art History, Theory, and Criticism majors who elect to take a minor may not minor in Art History.
- Art History, Theory and Criticism is a distinct academic discipline from Art, Art Education, or Communication Design, although all reside within the Department of Art and share common foundational requirements.
- A minimum of 27 upper-division art history credits required.

- Title and course numbers for variable topics courses will be distinct for each offering, for example: ARTH 354E Art and Culture of the Spanish Golden Age. A student may take up to three distinct offerings under each variable topics designation, for example, ARTH 350A Art of China, ARTH 350B Islamic Art, and ARTH 350D Ancient Maya Art and Culture may all be applied to the requirements.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Ancillary Courses: 6-10 credits

Two semesters of the same foreign language are required and may fulfill General Studies requirements.

Students who entered college with fluency in a language other than English are encouraged to study a language with which they are unfamiliar. Students with a good high school background in a foreign language may take intermediate or advanced courses in that language or study a new language. Four semesters of French or German are often required for entrance into most graduate programs in Art History, Theory and Criticism. Both French and German are often required for entrance into Ph.D. programs in Art History, Theory and Criticism and doctoral research often requires research in at least one additional language.

## Art Foundation Requirements: 18 credits

Foundation courses are prerequisites for 2000-level and upper-division courses in the program.

- ART 1101 - Art Studio: 2D Credits: 3
- ART 1501 - Art Studio: 3D Credits: 3
- ART 1531 - Art Studio: 4D Credits: 3
- ARTH 1600 - Art of the Ancient World Credits: 3
- ARTH 1700 - Art of the Medieval and Early Modern World Credits: 3
- ARTH 1800 - Art of the Modern and Contemporary World Credits: 3

## Required Post-foundation Course Work: 6 credits

- ARTH 2600 - Reading and Writing Visual Culture Credits: 3
- ARTH 4480 - Art Theory and Criticism Credits: 3

## Art History Electives: 24 credits

- ARTH 3210 - Variable Topics: Site Specific Studies in Art History Credits: 3
- ARTH 3310 - Arts of Africa Credits: 3
- ARTH 3330 - Egyptian Art Credits: 3
- ARTH 3340 - Asian Art Credits: 3
- ARTH 3360 - Contemporary Chicana/o Art Credits: 3
- ARTH 3385 - Feminist Art Since 1960 Credits: 3
- ARTH 3401 - Art of Mesoamerica: from Olmec to Aztec Credits: 3
- ARTH 3402 - Art of the Inca and their Ancestors Credits: 3
- ARTH 3405 - Native American Art Credits: 3
- ARTH 3412 - Art of Ancient Greece Credits: 3
- ARTH 3414 - Ancient Roman Art Credits: 3
- ARTH 3421 - Icons, Mosques, and Cathedrals: Art around the Medieval Mediterranean Credits: 3
- ARTH 3433 - Bosch, Dürer, and the Art of the Northern Renaissance Credits: 3
- ARTH 3434 - Michelangelo, Leonardo, and the Art of Renaissance Italy Credits: 3
- ARTH 3441 - Caravaggio, Bernini, Velázquez: Baroque Art in Italy and Spain Credits: 3
- ARTH 3443 - Rubens, Rembrandt, and Versailles: Baroque Art in Northern Europe Credits: 3
- ARTH 3445 - Colonial Latin American Art Credits: 3
- ARTH 3481 - Latin American Moderns: from Rivera to Botero Credits: 3
- ARTH 3500 - Variable Topics: Art of the Americas Credits: 3
- ARTH 3510 - Variable Topics in Ancient Art Credits: 3

- ARTH 3520 - Medieval Art: Variable Topics Credits: 3
- ARTH 3530 - Renaissance Art: Variable Topics Credits: 3
- ARTH 3540 - Baroque Art: Variable Topics Credits: 3
- ARTH 3560 - 19th Century Art: Variable Topics Credits: 3
- ARTH 3580 - 20th and 21st Century Art: Variable Topics Credits: 3
- ARTH 3670 - History of Art Between World Wars Credits: 3
- ARTH 3680 - Global Contemporary Art Since 1970 Credits: 3
- CDES 3690 - History of Communication Design Credits: 3
- ARTH 3780 - Cinema as Visual Art Credits: 3
- ARTH 3790 - Photography and Modernism Credits: 3
- ARTH 4410 - Art History and Its Methods Credits: 3
- ARTH 4500 - Variable Topics Seminar in Art History, Theory and Criticism Credits: 3
- ARTH 4510 - Exhibiting the Art Object Credits: 3

**Subtotal: 24 credits**

## Studio Art Electives: 6 credits

Choose two of the following studio art electives (6 credits). Prerequisites apply - see the catalog for more information.

- ART 2611 - Beginning Ceramics: Handbuilding Credits: 3
- ART 2613 - Beginning Ceramics: Wheelthrowing Credits: 3
- ART 2631 - Beginning Digital and Emerging Art Practices Credits: 3
- ART 2641 - Color Drawing: Wet and Dry Credits: 3
- ART 2643 - Figure Drawing: Wet and Dry Credits: 3
- ART 2651 - Beginning Jewelry and Metalsmithing Credits: 3
- ART 2661 - Beginning Painting Credits: 3
- ART 2671 - Beginning Photography Credits: 3
- ART 2682 - Beginning Printmaking Credits: 3
- CDES 2222 - Fundamentals of Communication Design Credits: 3

**Subtotal: 6 credits**

## Senior Experience: 3 credits

- ARTH 4710 - Art History, Theory and Criticism Senior Experience Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
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ESSJ Requirement	0-3 credits
Required Ancillary Courses	6-10 credits
Art Foundation Requirements	18 credits
Required Post-Foundation Courses	6 credits
Major Electives	24 credits
Studio Art Electives	6 credits
Senior Experience	3 credits
Unrestricted Electives	17-33 credits
<b>Total for the Art History, Theory and Criticism Major, B.A.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Art History, Theory, and Criticism Minor

Students in the Art History, Theory, and Criticism minor study art and visual culture from a variety of cultures and time periods. Students gain research and critical thinking skills as well as learn to do close visual analysis, which are all useful in a variety of career applications and creative industries. The Department of Art and MSU Denver are accredited by the National Association of Schools of Art and Design.

A grade of "C-" or better is required in each required course before progressing to subsequent courses. Students should note that programs differ in the minimum grade required. A minimum of nine upper division art history hours is required.

Art History, Theory, and Criticism is a distinct academic discipline from Art or Communication Design, although all reside within the Department of Art and share common foundational requirements.

## Required Courses

- ARTH 1600 - Art of the Ancient World Credits: 3
- ARTH 1700 - Art of the Medieval and Early Modern World Credits: 3
- ARTH 1800 - Art of the Modern and Contemporary World Credits: 3
- ARTH 2600 - Reading and Writing Visual Culture Credits: 3

**Subtotal: 12 credits**

## Art History Electives

Select 12 credits of art history (ARTH) electives.

**Total for Minor: 24 credits**

## Art Major, B.A.

[Department of Art](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

## About the Program

The Bachelor of Arts in Art is a liberal arts degree that provides students with an opportunity to gain a broad background in visual art. The creative problem-solving and critical thinking skills learned in this degree program are useful in a variety of career applications and personal aspirations toward lifelong learning. The Department of Art and MSU Denver are accredited by the National Association of Schools of Art and Design (N.A.S.A.D.).

## Student Outcomes

- Select, evaluate and apply appropriate research resources to develop and support their ideas.
- Apply creative processes to the design and completion of works of art that communicate compelling ideas.
- Clearly synthesize ideas about visual art in verbal form.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Students who are in the B.A. in Art may not minor in Studio Art.

- Art History, Theory and Criticism is a distinct academic discipline from Art, Art Education, or Communication Design, although all reside within the Department of Art and share common foundational requirements.
- Foundation courses are prerequisites for courses within the Art, Communication Design, and Art History, Theory and Criticism majors. Check each course description for specific prerequisites or corequisites.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Art Foundation Requirements: 18 credits

- ART 1101 - Art Studio: 2D Credits: 3
- ART 1501 - Art Studio: 3D Credits: 3
- ART 1531 - Art Studio: 4D Credits: 3
- ARTH 1600 - Art of the Ancient World Credits: 3
- ARTH 1700 - Art of the Medieval and Early Modern World Credits: 3
- ARTH 1800 - Art of the Modern and Contemporary World Credits: 3

## Required Course Work: 7 credits

- ART 3101 - Professional Practices I Credits: 1
- ART 4101 - Advanced Interdisciplinary Studio Credits: 3  
Take one of the following:
- ARTH 2600 - Reading and Writing Visual Culture Credits: 3
- ART 2221 - Doing Theory Credits: 3

## Electives in the Major: 21 credits

Select a minimum of 21 credits of electives in the major. At least 9 of these credits must be in upper-division courses that have an ART prefix.\* ART 3701 Professional Practices II may be taken as an elective in the major, but may not be applied to this 9 credit ART requirement. Students are encouraged to include at least one course designated as integrated media.

*\*Prerequisites apply. Students pursuing the B.A. in Art may not enroll in ART 4701, ARTH 4710, CDES 4450, CDES 4600, CDES 4625, CDES 4650, or CDES 4721, or in courses with an ARTE prefix. Certain other advanced ART and CDES courses may be available only to B.F.A. students.*

## 2XXX ART Elective: 3 credits

Students take 3 credit hours in a 2XXX ART elective to complete the major. Select from the following courses.

- ART 2611 - Beginning Ceramics: Handbuilding Credits: 3
- ART 2613 - Beginning Ceramics: Wheelthrowing Credits: 3
- ART 2631 - Beginning Digital and Emerging Art Practices Credits: 3
- ART 2641 - Color Drawing: Wet and Dry Credits: 3
- ART 2643 - Figure Drawing: Wet and Dry Credits: 3
- ART 2651 - Beginning Jewelry and Metalsmithing Credits: 3
- ART 2661 - Beginning Painting Credits: 3
- ART 2671 - Beginning Photography Credits: 3
- ART 2682 - Beginning Printmaking Credits: 3
- ART 2691 - Beginning Sculpture Credits: 3

## Upper-Division ART Elective: 9 credits

Students take 9 credit hours of 3XXX or 4XXX ART electives to complete the major. Select from the following courses.

- ART 3235 - Video Art Credits: 3
- ART 3236 - Experimental Animation Credits: 3
- ART 3237 - Art of the International Film Poster Credits: 3
- ART 3244 - Advanced Figure Drawing Credits: 3
- ART 3266 - Community Painting: The Mural Credits: 3
- ART 3301 - The Artist's Book Credits: 3
- ART 3391 - Fiber Structures Credits: 3

- ART 3393 - Electronics and Experimental Systems Credits: 3
- ART 3500 - Variable Topics: Site Specific Studies in Studio Art Credits: 3
- ART 3591 - Digital Fabrication Credits: 3
- ART 3612 - Intermediate Ceramics Credits: 3
- ART 3613 - Pattern Networks Credits: 3
- ART 3614 - Variable Topics in Intermediate Ceramics Credits: 3
- ART 3632 - Intermediate Digital and Emerging Art Practices Credits: 3
- ART 3637 - Socially Engaged Art Credits: 3
- ART 3639 - Performance Art Credits: 3
- ART 3640 - Installation Art Credits: 3
- ART 3642 - Intermediate Drawing Credits: 3
- ART 3652 - Intermediate Jewelry and Metalsmithing Credits: 3
- ART 3653 - Miniature Casting Methods Credits: 3
- ART 3654 - Variable Topics in Intermediate Jewelry Credits: 3
- ART 3662 - Intermediate Painting Credits: 3
- ART 3664 - Variable Topics in Intermediate Painting Credits: 3
- ART 3672 - Intermediate Photography Credits: 3
- ART 3678 - Environmental Art Credits: 3
- ART 3682 - Intermediate Printmaking Credits: 3
- ART 3692 - Intermediate Sculpture Credits: 3
- ART 3920 - Variable Topics in Integrated Media Credits: 3
- ART 4101 - Advanced Interdisciplinary Studio Credits: 3

## ART, ARTH, or CDES Electives: 9 credits

Students take 9 credit hours in ART, ARTH, or CDES electives to complete the major.

## Senior Experience: 3 credits

- ART 4710 - Art Senior Experience Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Art Foundation Requirements	18 credits
Required Courses	7 credits
Major Electives	21 credits

Senior Experience	3 credits
Unrestricted Electives	35-44 credits
<b>Total for the Art Major, B.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Art Major, B.F.A.

[Department of Art](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

## About the Program

The Bachelor of Fine Arts in Art prepares students to be critical, creative thinkers and makers. Students often become practicing artists who exhibit their work in professional settings and might continue their research in graduate studies. The Department of Art and MSU Denver are accredited by the National Association of Schools of Art and Design (N.A.S.A.D.).

## Student Outcomes

- Make artworks that show evidence of intellectual inquiry and curiosity;
- Convey ideas that are consistently reinforced through the execution of cohesive work(s) that are the result of the process of making;
- Use effective and eloquent oral, written, and visual communication of enduring ideas.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.

- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Art majors who elect to take a minor may not minor in Studio Art.
- Art History, Theory and Criticism is a distinct academic discipline from Art, Art Education, or Communication Design, although all reside within the Department of Art and share common foundational requirements.
- All students entering the department wishing to pursue the Bachelor of Fine Arts (B.F.A.) in Art will be admitted under the B.A. in Art. Entrance into the B.F.A. program is contingent on passing a formal portfolio review upon completing 21 credits in ART, CDES, or ARTH, inclusive of the 18 hours of foundations courses required for all students in the department. Students must earn a minimum of a 2.75 G.P.A. in this coursework in the major at the time of portfolio review and have completed the Written Communication, Oral Communication, and Quantitative Literacy General Studies requirements.
- Students who are not admitted to the B.F.A. degree may reapply up to three times.
- At least 33 upper-division credits hours in the major are required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Art Foundation Requirements: 18 credits

- ART 1101 - Art Studio: 2D Credits: 3
- ART 1501 - Art Studio: 3D Credits: 3
- ART 1531 - Art Studio: 4D Credits: 3
- ARTH 1600 - Art of the Ancient World Credits: 3
- ARTH 1700 - Art of the Medieval and Early Modern World Credits: 3
- ARTH 1800 - Art of the Modern and Contemporary World Credits: 3

## Post-foundation Courses Required for all B.F.A. in Art Majors: 12 credits

- ART 3101 - Professional Practices I Credits: 1
- ART 3701 - Professional Practices II Credits: 2
- ART 4101 - Advanced Interdisciplinary Studio Credits: 3
- ARTH 4480 - Art Theory and Criticism Credits: 3
- ARTH XXXX - Upper-division Art History Elective Credits: 3\*

## Studio Emphasis: 15 credits

Complete 9 credits in one of the studio areas listed below

Complete an additional 6 credits in a complementary studio area. If the emphasis is in a two-dimensional area, the complementary area would be one of the three-dimensional areas; if the emphasis is in a three-dimensional area, the complementary area would be one of the two-dimensional areas. Students may select Digital and Emerging Art Practices for either a 2D or 3D area, but not both.

Students must take at least two intermediate studio courses: one in the emphasis and one in the complementary studio area.

*Please note that all intermediate level studio specific area courses require you to have completed the following as prerequisites:*

- ART 1101: Studio Foundations: 2D
- ART 1501: Studio Foundations 3D
- ART 1531: Studio Foundations 4D
- A beginning level course in that specific studio area
- ARTH 1800: Art of the Modern and Contemporary World
- ARTH 1600 or 1700 (please note that both must be taken prior to enrolling in ART 4101: Advanced Interdisciplinary Studio)

## Two-dimensional Studio Areas

- Drawing
- Painting



- Photography
- Printmaking
- Digital and Emerging Arts Practices

### Three-dimensional Studio Areas

- Ceramics
- Jewelry
- Sculpture
- Digital and Emerging Arts Practices

## Studio Emphases: Two-Dimensional

### Digital and Emerging Art Practices

The following courses are required for the emphasis (9 credits total). ART 3632 is repeatable and will be taken twice for a total of 6 credits. Students will learn new content each time they take ART 3632.

- ART 2631 - Beginning Digital and Emerging Art Practices Credits: 3
- ART 3632 - Intermediate Digital and Emerging Art Practices Credits: 3

### Drawing Emphasis

The following courses are required for the emphasis:

- ART 2641 - Color Drawing: Wet and Dry Credits: 3
- ART 2643 - Figure Drawing: Wet and Dry Credits: 3
- ART 3642 - Intermediate Drawing Credits: 3

### Painting Emphasis

The following courses are required for the emphasis (9 credits total). ART 3662 and ART 3664 are repeatable and can be taken twice for a total of 6 credits. Students will learn new content each time they take ART 3662 and 3664.

- ART 2661 - Beginning Painting **Credits: 3**  
Take 2 of the following. Both are repeatable.
- ART 3662 - Intermediate Painting **Credits: 3**
- ART 3664 - Variable Topics in Intermediate Painting **Credits: 3**

### Photography Emphasis

The following courses are required for the emphasis (9 credits total). ART 3672 is repeatable and will be taken twice for a total of 6 credits. Students will learn new content each time they take ART 3672.

- ART 2671 - Beginning Photography Credits: 3

- ART 3672 - Intermediate Photography Credits: 3

### Printmaking Emphasis

The following courses are required for the emphasis (9 credits total). ART 3682 is repeatable and will be taken twice for a total of 6 credits. Students will learn new content each time they take ART 3682.

- ART 2682 - Beginning Printmaking Credits: 3
- ART 3682 - Intermediate Printmaking Credits: 3

## Studio Emphases: Three-Dimensional

### Ceramics Emphasis

The following courses are required for the emphasis:

- ART 2611 - Beginning Ceramics: Handbuilding Credits: 3
  - ART 2613 - Beginning Ceramics: Wheelthrowing Credits: 3
- One of the following:
- ART 3612 - Intermediate Ceramics Credits: 3
  - ART 3614 - Variable Topics in Intermediate Ceramics Credits: 3

### Digital and Emerging Art Practices

The following courses are required for the emphasis (9 credits total). ART 3632 is repeatable and will be taken twice for a total of 6 credits. Students will learn new content each time they take ART 3632.

- ART 2631 - Beginning Digital and Emerging Art Practices Credits: 3
- ART 3632 - Intermediate Digital and Emerging Art Practices Credits: 3

### Jewelry Emphasis

The following courses are required for the emphasis (9 credits total). ART 3652 and ART 3654 are repeatable and can be taken twice for a total of 6 credits. Students will learn new content each time they take ART 3652 and 3654.

- ART 2651 - Beginning Jewelry and Metalsmithing Credits: 3  
Take 2 of the following. Both are repeatable.
- ART 3652 - Intermediate Jewelry and Metalsmithing Credits: 3
- ART 3654 - Variable Topics in Intermediate Jewelry Credits: 3

## Sculpture Emphasis

The following courses are required for the emphasis (9 credits total). ART 3692 is repeatable and will be taken twice for a total of 6 credits. Students will learn new content each time they take ART 3692.

- ART 2691 - Beginning Sculpture Credits: 3
- ART 3692 - Intermediate Sculpture Credits: 3

## Integrated Media Courses: 12 credits

The Art Department offers a pool of interdisciplinary, thematic-based courses under the designation "integrated media." These courses explore new approaches and technologies, and cross the boundaries between media. The B.F.A. in Art requires 12 credits of integrated media courses, and all students are encouraged to take advantage of these innovative offerings.

The following courses are designated as integrated media:

- ART 3235 - Video Art Credits: 3
- ART 3236 - Experimental Animation Credits: 3
- ART 3301 - The Artist's Book Credits: 3
- ART 3391 - Fiber Structures Credits: 3
- ART 3393 - Electronics and Experimental Systems Credits: 3
- ART 3591 - Digital Fabrication Credits: 3
- ART 3613 - Pattern Networks Credits: 3
- ART 3637 - Socially Engaged Art Credits: 3
- ART 3639 - Performance Art Credits: 3
- ART 3640 - Installation Art Credits: 3
- ART 3678 - Environmental Art Credits: 3
- ART 3920 - Variable Topics in Integrated Media Credits: 3
- ARTH 3780 - Cinema as Visual Art Credits: 3
- CDES 2222 - Fundamentals of Communication Design Credits: 3
- CDES 2302 - Interactive Systems Credits: 3
- CDES 2602 - Interface Design and Development Credits: 3
- CDES 3101 - Community-Based Design Credits: 3
- CDES 3300 - Data-Driven Design Credits: 3
- CDES 3602 - Interactive Design I Credits: 3
- CDES 3625 - Animation Practices Credits: 3
- CDES 4251 - Designing the Human Experience Credits: 3

## Departmental Electives: 18 credits

18 additional hours in ART, ARTH, ARTE or CDES classes need to be completed as a component of this degree. At least 9 of these should have an ART prefix. 6 of the 18 must be upper division.

## Senior Experience: 3 credits

- ART 4701 - Studio Art Senior Experience: Exhibition and Thesis Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Art Foundation Requirements	18 credits
Post Foundation Requirements	12 credits
Studio Emphasis	15 credits
Integrated Media Courses	12 credits
ART Major Electives	18 credits
Senior Experience	3 credits
Unrestricted Electives	6-15 credits
<b>Total for the Art Major, B.F.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Art Minor

The Art Minor provides students the opportunity to develop their creative skills which will complement any major. Creativity and critical thinking skills learned in art classes are applicable to a wide range of careers and the minor allows students to explore, respond to, and communicate with their environment through a visual and material language. All students begin with foundational classes and build on their learning through progressively more advanced courses. Course work includes opportunities to work in a variety of media, including ceramics, drawing, digital and emerging arts practices, jewelry & metalsmithing, painting, printmaking, photography, sculpture, and a selection of communication design, and integrated media coursework.

A grade of "C-" or better is required in each required course before progressing to subsequent courses. Students should note that programs differ in the minimum grade required.

## Required Courses: 15 credits

- ART 1101 - Art Studio: 2D Credits: 3
- ART 1501 - Art Studio: 3D Credits: 3

- ART 1531 - Art Studio: 4D Credits: 3
- ARTH 1800 - Art of the Modern and Contemporary World Credits: 3  
Select 1 of the following courses:
- ARTH 1600 - Art of the Ancient World Credits: 3
- ARTH 1700 - Art of the Medieval and Early Modern World Credits: 3

**Total of 15 Credits**

## Studio Art Electives: 9 credits

### 2XXX Elective: 3 credits

Students take 3 credit hours in a 2XXX level ART elective or CDES 2222. Select from the following courses:

- ART 2611 - Beginning Ceramics: Handbuilding Credits: 3
- ART 2613 - Beginning Ceramics: Wheelthrowing Credits: 3
- ART 2631 - Beginning Digital and Emerging Art Practices Credits: 3
- ART 2641 - Color Drawing: Wet and Dry Credits: 3
- ART 2643 - Figure Drawing: Wet and Dry Credits: 3
- ART 2651 - Beginning Jewelry and Metalsmithing Credits: 3
- ART 2661 - Beginning Painting Credits: 3
- ART 2671 - Beginning Photography Credits: 3
- ART 2682 - Beginning Printmaking Credits: 3
- ART 2691 - Beginning Sculpture Credits: 3
- CDES 2222 - Fundamentals of Communication Design Credits: 3

## Upper Division Electives: 6 credits

Students choose 6 upper-division credit hours of an ART course or any Integrated Media CDES course.\* Additional prerequisites may be required for upper division coursework in certain media.

*\*ART 3101 and 3701 do not count towards the 6 upper-division credit hour requirement.*

- ART 3235 - Video Art Credits: 3
- ART 3236 - Experimental Animation Credits: 3
- ART 3237 - Art of the International Film Poster Credits: 3
- ART 3244 - Advanced Figure Drawing Credits: 3
- ART 3266 - Community Painting: The Mural Credits: 3
- ART 3301 - The Artist's Book Credits: 3
- ART 3391 - Fiber Structures Credits: 3
- ART 3393 - Electronics and Experimental Systems Credits: 3

- ART 3500 - Variable Topics: Site Specific Studies in Studio Art Credits: 3
- ART 3591 - Digital Fabrication Credits: 3
- ART 3612 - Intermediate Ceramics Credits: 3
- ART 3613 - Pattern Networks Credits: 3
- ART 3614 - Variable Topics in Intermediate Ceramics Credits: 3
- ART 3632 - Intermediate Digital and Emerging Art Practices Credits: 3
- ART 3637 - Socially Engaged Art Credits: 3
- ART 3639 - Performance Art Credits: 3
- ART 3640 - Installation Art Credits: 3
- ART 3642 - Intermediate Drawing Credits: 3
- ART 3652 - Intermediate Jewelry and Metalsmithing Credits: 3
- ART 3653 - Miniature Casting Methods Credits: 3
- ART 3654 - Variable Topics in Intermediate Jewelry Credits: 3
- ART 3662 - Intermediate Painting Credits: 3
- ART 3663 - Painting and New Contexts Credits: 3
- ART 3664 - Variable Topics in Intermediate Painting Credits: 3
- ART 3672 - Intermediate Photography Credits: 3
- ART 3677 - Experimental Photography Credits: 3
- ART 3682 - Intermediate Printmaking Credits: 3
- ART 3692 - Intermediate Sculpture Credits: 3
- ART 3920 - Variable Topics in Integrated Media Credits: 3
- CDES 3500 - Site Specific Studies in CDES: Variable Topics Credits: 3
- CDES 3625 - Animation Practices Credits: 3

**Total for the Minor: 24 credits**

## *Communication Design Major, B.F.A.*

[Department of Art](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

### About the Program

The B.F.A. in Communication Design is a professional degree that combines oral, written, and visual communication to address a diversity of design problems, from toothpaste tubes to cell phone screens, trademarks and logos, magazines and books to websites. This diversity of contemporary design practice is reflected in the degree which couples sound strategies in research, practice, and visual studies. The Department of Art's Communication Design program challenges students to become informed, thinking designers. The Department of Art and MSU Denver are accredited by the National Association of Schools of Art and Design (N.A.S.A.D.).

## Student Outcomes

- Show evidence of intellectual inquiry and curiosity in design research.
- Convey ideas that are consistently reinforced through cohesive works that are the result of the process of making.
- Effectively articulate oral, written and visual design processes and concepts.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

A total of 120 semester hours are required for graduation.

- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Art History, Theory and Criticism is a distinct academic discipline from Art or Communication Design, although all reside within the Department of Art and share common foundations.
- All students entering the department wishing to pursue the Bachelor of Fine Arts (B.F.A.) in Communication Design will be admitted under the B.A. in Art. Entrance into the B.F.A. Communication Design program is contingent on passing a formal portfolio review upon completing 21 credits in ART, CDES, or ARTH, inclusive of the 18 hours of foundations courses required for all students in the department. Students must earn a minimum of a 3.0 G.P.A. in this coursework in the major at the time of portfolio review and have completed the Written Communication, Oral Communication, and Quantitative Literacy General Studies requirements. The G.P.A. will be calculated in a degree progress report processed by the department as "what-if" for the Communication Design major) at the time of portfolio review.
- Students who are not admitted to the B.F.A. degree may reapply up to three times. Should a student not be admitted and continue in the B.A. in Art, that student must work toward all of the requirements of the B.A. in Art, which includes upper-division ART coursework.
- The course CDES 3225 Integrated Production Techniques is restricted to Communication Design students who have passed the B.F.A. in Communication Design portfolio review. Students are advised to work with an advisor to

plan their degree progress and anticipated portfolio application date well in advance of this course.

- Communication Design students must have a suitable laptop computer before proceeding with CDES 3225 and subsequent courses. See an advisor for specifications.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Art Foundation Requirements: 18 credits

- ART 1101 - Art Studio: 2D Credits: 3
- ART 1501 - Art Studio: 3D Credits: 3
- ART 1531 - Art Studio: 4D Credits: 3
- ARTH 1600 - Art of the Ancient World Credits: 3
- ARTH 1700 - Art of the Medieval and Early Modern World Credits: 3
- ARTH 1800 - Art of the Modern and Contemporary World Credits: 3

## Communication Design Requirements: 60 credits

- ART 1141 - Art Studio: Drawing Credits: 3
- CDES 3690 - History of Communication Design Credits: 3
- ARTH 4480 - Art Theory and Criticism Credits: 3
- CDES 2222 - Fundamentals of Communication Design Credits: 3
- CDES 2225 - Typographic Syntax Credits: 3
- CDES 2226 - Design Inquiry Credits: 3
- CDES 2302 - Interactive Systems Credits: 3
- CDES 2602 - Interface Design and Development Credits: 3
- CDES 3215 - Typographic Aesthetics Credits: 3
- CDES 3222 - Design Research Methods Credits: 3
- CDES 3602 - Interactive Design I Credits: 3
- CDES 3623 - Identity and Systems Design Credits: 3
- CDES 3625 - Animation Practices Credits: 3
- CDES 4400 - Thesis Preparation Credits: 3
- CDES 4450 - Professional Practices in Communication Design Credits: 3
- CDES 4600 - Communication Design Portfolio Development Credits: 3
- CDES 4625 - Communication Design Internship Credits: 3  
or
- CDES 4650 - Studio M Credits: 3

**Choose 9 credits from:**

- CDES 3001 - Zermile and 'Zines Credits: 3
- CDES 3101 - Community-Based Design Credits: 3
- CDES 3225 - Integrated Production Techniques Credits: 3
- CDES 3300 - Data-Driven Design Credits: 3
- CDES 3500 - Site Specific Studies in CDES: Variable Topics Credits: 3
- CDES 3980 - Communication Design Junior Internship Credits: 1-4
- CDES 4051 - Sight Sound Syntax Credits: 3
- CDES 4151 - Design in Public Space Credits: 3
- CDES 4152 - Citizen Designers: Social Poster Design Credits: 3
- CDES 4202 - Interactive Design II Credits: 3
- CDES 4251 - Designing the Human Experience Credits: 3
- CDES 4252 - Mobile Prototyping Credits: 3
- CDES 4300 - Variable Topics in Communication Design Credits: 3
- ARTH XXXX - Upper Division Art History Elective (maximum 3 credits)\*

*\*ARTH 3360 (CHS 3025) may be used as an Art History elective for the B.F.A. in Communication Design.*

- CDES 4721 - Communication Design Senior Experience: Exhibition and Thesis Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Art Foundation Requirements	18 credits
Communication Design Requirements	60 credits
Senior Experience	3 credits
Unrestricted Electives	3-12 credits
<b>Total for the Communication Design Major, B.F.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Department of Biology

Location: Science Building, Room 2042

Phone: 303-615-0777

E-Mail: [bio@msudenver.edu](mailto:bio@msudenver.edu)

Website: [Biology Department Website](#)

### Guidelines for Field Experience, Internship, Practicum, and Workshop Courses

No more than four semester hours with the following course numbers will be applied toward the 40 semester hours of biology courses required for graduation: BIO 2888, 2980, 2990, 3970, 3980, 4888, 4950, 4980, and 4990. However, additional credits with the above course numbers may be applied toward general elective hours.

## Biology Major, B.A.

[Department of Biology](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

Senior Experience: 3 credits

## About the Program

The Department of Biology degree program provides students with the conceptual framework to examine living organisms from the molecular level to entire ecosystems. Students in both the Biology Major, B.A. and Biology Major, B.S. gain comprehensive knowledge of biological principles as well as the analytical skills and laboratory and field-based scientific training necessary to pursue graduate studies, conduct contemporary biological research, or directly enter the workforce. These majors allow students the flexibility to tailor their coursework toward a particular discipline of interest. The difference between the majors is in the amount of chemistry and mathematics required. Students should consult with a faculty advisor for degree planning towards field-specific career or post-baccalaureate goals.

## Student Outcomes

- I.1. Biology graduates will demonstrate the ability to interpret and apply the principles of cell biology.
- I.2. Biology graduates will demonstrate the ability to interpret and apply the principles of Molecular Biology & Genetics.
- I.3. Biology graduates will demonstrate the ability to interpret and apply the principles of Organismal Biology.
- I.4. Biology graduates will demonstrate the ability to interpret and apply the principles of Population Biology, Evolution, and Ecology.
- II.1. Biology graduates will demonstrate proper use and understanding of a broad range of biological techniques.
- II.2. Biology graduates will use knowledge and observations to formulate hypotheses, identify relevant variables, and design experiments to test hypotheses.
- III.1. Biology graduates will demonstrate the ability to locate and critically analyze sources of biological information.
- III.2. Biology graduates will demonstrate the ability to communicate concepts in biology using the vocabulary of the discipline.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each BIO prefix course in this program to count toward the bachelor's

degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

## Required Non-Biology Courses: 11-12 credits

All students must complete the following courses. To use CHE 1100 or CHE 1800 for the General Studies Natural and Physical Sciences requirement, students must take the corresponding lab (CHE 1150 or CHE 1801, respectively).

The Math course may count toward the Quantitative Literacy General Studies requirements.

- CHE 1100 - Principles of Chemistry **Credits: 4**
- CHE 2100 - Introduction to Organic and Biological Chemistry **Credits: 4**
- or
- CHE 1800 - General Chemistry I **Credits: 4**
- CHE 1810 - General Chemistry II **Credits: 4**
- A minimum of one semester of mathematics starting with MTH 1109 or above. Note - MTH 1210 does not satisfy this requirement. Credits: 3-4

## Biology Major Required Courses: 19-23 credits

- BIO 1080 - General Biology I **Credits:** 3
- BIO 1081 - General Biology II **Credits:** 3
- BIO 1090 - General Biology Laboratory I **Credits:** 1
- BIO 1091 - General Biology Laboratory II **Credits:** 1
- BIO 3520 - General Ecology **Credits:** 3  
and
- BIO 3600 - General Genetics **Credits:** 4  
or
- BIO 3610 - Genetics: Principles and Analysis **Credits:** 4

## Select one of these options: 4-8 credits

### Option 1

- BIO 2100 - General Botany Credits: 5

### Option 2

- BIO 2400 - General Microbiology Credits: 5

### Option 3

Both courses

- BIO 2310 - Human Anatomy and Physiology I Credits: 4
- BIO 2320 - Human Anatomy and Physiology II Credits: 4

### Option 4

One of the following two courses

- BIO 3200 - Invertebrate Zoology Credits: 4  
or
- BIO 3260 - Vertebrate Zoology Credits: 4

## Biology Electives: 17-21

Biology courses selected from the 2000-, 3000-, and 4000-level series, and approved by faculty advisors in the Biology Department, must be completed to bring the total of biology courses approved for the major to 40 semester hours.

## Upper division course requirements

At least 21 semester hours of the major (including General Genetics and General Ecology) must be 3000- and 4000-level BIO courses approved by the Biology Department faculty.

## Senior Experience: 3 credits

- Senior Experience course

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Non-Biology Courses	12 credits
Biology Major Required Courses	19-23 credits
Biology Electives	17-21 credits
Senior Experience	3 credits
Unrestricted Electives	29-42 credits
Total for the Biology Major, B.A.	120 credits

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Biology Major, B.A. with Secondary Science Teacher Licensure Concentration*

[Department of Biology](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

## About the Program

The Biology Major with Secondary Licensure concentration is designed for those students who plan to teach Secondary Science. The program includes a Biology B.A. Major, and Secondary Education courses required by the Colorado Department of Education for licensure. The major provides students with a background in the Colorado Academic Standards for Science and prepares them to pass the required content exam for licensure.

## Student Outcomes



## Secondary Education

- Students in Secondary/K-12 Education teacher licensure programs will demonstrate awareness of multiculturalism, diversity, equity, and inclusion.
- Students in Secondary/K-12 Education teacher licensure program will gain readiness and eligibility for student teaching.
- Teacher candidates will successfully complete student teaching.

## Biology Major B.A.

- Interpret and apply the principles of 1. Cell Biology, 2. Molecular Biology & Genetics, 3. Organismal Biology, and 4. Population Biology, Evolution, and Ecology.
- Use and understand a broad range of biological techniques.
- Formulate hypotheses using knowledge and observations, identify relevant variables, and design experiments to test hypotheses.
- Locate and critically analyze sources of biological information.
- Communicate concepts in biology using the vocabulary of the discipline.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 126 semester hours are required for graduation in this program.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree.
- A minimum GPA of 2.75 in the Biology Major and Additional Courses for Secondary Science Licensure is needed to apply for student teaching.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion. Those recommended courses below can satisfy additional degree program requirements beyond General Studies.

- Written Communication (6 credits)
- Oral Communication (3 credits)

- Quantitative Literacy (3 credits)
  - **Recommended:** Student may fulfill this General Studies requirement with MTH 1112 - College Algebra Through Modeling under Mathematics Courses for Secondary Science Licensure. (Note: depending on the course selected, this may exceed 3 credits.)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** Students may fulfill this General Studies requirement with Additional Content Courses for Secondary Science Licensure Concentration. (Note: depending on the courses selected, this total may exceed 6 credits.)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** Students may fulfill this requirement with EDS 3130 - Foundations of Educational Psychology and Philosophy and EDS 3150 - Critical Sociocultural Lenses for Teachers, which also meet requirements under Foundation and Method Courses for Secondary Education. (Note: depending on the courses selected, this total may exceed 6 credits.)
- Global Diversity (0 or 3 credits\*)

*\*Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

Students can consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

- Students can fulfill this requirement with EDS 3150 - Critical Sociocultural Lenses for Teachers.

## Biology Major Core Courses: 38 credits

- BIO 1080 - General Biology I Credits: 3
- BIO 1090 - General Biology Laboratory I Credits: 1
- BIO 1081 - General Biology II Credits: 3
- BIO 1091 - General Biology Laboratory II Credits: 1
- BIO 2310 - Human Anatomy and Physiology I Credits: 4
- BIO 2400 - General Microbiology Credits: 5
- BIO 3520 - General Ecology Credits: 3
- BIO 4850 - Evolution Credits: 3
- SCI 3950 - Teaching Science in Secondary Schools Credits: 3



- SCI 3960 - Field Experience in Teaching Science in Secondary Schools Credits: 1

Please select one of the following:

- BIO 3600 - General Genetics Credits: 4  
or
- BIO 3610 - Genetics: Principles and Analysis Credits: 4

Please select upper division Biology courses totaling a minimum of 7 credits:

- BIO 3000-4999 Biology Upper Division Elective
- BIO 3000-4999 Biology Upper Division Elective

## Additional Courses for Secondary Science Licensure: 34 credits

All students must complete thirty four (34) credits in the following disciplines to prepare to teach Secondary Science. Nine or more credits in this category can also satisfy General Studies requirements for Quantitative Literacy and Natural and Physical Sciences.

### Chemistry (10 Credits):

- CHE 1800 - General Chemistry I Credits: 4
- CHE 1801 - General Chemistry I Laboratory Credits: 1
- CHE 1810 - General Chemistry II Credits: 4
- CHE 1811 - General Chemistry II Laboratory Credits: 1

### Physics (10 Credits):

- PHY 2010 - College Physics I Credits: 4
- PHY 2020 - College Physics II Credits: 4
- PHY 2030 - College Physics I Laboratory Credits: 1
- PHY 2040 - College Physics II Laboratory Credits: 1

### Earth and Space Science (7 Credits):

- GEL 1010 - Physical Geology Credits: 4

Select one of the following courses:

- MTR 1400 - Weather and Climate Credits: 3  
or
- GEG 1100 - Introduction to Physical Geography Credits: 3

### Math (7 Credits):

- MTH 1112 - College Algebra Through Modeling Credits: 4
- MTH 1120 - College Trigonometry Credits: 3

## Foundation and Methods Courses for Secondary Education: 24 credits

All students must complete the following courses in Foundation and Methods Courses for Secondary Education. Before registering for these courses, students should obtain provisional admission to the School of Education. An application can be found [HERE](#). Six or

more credits in this category can also satisfy General Studies requirements for Social and Behavioral Sciences. Three credits in this category can also satisfy ESSJ requirement.

- EDS 3130 - Foundations of Educational Psychology and Philosophy Credits: 4
- EDS 3140 - First Field Experience in Secondary Education Credits: 1
- EDS 3150 - Critical Sociocultural Lenses for Teachers Credits: 3
- EDT 3010 - Integrating Educational Technology into Teaching Credits: 3
- SED 3600 - Exceptional Learners in the Classroom Credits: 3
- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners Credits: 3
- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools Credits: 3
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools Credits: 1
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools Credits: 3

## Senior Experience: 12 credits

- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 Credits: 6,12

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Biology Major Core Courses	38 credits
Additional Content Courses for Secondary Science Licensure	34 credits
Foundation and Methods Courses for Secondary Education	24 credits
Senior Experience	12 credits
Total for the Biology Major, B.A. with Secondary Science Teacher Licensure Concentration	126 credits

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree.**

**Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

**Up to 15 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.**

## ***Biology Major, B.S.***

[Department of Biology](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

### **About the Program**

The Department of Biology degree program provides students with the conceptual framework to examine living organisms from the molecular level to entire ecosystems. Students in both the Biology Major, B.A. and Biology Major, B.S. gain comprehensive knowledge of biological principles as well as the analytical skills and laboratory and field-based scientific training necessary to pursue graduate studies, conduct contemporary biological research, or directly enter the workforce. These majors allow students the flexibility to tailor their coursework toward a particular discipline of interest. The difference between the majors is in the required number of upper division biology and non-biology STEM courses. Students should consult with a faculty advisor for degree planning towards field-specific career or post-baccalaureate goals.

### **Student Outcomes**

- I.1. Biology graduates will demonstrate the ability to interpret and apply the principles of cell biology.
- I.2. Biology graduates will demonstrate the ability to interpret and apply the principles of Molecular Biology & Genetics.
- I.3. Biology graduates will demonstrate the ability to interpret and apply the principles of Organismal Biology.
- I.4. Biology graduates will demonstrate the ability to interpret and apply the principles of Population Biology, Evolution, and Ecology.
- II.1. Biology graduates will demonstrate proper use and understanding of a broad range of biological techniques.
- II.2. Biology graduates will use knowledge and observations to formulate hypotheses, identify relevant variables and design experiments to test hypotheses.
- III.1. Biology graduates will demonstrate the ability to locate and critically analyze sources of biological information.
- III.2. Biology graduates will demonstrate the ability to communicate concepts in biology using the vocabulary of the discipline.

## **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## **Program Requirements**

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each BIO prefix course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## **General Studies Requirements: 33 credits**

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## **Ethnic Studies & Social Justice Requirement: 0 or 3 credits**

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

## **Biology Major Required Courses: 19-20 credits**

- BIO 1080 - General Biology I **Credits: 3**
- BIO 1090 - General Biology Laboratory I **Credits: 1**
- BIO 1081 - General Biology II **Credits: 3**
- BIO 1091 - General Biology Laboratory II **Credits: 1** and

- BIO 3520 - General Ecology **Credits: 3**  
and

Select one of the following:

- BIO 2100 - General Botany **Credits: 5**
  - BIO 2310 - Human Anatomy and Physiology I **Credits: 4**
  - BIO 2400 - General Microbiology **Credits: 5**
  - BIO 3200 - Invertebrate Zoology **Credits: 4**
  - BIO 3260 - Vertebrate Zoology **Credits: 4**  
and
- Select one of the following:
- BIO 3600 - General Genetics **Credits: 4**
  - BIO 3610 - Genetics: Principles and Analysis **Credits: 4**

## Biology Elective Requirement: 26-27 credits

- BIO courses selected from the 2000-, 3000-, and 4000-level series, and approved by faculty advisors in the Biology Department, must be completed to bring the total of biology courses approved for the major to 46 semester hours.

## Upper division course requirement

At least 27 semester hours of the major (including General Genetics and General Ecology) must be 3000- and 4000-level BIO courses approved by the Biology Department faculty.

## Required Non-Biology Courses: 26-27 credits

## Required Chemistry Courses: 10 credits

All students must complete one of the following course sequences. CHE 1100 and CHE 1150 or CHE 1800 and CHE 1801 courses may also count toward the Natural and Physical Science General Studies requirements.

- CHE 1800 - General Chemistry I **Credits: 4**
- CHE 1801 - General Chemistry I Laboratory **Credits: 1**
- CHE 1810 - General Chemistry II **Credits: 4**
- CHE 1811 - General Chemistry II Laboratory **Credits: 1**  
or
- CHE 1100 - Principles of Chemistry **Credits: 4**
- CHE 1150 - Principles of Chemistry Laboratory **Credits: 1**
- CHE 2100 - Introduction to Organic and Biological Chemistry **Credits: 4**
- CHE 2150 - Introduction to Organic and Biological Chemistry Laboratory **Credits: 1**

## Required Mathematics Courses: 7-8 credits

All students must complete two semesters of Mathematics starting with MTH 1109, MTH 1110, or above. The Math courses may also count toward the Quantitative Literacy General Studies requirements.

## Required Non-Biology Science Electives: 9 credits

Choose 9 additional credits from the following list of courses. At least 6 credits must be upper division (3000- or 4000-level). Any mathematics course chosen from the list below is in addition to the two required mathematics courses.

### Anthropology

- ANT 1010 - Introduction to Biological Anthropology **Credits: 3**
- ANT 3100 - Human Evolution **Credits: 3**
- ANT 3170 - Primate Adaptation and Evolution **Credits: 3**
- ANT 3790 - Human Osteology **Credits: 3**
- ANT 3860 - Paleopathology **Credits: 3**
- ANT 4100 - Biological Anthropology Research Design **Credits: 3**

### Brewing Science

- BVG 4220 - Brewing Fermentation **Credits: 3**
- BVG 4350 - Brewing Science and Technology **Credits: 3**

### Civil Engineering Technology

- CET 3320 - Environmental Impact Statements **Credits: 3**

### Chemistry

- CHE 3100 - Organic Chemistry I **Credits: 4**
- CHE 3110 - Organic Chemistry II **Credits: 4**
- CHE 3120 - Organic Chemistry Laboratory I **Credits: 1**
- CHE 3130 - Organic Chemistry Laboratory II **Credits: 1**
- CHE 4310 - Biochemistry I **Credits: 4**
- CHE 4350 - Biochemistry Laboratory **Credits: 2**

### Computer Science

- CS 1050 - Computer Science 1 **Credits: 4**
- CS 2050 - Computer Science 2 **Credits: 4**
- CS 3120 - Machine Learning **Credits: 4**
- CS 3150 - Digital Image Processing and Computer Vision **Credits: 4**

### Environmental Science

- ENV 1200 - Introduction to Environmental Science Credits: 3
- ENV 2100 - Environmental Sampling and Analysis Credits: 3
- ENV 3400 - Water Resources Credits: 3
- ENV 3700 - Mountain Environments Credits: 3
- ENV 3740 - Environmental Health Credits: 3
- ENV 4400 - Landscape Ecology Credits: 3
- ENV 4420 - Wetlands Credits: 3
- ENV 4440 - Limnology Credits: 3
- ENV 4450 - Stream Ecology Credits: 3
- ENV 4460 - Advanced Water Quality Analysis Credits: 3
- ENV 4970 - Environmental Field Studies Credits: 3

## Exercise Science

- ESS 3300 - Anatomical Kinesiology Credits: 3
- ESS 3340 - Physiology of Exercise Credits: 4

## Geography

- GEG 1100 - Introduction to Physical Geography Credits: 3
- GEG 1700 - Global Sustainability Credits: 3
- GEG 3410 - Biogeography Credits: 3
- GEG 4700 - Sustainability in Resource Management Credits: 3

## Geology

- GEL 1010 - Physical Geology Credits: 4
- GEL 3420 - Soil Resources Credits: 3
- GEL 3422 - Methods of Soil Analysis and Sampling Credits: 1

## Geographic Information Systems

- GIS 2250 - Geographic Information Systems Credits: 4
- GIS 3250 - Cartography Credits: 3
- GIS 4840 - Remote Sensing Credits: 3
- GIS 4850 - Spatial Modeling in Raster Credits: 4
- GIS 4860 - GIS Applications Credits: 4

## Integrative Therapeutic Practices

- ITP 4300 - Botanical Pharmacology Credits: 3
- ITP 4600 - Clinical Pathophysiology Credits: 4

## Mathematics

- MTH 1120 - College Trigonometry Credits: 3

- MTH 1210 - Introduction to Statistics Credits: 4
- MTH 1410 - Calculus I Credits: 4
- MTH 2140 - Computational Matrix Algebra Credits: 2
- MTH 2410 - Calculus II Credits: 4
- MTH 2520 - R Programming Credits: 4
- MTH 3130 - Applied Methods in Linear Algebra Credits: 4
- MTH 3140 - Linear Algebra Credits: 4
- MTH 3210 - Probability and Statistics Credits: 4
- MTH 3220 - Statistical Methods Credits: 4
- MTH 3240 - Environmental Statistics Credits: 4
- MTH 3270 - Data Science Credits: 4
- MTH 3420 - Differential Equations Credits: 4
- MTH 3430 - Mathematical Modeling Credits: 4
- MTH 3470 - Introduction to Discrete Mathematics and Modeling Credits: 4

## Meteorology

- MTR 1400 - Weather and Climate Credits: 3
- MTR 3330 - Climatology Credits: 3

## Nutrition

- NUT 2040 - Introduction to Nutrition Credits: 3
- NUT 3150 - Advanced Nutrition - Macronutrients Credits: 3
- NUT 3160 - Advanced Nutrition - Micronutrients Credits: 3
- NUT 3500 - Food Safety Credits: 3

## Physics

- PHY 2010 - College Physics I Credits: 4
- PHY 2020 - College Physics II Credits: 4
- PHY 2030 - College Physics I Laboratory Credits: 1
- PHY 2040 - College Physics II Laboratory Credits: 1
- PHY 2311 - General Physics I Credits: 4
- PHY 2321 - General Physics I Laboratory Credits: 1
- PHY 2331 - General Physics II Credits: 4
- PHY 2341 - General Physics II Laboratory Credits: 1
- PHY 3231 - Vibrations, Waves, and Mathematical Methods Credits: 4
- PHY 3311 - Analytical Mechanics Credits: 4

## Psychology

- PSY 3560 - Psychopharmacology Credits: 3
- PSY 4520 - Sensation and Perception Credits: 3
- PSY 4540 - Behavioral Neuroscience Credits: 3

## Senior Experience: 3 credits

- Senior Experience course

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Biology Major Required Courses	19-20 credits
Biology Major Electives	26-27 credits
Required Chemistry Courses	10 credits
Required Mathematics Courses	7-8 credits
Required Non-Biology Science Courses	9 credits
Senior Experience	3 credits
Unrestricted Electives	8-24 credits
<b>Total for the Biology Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Biology Minor

Students seeking a Biology Minor are required to take a minimum of 24 semester hours, 3 of which must be upper division (3000-4000 level). A grade of C- or better is required for each course in this program to count toward a minor. Students should note that programs differ in the minimum grade required.

Students seeking a Biology Minor are required to take BIO1080, BIO1090, BIO1081, and BIO1091, and must complete at least one organismal course in general botany, human anatomy and physiology, general microbiology, or zoology.

## Required Courses

- BIO 1080 - General Biology I Credits: 3
- BIO 1090 - General Biology Laboratory I Credits: 1
- BIO 1081 - General Biology II Credits: 3
- BIO 1091 - General Biology Laboratory II Credits: 1

### Select one of these options:

- Option 1: BIO 2100 - General Botany Credits: 5
- Option 2: BIO 2310 - Human Anatomy and Physiology I Credits: 4
- Option 3: BIO 2400 - General Microbiology Credits: 5
- Option 4: BIO 3200 - Invertebrate Zoology Credits: 4
- Option 5: BIO 3260 - Vertebrate Zoology Credits: 4

## Electives

Biology courses from the 2000-, 3000-, and 4000-level series, approved by the Department of Biology, must be completed to bring the total of biology courses approved for the minor to 24 semester hours. At least 3 of those semester hours must be upper division (3000- or 4000-level) to complete the minor. Students should seek assistance from a Biology department advisor or faculty member in selecting elective courses.

Total (minimum): 24 credits

## Department of Chemistry and Biochemistry

Location: Science Building, Room 3062

Phone: 303-615-0277

E-Mail: [che@msudenver.edu](mailto:che@msudenver.edu)

Website: [Chemistry and Biochemistry Department Website](#)

## American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP)

### Background:

The American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) is a credentialed post-baccalaureate bridge experience modeled in accordance with the ACS Bridge Project, which integrates culturally responsive practices into the program curriculum to provide alternative pathways to graduate programs in the chemical and/or biochemical sciences for students from underrepresented/minoritized (URM) groups in STEM.<sup>1</sup> Accordingly, the ACS-BP is tuition-free and offers a competitive salary, housing stipend, and health insurance for the full two years of the program. The goal of this structure is to enable students the space to fully engage, relax into their STEM identity, focus, and thrive while getting high-quality, rigorous preparation for graduate programs in the Chemical and/or Biochemical Sciences.

### Advantages of this Program:

Graduate admissions decisions rely heavily on a student's upper-division electives, hands-on teaching experience, immersive research

experiences, and scientific literacy skills. The ACS-BP provides depth and breadth of opportunity for students in each of those critical areas while introducing students to the graduate school experience. The program curriculum is modeled after the first two years of a graduate program, but unlike grad school, we provide at least three tiers of mentorship for each student to ensure holistic, comprehensive support while they're discovering their graduate school path. Formal and informal networking and collaborative research interactions are also included to provide students with a wealth of opportunities to interact with the broader scientific and URM-centered STEM communities.

### Curriculum Specifics:

During the first year, each student completes advanced undergraduate coursework, an effective college teaching experience, graduate school and research support coursework, and research rotations. Students gain invaluable experience and insight while they prepare for the second phase of the program: an Immersive Research Internship. The Immersive Research Internship begins in the second half of their second semester when students transition to hands-on laboratory research with a principal investigator at MSU Denver or a partnering graduate institution for the remainder of the program. During this time, the students create and iteratively refine a poster and an oral presentation on their research project through scheduled presentations at MSU Denver and partnering institutions. The ACS-BP culminates in a capstone project wherein the students prepare a thesis or publication-quality document on their research and present their final poster and oral presentation to a panel of program mentors.

### Notes:

While this program is specifically designed for students from URM groups in STEM, we recognize that there are many ways that people can be systemically affected in today's society. Therefore, any student who has experienced overwhelming circumstantial disadvantage and associated resource needs is encouraged to apply.

Additionally, if students are admitted to and attend graduate school at one of our partner universities, a portion of the ACS-BP coursework is designed to directly transfer as credit toward their graduate program.

The minimum passing grade for the *undergraduate-level* curriculum in this program is a C, and the minimum passing grade is a B- for courses that will transfer into a subsequent graduate program (due to the requirements of our partnering graduate programs).

## ACS-BP Program Requirements (19.5 credits)

To complete the ACS-BP certificate program, each student must complete 19.5 credit hours of coursework as outlined in the categories below. The specifics of the program timeline and curriculum category specifics are described in more detail in the following sections.

Program Credit Categories	Credit Hours/Course	Required Credits/Category
---------------------------	---------------------	---------------------------

Internship I/II: T1 Mentor	0.5	3
Effective College Teaching in Chemistry: T2 Mentor	0.5	1
Graduate School and Research Support Coursework	0.5 - 1	3.5
Research Rotations	0.5	0.5
Immersive Research Internship: T3 Mentor	0.5 - 2	5
ACS-BP Research Capstone	0.5	0.5
Advanced Undergraduate Coursework*	2 - 4	6
<i>Total Credits for the Program</i>		<i>19.5</i>

\*For this certificate program, students must complete 6 credits of advanced undergraduate coursework in addition to/ or to replace the coursework completed during their bachelor's degree. For that reason, transfer credits will only be assessed on a case-by-case basis under outstanding circumstances.

## Program Timeline

### Year 1 - Semester 1 (1.5 - 8.5 credits)

During the first semester, students work closely with their Tier 1 and Tier 2 mentors to plan their course through the program, learn teaching practices, and begin to plan for graduate school admission processes. This is a good time to complete the specified electives in the *Advanced Undergraduate Coursework* and *Graduate School and Research Support Coursework* categories.

#### Required Core Courses: Credits / Units: 1.5

- CHE 0010 - Effective College Teaching in Chemistry I: T2 Mentor **Credits: 0**
  - CHE 4970 - Internship I: T1 Mentor **Credits: 0.5**
  - CHE 4971 - Effective College Teaching in Chemistry I **Credits: 0.5**
  - CHE 4972 - Navigating Graduate School **Credits: 0.5**
- AND**

#### Specified Electives:

Advanced Undergraduate Coursework (0-6 credits)

Graduate School and Research Support Coursework (0-1 credits)

### Year 1 - Semester 2 (3.5 - 10.5 credits)

During the second semester, the program begins to ramp up as students continue to work with their Tier 1 and Tier 2 mentors to define their graduate school trajectory. Students select their Tier 3 research mentors and become more involved in graduate preparation coursework, such as *Advanced Science Communication I*. All specified electives in the *Advanced Undergraduate Coursework* and *Graduate School and Research Support Coursework* categories must be completed by the end of Year 1 - Semester 2.

**Required Core Courses: Credits / Units: 3**

- CHE 0020 - Effective College Teaching in Chemistry II: T2 Mentor Credits: 0
- CHE 4970 - Internship I: T1 Mentor Credits: 0.5
- CHE 4972 - Navigating Graduate School Credits: 0.5
- CHE 4973 - Advanced Science Communication I Credits: 1
- CHE 4976 - Effective College Teaching in Chemistry II Credits: 0.5
- CHE 4977 - Research/Laboratory Rotation Credits: 0.5  
*This course is taken during the first 8 weeks of the second semester.*
- CHE 4979 - Research/Laboratory Internship I: T3 Mentor Credits: 0.5  
*This course is taken during the last 5 weeks of the second semester.*

**AND**

**Specified Electives:**

Advanced Undergraduate Coursework (0-6 credits)

Graduate School and Research Support Coursework (0-1 credits)

## Year 1 - Summer (1 credit)

The students start fully engaging in the *Immersive Research Internship* portion of the program with their Tier 3 mentor during the summer after their first year. The students continue to work with their Tier 1 mentor to ensure they are adequately supported at every stage of the program.

- CHE 4970 - Internship I: T1 Mentor Credits: 0.5
- CHE 4983 - Research/Laboratory Internship IA: T3 Mentor Credits: 0.5-1

**NOTE: At the end of Year 1 - Summer students will have completed 13 of the 19.5 required credits.**

## Year 2 - Semester 1 (2.5 credits)

The students continue the *Immersive Research Internship* portion of the program during the second academic year, working with their Tier 1 and Tier 3 mentors to hone their research and science communication skills while submitting their graduate application packages.

- CHE 4978 - Internship II: T1 Mentor Credits: 0.5

- CHE 4985 - Research/Laboratory Internship II: T3 Mentor Credits: 1-2

## Year 2 - Semester 2 (3 credits)

As students approach the end of the program, they take *Advanced Science Communication II* to prepare them to complete their capstone projects on the work they've completed during their *Immersive Research Internship*.

- CHE 4978 - Internship II: T1 Mentor Credits: 0.5
- CHE 4984 - Advanced Science Communication II Credits: 0.5
- CHE 4985 - Research/Laboratory Internship II: T3 Mentor Credits: 1-2

## Year 2 - Summer (1 credit)

Students work closely with their Tier 1 and Tier 3 mentors to complete their *Research Capstone* projects and present their research to a panel of mentors in an open forum discussion.

- CHE 4978 - Internship II: T1 Mentor Credits: 0.5
- CHE 4998 - ACS-BP Research Capstone Credits: 0.5

## Program Credit Categories

### Internship I/II: T1 Mentor (3 credits)

Students must complete **a total of 3 credits** of *Internship* coursework with their *Tier 1 Mentor* during the course of their program. Both of these courses are repeated three times.

- CHE 4970 - Internship I: T1 Mentor Credits: 0.5
- CHE 4978 - Internship II: T1 Mentor Credits: 0.5

### Effective College Teaching in Chemistry with a T2 Mentor (1 credit)

Students must complete **a total of 1 credit and associated non-credit coursework** in *Effective College Teaching in Chemistry* with *Tier 2 Mentorship* during their first two semesters.

- CHE 0010 - Effective College Teaching in Chemistry I: T2 Mentor Credits: 0
- CHE 0020 - Effective College Teaching in Chemistry II: T2 Mentor Credits: 0
- CHE 4971 - Effective College Teaching in Chemistry I Credits: 0.5
- CHE 4976 - Effective College Teaching in Chemistry II Credits: 0.5

## Graduate School and Research Support Coursework (3.5 credits)

Students must complete **a total of 3.5 credits** of *Graduate School and Research Support Coursework* during their first two semesters.

### **Core Required Courses: Credits / Units: 2.5**

- CHE 4972 - Navigating Graduate School Credits: 0.5  
*This course is taken two times; during the first and second semester of the first year in the program.*
- CHE 4973 - Advanced Science Communication I Credits: 1
- CHE 4984 - Advanced Science Communication II Credits: 0.5
- Specified Electives: Credits / Units: 1**
- CHE 3810 - Chemistry Literature and Research Credits: 1
- CHE 4974 - Ethical Practices in Scientific Work Credits: 0.5
- CHE 4975 - Data Handling in Scientific Work Credits: 0.5

## Research Rotations (0.5 credits)

Students must complete **a total of 0.5 credits** of *Research/Laboratory Rotations* in the first half of the second semester in the program.

- CHE 4977 - Research/Laboratory Rotation Credits: 0.5

## Immersive Research Internship with a Tier 3 Mentor (5 credits)

Students must complete **a total of 5 credits** of *Immersive Research Internship* coursework with their Tier 3 Mentor during the course of their program.

- CHE 4979 - Research/Laboratory Internship I: T3 Mentor Credits: 0.5
- CHE 4983 - Research/Laboratory Internship IA: T3 Mentor Credits: 0.5-1
- CHE 4985 - Research/Laboratory Internship II: T3 Mentor Credits: 1-2

## ACS-BP Research Capstone (0.5 credits)

Students must complete **a total of 0.5 credits** of *Research Capstone* coursework with their Tier 1 and Tier 3 Mentors during the course of their program.

- CHE 4998 - ACS-BP Research Capstone Credits: 0.5

## Advanced Undergraduate Coursework (6 credits)

Students must complete **a total of 6 credits** of *Advanced Undergraduate Coursework* during their first two semesters in the program. We expect that most students will take advanced electives in chemistry or biochemistry for this program. However, we have identified coursework within and outside the department in the *Research Interest* areas below that could benefit students who want to enter a graduate program in a specific area. Any courses listed below at the 3000 level or higher, including Omnibus courses at the 390 level or higher, will satisfy the *Advanced Undergraduate Coursework* requirement for this program.

*Note:* Most of these courses have prerequisites that are not listed below. Students are encouraged to discuss their potential coursework with their T1 mentor prior to registering for classes.

## Department of Chemistry and Biochemistry - Advanced Undergraduate Coursework

- CHE 3050 - Environmental Chemistry Credits: 3
- CHE 3140 - Spectrometric Identification of Organic Compounds Credits: 3
- CHE 3300 - Inorganic Chemistry Credits: 3
- CHE 3600 - Crime Scene Investigation I Credits: 4
- CHE 3610 - Crime Scene Investigation II Credits: 4
- CHE 3700 - Forensic Chemistry Credits: 4
- CHE 3710 - Forensic Biochemistry Credits: 4
- CHE 4010 - Advanced Organic Chemistry Credits: 3
- CHE 4020 - Synthetic Organic Chemistry Credits: 3
- CHE 4800 - Special Topics in Chemistry Credits: 4
- CHE 4100 - Instrumental Analysis Credits: 3
- CHE 4110 - Instrumental Analysis Laboratory Credits: 2
- CHE 4130 - Quality in the Chemical Industry Credits: 2
- CHE 4160 - QA/QC Methods Laboratory Credits: 1
- CHE 4300 - Advanced Inorganic Chemistry Credits: 4
- CHE 4310 - Biochemistry I Credits: 4
- CHE 4320 - Biochemistry II Credits: 4
- CHE 4350 - Biochemistry Laboratory Credits: 2
- CHE 4390 - Advanced Biochemistry Laboratory Credits: 3
- CHE 4450 - Physical Chemistry: Quantum Mechanics and Spectroscopy Credits: 4
- CHE 4460 - Physical Chemistry: Thermodynamics and Kinetics Credits: 4
- CHE 4480 - Physical Chemistry Laboratory: Quantum and Spectroscopy Credits: 2
- CHE 4490 - Physical Chemistry Laboratory: Thermodynamics and Kinetics Credits: 2

## Analytical/Instrumental Research Interest

If students take CHE 4100/CHE 4110 and CHE 4130/CHE 4160 as electives in this *Research Interest* area, they will simultaneously earn the Quality in the Chemical Industry Certificate.



- CHE 3140 - Spectrometric Identification of Organic Compounds Credits: 3
- CHE 4100 - Instrumental Analysis Credits: 3
- CHE 4110 - Instrumental Analysis Laboratory Credits: 2
- CHE 4130 - Quality in the Chemical Industry Credits: 2
- CHE 4160 - QA/QC Methods Laboratory Credits: 1
- ENV 4460 - Advanced Water Quality Analysis Credits: 3
- MTH 3210 - Probability and Statistics Credits: 4

### Biochemical Research Interest

- BIO 2310 - Human Anatomy and Physiology I Credits: 4
  - BIO 2400 - General Microbiology Credits: 5
- Note: BIO 2310 and BIO 2400 don't count toward advanced electives but may be prerequisites of courses listed in this research interest area, or of general interest if you are considering this type of graduate program. We encourage you to discuss these courses with your Tier 1 mentor (or the Departmental Advisor) when registering for courses.*
- BIO 3350 - Immunology Credits: 3
  - BIO 3351 - Immunology Laboratory Credits: 1
  - BIO 3600 - General Genetics Credits: 4
  - BIO 4050 - Advanced Cell and Molecular Biology Credits: 3
  - BIO 4060 - Cellular and Molecular Biology Laboratory Credits: 2
  - BIO 4070 - Biology of Cancer Credits: 3
  - BIO 4300 - Neurobiology Credits: 3
  - CHE 4310 - Biochemistry I Credits: 4
  - CHE 4320 - Biochemistry II Credits: 4
  - CHE 4350 - Biochemistry Laboratory Credits: 2
  - CHE 4390 - Advanced Biochemistry Laboratory Credits: 3

### Chemical Education Research Interests

- PSY 2310 - Statistics for the Social and Behavioral Sciences Credits: 3
- Note: PSY 2310 doesn't count toward advanced electives but may be a prerequisite of courses listed in this research interest area, or of general interest if you are considering this type of graduate program. We encourage you to discuss these courses with your Tier 1 mentor (or the Departmental Advisor) when registering for courses.*
- PSY 3010 - Research Methods in Psychological Science Credits: 3
  - PSY 3340 - Cognitive Development and Learning Credits: 3
  - PSY 4320 - Advanced Psychological Research Methods Credits: 3
  - PSY 4450 - Advanced Psychological Data Science Credits: 3
  - PSY 4570 - Cognitive Psychology Credits: 3

### Computation Chemistry/Biochemistry Interest

- BIO 3350 - Immunology Credits: 3
  - BIO 3600 - General Genetics Credits: 4
  - BIO 4050 - Advanced Cell and Molecular Biology Credits: 3
  - BIO 4070 - Biology of Cancer Credits: 3
  - BIO 4300 - Neurobiology Credits: 3
  - BIO 4060 - Cellular and Molecular Biology Laboratory Credits: 2
  - CHE 4450 - Physical Chemistry: Quantum Mechanics and Spectroscopy Credits: 4
  - CHE 4460 - Physical Chemistry: Thermodynamics and Kinetics Credits: 4
  - CHE 4480 - Physical Chemistry Laboratory: Quantum and Spectroscopy Credits: 2
  - CHE 4490 - Physical Chemistry Laboratory: Thermodynamics and Kinetics Credits: 2
  - CS 2050 - Computer Science 2 Credits: 4
  - CS 3120 - Machine Learning Credits: 4
  - MTH 2520 - R Programming Credits: 4
  - MTH 2540 - Scientific Computing with Python Credits: 4
- Note: CS 2050, MTH 2510, MTH 2520, and MTH 2540 don't count toward advanced electives but may be prerequisites of courses listed in this research interest area, or of general interest if you are considering this type of graduate program. We encourage you to discuss these courses with your Tier 1 mentor (or the Departmental Advisor) when registering for courses.*
- MTH 3210 - Probability and Statistics Credits: 4
  - MTH 3220 - Statistical Methods Credits: 4
  - MTH 3270 - Data Science Credits: 4
  - MTH 3430 - Mathematical Modeling Credits: 4

### Environmental Research Interest

- CHE 3050 - Environmental Chemistry Credits: 3
  - CHE 4100 - Instrumental Analysis Credits: 3
  - CHE 4110 - Instrumental Analysis Laboratory Credits: 2
  - ENV 1200 - Introduction to Environmental Science Credits: 3
  - ENV 2100 - Environmental Sampling and Analysis Credits: 3
- Note: ENV 1200 and ENV 2100 don't count toward advanced electives but may be prerequisites of courses listed in this research interest area, or of general interest if you are considering this type of graduate program. We encourage you to discuss these courses with your Tier 1 mentor (or the Departmental Advisor) when registering for courses.*
- ENV 3422 - Methods of Soil Analysis and Sampling Credits: 1
  - ENV 3440 - Energy and Mineral Resources Credits: 4

- ENV 3710 - Environmental Remediation Credits: 3
- ENV 4460 - Advanced Water Quality Analysis Credits: 3
- MTH 3240 - Environmental Statistics Credits: 4

### Forensic Chemistry/Biochemistry Research Interest

- CHE 2710 - Introduction to Criminalistics Credits: 3
- CHE 2711 - Introduction to Criminalistics Laboratory Credits: 1
- CHE 2750 - Arson and Explosives Credits: 3
- CHE 2760 - Field Testing and Laboratory Analysis of Drugs Credits: 1

Note: CHE 2710, CHE 2711, CHE 2750, and CHE 2760 don't count toward advanced electives but may be prerequisites of courses listed in this research interest area, or of general interest if you are considering this type of graduate program. We encourage you to discuss these courses with your Tier 1 mentor (or the Departmental Advisor) when registering for courses.

- CHE 3600 - Crime Scene Investigation I Credits: 4
- CHE 3610 - Crime Scene Investigation II Credits: 4
- CHE 3700 - Forensic Chemistry Credits: 4
- CHE 3710 - Forensic Biochemistry Credits: 4
- CJC 4650 - Ethics for the Criminal Justice Professional Credits: 3

### Inorganic Research Interest

- CHE 3300 - Inorganic Chemistry Credits: 3
- CHE 4300 - Advanced Inorganic Chemistry Credits: 4
- CHE 4450 - Physical Chemistry: Quantum Mechanics and Spectroscopy Credits: 4
- CHE 4460 - Physical Chemistry: Thermodynamics and Kinetics Credits: 4
- CHE 4480 - Physical Chemistry Laboratory: Quantum and Spectroscopy Credits: 2
- CHE 4490 - Physical Chemistry Laboratory: Thermodynamics and Kinetics Credits: 2

### Organic Research Interest

- CHE 3140 - Spectrometric Identification of Organic Compounds Credits: 3
- CHE 4010 - Advanced Organic Chemistry Credits: 3
- CHE 4020 - Synthetic Organic Chemistry Credits: 3

### Pharmaceutical Research Interest

- BIO 2310 - Human Anatomy and Physiology I Credits: 4
  - BIO 2400 - General Microbiology Credits: 5
- Note: BIO 2310 and BIO 2400 don't count toward advanced electives but may be prerequisites of courses listed in this

research interest area, or of general interest if you are considering this type of graduate program. We encourage you to discuss these courses with your Tier 1 mentor (or the Departmental Advisor) when registering for courses.

- BIO 3350 - Immunology Credits: 3
- BIO 3351 - Immunology Laboratory Credits: 1
- BIO 3600 - General Genetics Credits: 4
- BIO 4050 - Advanced Cell and Molecular Biology Credits: 3
- BIO 4060 - Cellular and Molecular Biology Laboratory Credits: 2
- BIO 4070 - Biology of Cancer Credits: 3
- BIO 4300 - Neurobiology Credits: 3
- CHE 4310 - Biochemistry I Credits: 4
- CHE 4320 - Biochemistry II Credits: 4
- CHE 4350 - Biochemistry Laboratory Credits: 2
- CHE 4390 - Advanced Biochemistry Laboratory Credits: 3

### Physical/Spectroscopy Research Interest

- CHE 3140 - Spectrometric Identification of Organic Compounds Credits: 3
- CHE 4300 - Advanced Inorganic Chemistry Credits: 4
- CHE 4450 - Physical Chemistry: Quantum Mechanics and Spectroscopy Credits: 4
- CHE 4460 - Physical Chemistry: Thermodynamics and Kinetics Credits: 4
- CHE 4480 - Physical Chemistry Laboratory: Quantum and Spectroscopy Credits: 2
- CHE 4490 - Physical Chemistry Laboratory: Thermodynamics and Kinetics Credits: 2

## Biochemistry Major, B.S.

[Department of Chemistry and Biochemistry](#)

[College of Letters, Arts and Sciences](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

The Biochemistry B.S. degree program offers students a focused, intensive education in the natural sciences and in the field of biochemistry. This degree prepares students for graduate work in biochemistry, for biochemical and biomedical careers in industry/government, and for post-graduate studies in the health sciences.

### Student Outcomes

- Apply the fundamental principles of chemistry and/or biochemistry, showing core competency in chemistry areas (general, analytical, organic, biochemistry, and physical chemistry)
- Design and conduct experiments using appropriate techniques and equipment
- Conduct scientific inquiry in an ethical manner
- Handle chemicals and chemical waste safely
- Search, critically evaluate, and properly cite scientific literature
- Use effective oral and written communication skills

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1410 - Calculus I\*
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** PHY 2010 - College Physics I\* or PHY 2311 - General Physics I\*
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

\* The listed courses are required courses for the major and can also fulfill general studies requirements

\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and

humanities; historical; natural and physical sciences; or social and behavioral sciences.

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ requirement for degree completion.

## Required Major Courses: 40 credits

- CHE 1800 - General Chemistry I Credits: 4
- CHE 1801 - General Chemistry I Laboratory Credits: 1
- CHE 1810 - General Chemistry II Credits: 4
- CHE 1811 - General Chemistry II Laboratory Credits: 1
- CHE 3000 - Analytical Chemistry Credits: 3
- CHE 3010 - Analytical Chemistry Laboratory Credits: 2
- CHE 3100 - Organic Chemistry I Credits: 4
- CHE 3110 - Organic Chemistry II Credits: 4
- CHE 3120 - Organic Chemistry Laboratory I Credits: 1
- CHE 3130 - Organic Chemistry Laboratory II Credits: 1
- CHE 3190 - Survey of Physical Chemistry Credits: 4
- CHE 3200 - Survey of Physical Chemistry Laboratory Credits: 1
- CHE 4310 - Biochemistry I Credits: 4
- CHE 4320 - Biochemistry II Credits: 4
- CHE 4350 - Biochemistry Laboratory Credits: 2

## Required Biology, Physics, and Math Courses: 25 credits

Biochemistry is, by nature, an interdisciplinary area of study, and the required coursework reflects that reality, offering a complete education in the biochemical, biomedical, and technical fields. The student must satisfy the non-chemistry course requirements below.

*Note: MTH 1410 counts as a Quantitative Literacy General Studies course; the Biology and Physics courses count as Natural and Physical Science General Studies courses.*

- BIO 1080 - General Biology I **Credits: 3**
- BIO 1081 - General Biology II **Credits: 3**
- BIO 1090 - General Biology Laboratory I **Credits: 1**
- BIO 1091 - General Biology Laboratory II **Credits: 1**
- BIO 3050 - Cell Biology **Credits: 4**

Select one of the following Genetics courses:

- BIO 3600 - General Genetics **Credits: 4**  
or
- BIO 3610 - Genetics: Principles and Analysis **Credits: 4**
- MTH 1410 - Calculus I **Credits: 4**

Select one of these two options:

### Option 1

- PHY 2010 - College Physics I Credits: 4
- PHY 2030 - College Physics I Laboratory Credits: 1

### Option 2

- PHY 2311 - General Physics I Credits: 4
- PHY 2321 - General Physics I Laboratory Credits: 1

## Additional Required STEM Elective Courses: 10 credits

Reflecting the broad, interdisciplinary nature of biochemistry, students must complete 10 credits of additional STEM electives from the following list.

\*Some of these courses may count to fulfill the Natural and Physical Sciences General Studies requirement. Students should work with their academic advisor.

- CHE 3050 - Environmental Chemistry Credits: 3
- CHE 3140 - Spectrometric Identification of Organic Compounds Credits: 3
- CHE 3300 - Inorganic Chemistry Credits: 3
- CHE 3700 - Forensic Chemistry Credits: 4
- CHE 3710 - Forensic Biochemistry Credits: 4
- CHE 3810 - Chemistry Literature and Research Credits: 1
- CHE 3980 - Internship in Chemistry Credits: 1-15
- CHE 4100 - Instrumental Analysis Credits: 3
- CHE 4110 - Instrumental Analysis Laboratory Credits: 2
- CHE 4130 - Quality in the Chemical Industry Credits: 2
- CHE 4160 - QA/QC Methods Laboratory Credits: 1
- CHE 4300 - Advanced Inorganic Chemistry Credits: 4
- CHE 4360 - Computational Biochemistry Laboratory Credits: 2
- CHE 4390 - Advanced Biochemistry Laboratory Credits: 3
- CHE 4800 - Special Topics in Chemistry Credits: 4
- BIO 2310 - Human Anatomy and Physiology I Credits: 4
- BIO 2320 - Human Anatomy and Physiology II Credits: 4
- BIO 2400 - General Microbiology Credits: 5
- BIO 3140 - Plant Physiology Credits: 5
- BIO 3160 - Plant Anatomy and Morphology Credits: 4
- BIO 3170 - Paleobotany Credits: 4
- BIO 3200 - Invertebrate Zoology Credits: 4
- BIO 3210 - Histology Credits: 4
- BIO 3220 - Comparative Vertebrate Anatomy Credits: 5
- BIO 3260 - Vertebrate Zoology Credits: 4

- BIO 3320 - Advanced Human Physiology Credits: 4
- BIO 3330 - Advanced Human Cadaver Anatomy Credits: 5
- BIO 3340 - Endocrinology Credits: 3
- BIO 3350 - Immunology Credits: 3
- BIO 3351 - Immunology Laboratory Credits: 1
- BIO 3360 - Animal Physiology Credits: 4
- BIO 3400 - Microbial Physiology Credits: 4
- BIO 3471 - Biology of Women Credits: 3
- BIO 4050 - Advanced Cell and Molecular Biology Credits: 3
- BIO 4060 - Cellular and Molecular Biology Laboratory Credits: 2
- BIO 4070 - Biology of Cancer Credits: 3
- BIO 4200 - General Mycology Credits: 3
- BIO 4271 - Parasitology Credits: 4
- BIO 4300 - Neurobiology Credits: 3
- BIO 4350 - Clinical Immunology Credits: 3
- BIO 4440 - Virology Credits: 3
- BIO 4450 - Pathogenic Microbiology Credits: 5
- BIO 4470 - Microbial Genetics Credits: 4
- BIO 4850 - Evolution Credits: 3
- ANT 3000 - Quantitative Methods in Anthropology Credits: 3
- ANT 3100 - Human Evolution Credits: 3
- ANT 3800 - Forensic Anthropology Credits: 3
- ANT 3820 - Forensic Archaeology Credits: 3
- ANT 3840 - Introduction to Bioarchaeology Credits: 3
- ANT 3860 - Paleopathology Credits: 3
- CS 1050 - Computer Science 1 Credits: 4
- CS 2050 - Computer Science 2 Credits: 4
- CS 3120 - Machine Learning Credits: 4
- ENV 2100 - Environmental Sampling and Analysis Credits: 3
- ENV 3422 - Methods of Soil Analysis and Sampling Credits: 1
- ENV 4500 - Environmental Biogeochemistry Credits: 3
- GEG 3410 - Biogeography Credits: 3
- GEG 3422 - Methods of Soil Analysis and Sampling Credits: 1
- MTH 1410 - Calculus I Credits: 4
- MTH 2410 - Calculus II Credits: 4
- MTH 2420 - Calculus III Credits: 4
- MTH 2520 - R Programming Credits: 4
- MTH 2540 - Scientific Computing with Python Credits: 4
- MTH 3210 - Probability and Statistics Credits: 4
- MTH 3270 - Data Science Credits: 4
- MTH 3430 - Mathematical Modeling Credits: 4
- PHY 2020 - College Physics II Credits: 4
- PHY 2040 - College Physics II Laboratory Credits: 1
- PHY 2331 - General Physics II Credits: 4
- PHY 2341 - General Physics II Laboratory Credits: 1
- PHY 2821 - Sophomore Physics Laboratory Credits: 1

- PHY 3111 - Modern Physics I Credits: 4
- PHY 3121 - Modern Physics II Credits: 3
- PHY 4810 - Quantum Physics II Credits: 3
- PSY 2120 - Brain and Behavior Credits: 3
- PSY 3380 - Clinical Neuropsychology Credits: 3
- PSY 3410 - Health Psychology Credits: 3
- PSY 3440 - Cravings and Addictions Credits: 3
- PSY 3560 - Psychopharmacology Credits: 3
- PSY 4540 - Behavioral Neuroscience Credits: 3

## Senior Experience: 3 credits

Students must complete a Senior Experience course offered by the Department of Chemistry & Biochemistry.

- CHE 4390 - Advanced Biochemistry Laboratory Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Major Courses	40 credits
Required Biology, Math, and Physics Courses	25 credits
Additional Required Science Elective Courses	10 credits
Senior Experience	3 credits
Unrestricted Electives	6-18 credits
<b>Total for the Biochemistry Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and Multicultural requirements, so the total credits listed may be greater than the number required to complete the degree.

Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## *Chemical Industry, National, and Government Laboratory Post-Baccalaureate Bridge Program (ING-BP)*

### Background:

The Industry, National, and Government Laboratory Post-Baccalaureate Bridge Program (ING-BP) is a credentialed bridge experience that provides intensive training and advanced internship opportunities for students interested in employment performing laboratory-based work in the chemical industry or national or government laboratories. The ING-BP is modeled after the ACS

Bridge Project bridge experiences, which successfully integrate culturally responsive practices that provide alternative pathways for students from underrepresented/minoritized (URM) groups interested in graduate programs in the chemical and/or biochemical sciences. However, ~ 60% of all chemistry BA/BS graduates seek employment in government or industrial laboratories.<sup>1</sup> Thus, the ING-BP is a first-of-its-kind program that integrates culturally responsive practices to launch students from URM groups into their desired careers. (See **Notes**) Accordingly, the ING-BP is tuition-free and offers a competitive salary, housing stipend, and health insurance for the full two years of the program. The goal of this structure is to enable students the space to fully engage, relax into their STEM identity, focus, and thrive while getting high-quality, rigorous preparation for careers in the Chemical and/or Biochemical Sciences.

### Advantages of this Program:

Hiring decisions in industry, national, and government laboratories rely heavily on a student's upper-division electives, hands-on laboratory training on relevant instrumentation, and exposure and practice with specific technical writing tasks. Thus, the ING-BP focuses on providing depth and breadth of opportunity for students in each of these critical areas while providing students with real-world experience. The ING-BP curriculum provides unique training opportunities that are based on specific, ongoing feedback from hiring managers and professionals in local industry, government, and national laboratories. These training opportunities are accompanied by a three-tiered mentorship network for each student to ensure holistic, comprehensive support while they discover their desired employment path. Formal and informal networking and collaborative research interactions are also included to provide students with a wealth of opportunities to interact with the broader scientific and URM-centered STEM communities.

### Curriculum Specifics:

During the first year, each student completes undergraduate coursework relevant to their career trajectory, a technical writing course, employment support coursework, and laboratory rotations. Students gain invaluable experience and insight while they prepare for the second phase of the program: an Immersive Laboratory Internship. The Immersive Laboratory Internship begins during the second half of their second semester when students transition to hands-on work with one of our partners in the chemical industry or a government or national laboratory for the remainder of the program. During this time, the students create and iteratively refine a poster and an oral presentation on their research project through scheduled presentations at MSU Denver and partnering institutions. The ING-BP culminates in a capstone project wherein students produce a variety of tailored resumes, engage in mock interviews, and develop a broad set of nuanced professional skills. This supportive, yet highly-customizable structure enables students to gain the tools, credentials, and experience necessary to achieve gainful employment in a competitive entry-level position in the student's field of interest.

### Notes:

While this program is specifically designed for students from URM groups, we recognize that there are many ways that

people can be systemically affected in today's society. Therefore, any student who has experienced overwhelming circumstantial disadvantages and associated resource needs is encouraged to apply.

If desired, students can simultaneously earn the Quality in the Chemical Industry Certificate while completing the ING-BP.

The minimum passing grade for the curriculum in this program is a C.

## ING-BP Program Requirements (19.5 - 23.5 Credits)

To complete the ING-BP certificate program, each student must complete 19.5 - 23.5 credit hours of coursework, depending on their *Emphasis Track*, as outlined in the categories below. The specifics of the program timeline and curriculum category specifics are described in the following sections.

Program Credit Categories	Credit Hours/Course	Required Credits/Category
Internship I/II: T1 Mentor	0.5	3
Technical Employment Support Coursework	0.5	4.5
a. JMP 2610 - Intro to Technical Writing	3	-
b. Ethical Practices in the Employment Sector: T2 Mentor	0.5	-
c. Data Handling in the Employment Sector: T2 Mentor	0.5	-
d. ING-BP Capstone	0.5	-
Laboratory Rotations	0.5	0.5
Immersive Laboratory Internship: T3 Mentor	0.5 - 1	3.5
Advanced Undergraduate Coursework*	1- 4	8-12*
<i>Total Credits for the Program</i>		<i>19.5 - 23.5</i>

\*Advanced Undergraduate Coursework Requirements are determined based on the student's chosen *Emphasis Track*. Transfer credits will be assessed on a case-by-case basis.

## Program Timeline

### Year 1 - Semester 1 (7 - 12 credits)

During the first semester, students work closely with their Tier 1 and Tier 2 mentors to plan their course through the program, learn essential workforce skills, and take essential *Advanced Undergraduate Coursework* that will set students up to take the next step in their career.

#### Required Core Courses: Credits / Units: 4

- CHE 4970 - Internship I: T1 Mentor **Credits: 0.5**
- JMP 2610 - Introduction to Technical Writing **Credits: 3**
- Technical and Employment Support Specified Electives:**
- CHE 0015 - Ethical Practices in the Employment Sector: T2 Mentor **Credits: 0**
- CHE 4974 - Ethical Practices in Scientific Work **Credits: 0.5**

#### OR

- CHE 0025 - Data Handling in the Employment Sector: T2 Mentor **Credits: 0**
- CHE 4975 - Data Handling in Scientific Work **Credits: 0.5**

#### AND

#### Specified Emphasis Track Coursework:

Advanced Undergraduate Coursework (3 - 8 cr. hr.)

### Year 1 - Semester 2 (2 - 11 credits)

During the second semester, the program begins to ramp up as students continue to work with their Tier 1 and Tier 2 mentors to define their trajectory into their desired employment sector. Students select their Tier 3 laboratory mentors and complete their required *Advanced Undergraduate Coursework* and *Technical Employment Support Coursework*.

#### Required Core Courses:

- CHE 4970 - Internship I: T1 Mentor **Credits: 0.5**
- CHE 4977 - Research/Laboratory Rotation **Credits: 0.5**  
*This course is taken during the first 8 weeks of the second semester.*
- CHE 4979 - Research/Laboratory Internship I: T3 Mentor **Credits: 0.5**  
*This course is taken during the last 5 weeks of the second semester.*

#### Technical and Employment Support Specified Electives:

- CHE 0015 - Ethical Practices in the Employment Sector: T2 Mentor **Credits: 0**

- CHE 4974 - Ethical Practices in Scientific Work **Credits:** 0.5  
**OR**
- CHE 0025 - Data Handling in the Employment Sector: T2 Mentor **Credits:** 0  
**AND**

- CHE 4975 - Data Handling in Scientific Work **Credits:** 0.5

#### **Specified Emphasis Track Coursework:**

Advanced Undergraduate Coursework (0 - 9 cr. hr.)

### Year 1 - Summer (1 credit)

The students start fully engaging in the *Immersive Laboratory Internship* portion of the program with their Tier 3 mentor during the summer after their first year. The students continue to work with their Tier 1 mentor to ensure they are adequately supported at every stage of the program

- CHE 4970 - Internship I: T1 Mentor Credits: 0.5
- CHE 4983 - Research/Laboratory Internship IA: T3 Mentor Credits: 0.5-1  
**Note: At the end of Year 1 - Summer students will have completed at least 15 of their required credits.**

### Year 2 - Semester 1 (1.5 credits)

The students continue the *Immersive Laboratory Internship* portion of the program during the second academic year, working with their Tier 1 and Tier 3 mentors to hone their laboratory and science communication skills.

- CHE 4978 - Internship II: T1 Mentor Credits: 0.5
- CHE 4985 - Research/Laboratory Internship II: T3 Mentor Credits: 1-2

### Year 2 - Semester 2 (2 credits)

As students approach the end of the program, they take their *ING-BP Capstone* course to prepare them for entering the workforce. They do this the semester before their final summer in the program so they can apply the skills they've learned during their capstone course to job applications while still receiving support through the program.

- CHE 4978 - Internship II: T1 Mentor Credits: 0.5
- CHE 4985 - Research/Laboratory Internship II: T3 Mentor Credits: 1-2
- CHE 4997 - ING-BP Capstone: Resume, Interviews, and Professionalism Credits: 0.5

### Year 2 - Summer (1 credit)

Students work closely with their Tier 1 and Tier 3 mentors to get real-time feedback on job applications and interview skills while completing their final laboratory projects.

- CHE 4978 - Internship II: T1 Mentor Credits: 0.5
- CHE 4987 - Research/Laboratory Internship IIA: T3 Mentor Credits: 0.5

## Program Credit Categories

### Internship I/II: T1 Mentor (3 credits)

Students must complete **a total of 3 credits** of *Internship coursework* with their *Tier 1 Mentor* during the course of their program. Both of these courses are repeated three times.

- CHE 4970 - Internship I: T1 Mentor Credits: 0.5
- CHE 4978 - Internship II: T1 Mentor Credits: 0.5

### Technical Employment Support Coursework with a T2 Mentor (4.5 credits)

Students must complete **a total of 4 credits and associated non-credit coursework during their first two semesters** in *Technical Employment Support Coursework* with *Tier 2 Mentorship*. The ING-BP Capstone course, *CHE 4997 - ING-BP Capstone: Resume, Interviews, and Professionalism* is taken during the second semester of the student's second year.

- CHE 0015 - Ethical Practices in the Employment Sector: T2 Mentor Credits: 0
- CHE 0025 - Data Handling in the Employment Sector: T2 Mentor Credits: 0
- CHE 4974 - Ethical Practices in Scientific Work Credits: 0.5
- CHE 4975 - Data Handling in Scientific Work Credits: 0.5
- CHE 4997 - ING-BP Capstone: Resume, Interviews, and Professionalism Credits: 0.5
- JMP 2610 - Introduction to Technical Writing Credits: 3

### Laboratory Rotations (0.5 credits)

Students must complete **a total of 0.5 credits** of *Research/Laboratory Rotations* in the first half of the second semester in the program.

- CHE 4977 - Research/Laboratory Rotation Credits: 0.5

### Immersive Laboratory Internship with a Tier 3 Mentor (3.5 credits)

Students must complete a **total of 3.5 credits** of *Immersive Laboratory Internship* coursework with their Tier 3 Mentor during the course of their program.

- CHE 4979 - Research/Laboratory Internship I: T3 Mentor Credits: 0.5
- CHE 4983 - Research/Laboratory Internship IA: T3 Mentor Credits: 0.5-1
- CHE 4985 - Research/Laboratory Internship II: T3 Mentor Credits: 1-2
- CHE 4987 - Research/Laboratory Internship IIA: T3 Mentor Credits: 0.5

## Advanced Undergraduate Coursework (8-12 credits)

Students must complete a **total of 8-12 credits** of *Advanced Undergraduate Coursework* during their first two semesters in the program. The following *Emphasis Tracks* are geared toward relevant career trajectories. Any courses at the 3000 level or higher listed in these *Emphasis Tracks* will satisfy the *Advanced Undergraduate Coursework* requirement, including Omnibus courses at the 390 level or higher. If students have already completed some of the required courses within an *Emphasis Track*, those credits can be substituted for the specified elective courses. *Elective Course Sets* listed below within a specific emphasis are suggestions that could deepen the student's experience but are not required to complete that *Emphasis Track*.

*Note:* The credit totals do not include all pre-requisite courses. Students are encouraged to discuss their potential coursework with their T1 mentor prior to registering for classes.

## QA/QC Laboratory Emphasis (8 credits)

This *Emphasis Track* enables students to simultaneously earn the Quality in the Chemical Industry Certificate.

### Required Courses: Credits / Units: 9

- CHE 4100 - Instrumental Analysis Credits: 3
  - CHE 4110 - Instrumental Analysis Laboratory Credits: 2
  - CHE 4130 - Quality in the Chemical Industry Credits: 2
  - CHE 4160 - QA/QC Methods Laboratory Credits: 1
- Elective Course(s) (Not Required)**
- CHE 3140 - Spectrometric Identification of Organic Compounds Credits: 3

## Pharmaceutical/Synthetic Laboratory Emphasis (11 credits)

If students take CHE 4130 and CHE 4160 as electives in this *Emphasis Track*, they will simultaneously earn the Quality in the Chemical Industry Certificate.

### Required Courses: Credits / Units: 11

- CHE 3140 - Spectrometric Identification of Organic Compounds Credits: 3
  - CHE 4100 - Instrumental Analysis Credits: 3
  - CHE 4110 - Instrumental Analysis Laboratory Credits: 2
  - CHE 4010 - Advanced Organic Chemistry Credits: 3
- Elective Course(s) (Not Required):**
- CHE 4020 - Synthetic Organic Chemistry Credits: 3
  - CHE 4130 - Quality in the Chemical Industry Credits: 2
  - CHE 4160 - QA/QC Methods Laboratory Credits: 1

## Biological/Biochemical Laboratory Emphasis (11 credits)

If students take CHE 4130 and CHE 4160 as electives in this *Emphasis Track*, they will simultaneously earn the Quality in the Chemical Industry Certificate.

### Required Courses: Credits / Units: 11

- CHE 4100 - Instrumental Analysis Credits: 3
  - CHE 4110 - Instrumental Analysis Laboratory Credits: 2
  - CHE 4310 - Biochemistry I Credits: 4
  - CHE 4350 - Biochemistry Laboratory Credits: 2
- Elective Course Set 1 (Not Required):**
- CHE 4130 - Quality in the Chemical Industry Credits: 2
  - CHE 4160 - QA/QC Methods Laboratory Credits: 1
  - CHE 4320 - Biochemistry II Credits: 4
  - CHE 4390 - Advanced Biochemistry Laboratory Credits: 3
- Elective Course Set 2 (Not Required):**
- BIO 2310 - Human Anatomy and Physiology I Credits: 4
  - BIO 2320 - Human Anatomy and Physiology II Credits: 4
  - BIO 2400 - General Microbiology Credits: 5
  - BIO 3350 - Immunology Credits: 3
  - BIO 3351 - Immunology Laboratory Credits: 1

*Note: BIO - 2310, BIO - 2320, and BIO- 2400 aren't Required Core Courses but could be prerequisites of courses listed in this laboratory Emphasis Track, or of general interest if you want to pursue a position in this employment sector. We encourage you to discuss these courses with your Tier 1 mentor (or the Departmental Advisor) when registering for courses.*

## Environmental Laboratory Emphasis (11 credits)

This *Emphasis Track* enables students to simultaneously earn the Quality in the Chemical Industry Certificate.

### Required Courses: Credits / Units: 12

- CHE 3050 - Environmental Chemistry Credits: 3
  - CHE 4100 - Instrumental Analysis Credits: 3
  - CHE 4110 - Instrumental Analysis Laboratory Credits: 2
  - CHE 4130 - Quality in the Chemical Industry Credits: 2
  - CHE 4160 - QA/QC Methods Laboratory Credits: 1
- Elective Courses (Not Required):**



- ENV 2100 - Environmental Sampling and Analysis **Credits: 3**
- ENV 3422 - Methods of Soil Analysis and Sampling **Credits: 1**
- ENV 3710 - Environmental Remediation **Credits: 3**
- ENV 4460 - Advanced Water Quality Analysis **Credits: 3**  
*Note: ENV - 2100 isn't a Required Core Course but could be a prerequisite of courses listed in this laboratory Emphasis Track, or of general interest if you want to pursue a position in this employment sector. We encourage you to discuss these courses with your Tier 1 mentor (or the Departmental Advisor) when registering for courses.*

MTH 3240 - Environmental Statistics **Credits: 4**

## Criminalistics Laboratory Emphasis (12 credits)

If students take CHE 4130 and CHE 4160 as electives in this Emphasis Track, they will simultaneously earn the Quality in the Chemical Industry Certificate.

### **Required Courses: Credits / Units: 12**

- CHE 2710 - Introduction to Criminalistics **Credits: 3**
- CHE 2711 - Introduction to Criminalistics Laboratory **Credits: 1**
- CHE 3600 - Crime Scene Investigation I **Credits: 4**
- CHE 3610 - Crime Scene Investigation II **Credits: 4**
- **Elective Courses (Not Required):**
- CHE 2750 - Arson and Explosives **Credits: 3**
- CHE 2760 - Field Testing and Laboratory Analysis of Drugs **Credits: 1**
- CHE 3700 - Forensic Chemistry **Credits: 4**
- CHE 3710 - Forensic Biochemistry **Credits: 4**
- CHE 4130 - Quality in the Chemical Industry **Credits: 2**
- CHE 4160 - QA/QC Methods Laboratory **Credits: 1**
- CJC 4650 - Ethics for the Criminal Justice Professional **Credits: 3**

*Note: CHE - 2750 and CHE - 2760 aren't Required Core Courses but could be prerequisites of courses listed in this laboratory Emphasis Track, or of general interest if you want to pursue a position in this employment sector. We encourage you to discuss these courses with your Tier 1 mentor (or the Departmental Advisor) when registering for courses.*

## Data Science Laboratory Emphasis (12 credits)

### **Required Courses: Credits / Units: 12**

- MTH 2520 - R Programming **Credits: 4**
- CS 3120 - Machine Learning **Credits: 4**
- MTH 3270 - Data Science **Credits: 4**
- **Elective Courses (Not Required):**
- MTH 2540 - Scientific Computing with Python **Credits: 4**
- MTH 3210 - Probability and Statistics **Credits: 4**

- MTH 3430 - Mathematical Modeling **Credits: 4**  
*Note: MTH - 2540 isn't a Required Core Course but could be a prerequisite of courses listed in this laboratory Emphasis Track, or of general interest if you want to pursue a position in this employment sector. We encourage you to discuss these courses with your Tier 1 mentor (or the Departmental Advisor) when registering for courses.*

## Chemistry Major for ACS Certified B.S.

[Department of Chemistry and Biochemistry](#)

[College of Letters, Arts and Sciences](#)

Available Program  
 Format(s): [In-Person](#)

## About the Program

The Bachelor of Science in Chemistry degree program provides students an in-depth study of the physical sciences, with an emphasis on chemistry. This program equips students with the chemical knowledge required for pursuing a career as a chemist in industry or government, attending graduate school in chemistry, or attending a professional school such as medicine, pharmacy, or dentistry. Students should consult with the department advisor for assistance with degree planning for specific careers after graduation.

The American Chemical Society certified degree program offers students exposure to each of the major sub-disciplines of chemistry: analytical, organic, inorganic, physical, and biochemical.

## Student Outcomes

- Apply the fundamental principles of chemistry and/or biochemistry, showing core competency in chemistry areas (general, analytical, organic, biochemistry, and physical chemistry).
- Design and conduct experiments using appropriate techniques and equipment.
- Conduct scientific inquiry in an ethical manner.
- Handle chemicals and chemical waste safely.
- Search, critically evaluate, and properly cite scientific literature.
- Use effective oral and written communication skills.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1410 - Calculus I\*
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** PHY 2010 - College Physics I\* or PHY 2311 - General Physics I\*
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

\* The listed courses are required ancillary courses for the major and can also fulfill general studies requirements

\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

## Required Ancillary Courses: 22 credits

- MTH 1410 - Calculus I Credits: 4
- MTH 2410 - Calculus II Credits: 4
- MTH 2420 - Calculus III Credits: 4

Select one of the following Physics Lecture/Lab sequences:

- PHY 2010 - College Physics I Credits: 4
- PHY 2030 - College Physics I Laboratory Credits: 1
- PHY 2020 - College Physics II Credits: 4

- PHY 2040 - College Physics II Laboratory Credits: 1

or

- PHY 2311 - General Physics I Credits: 4
  - PHY 2321 - General Physics I Laboratory Credits: 1
  - PHY 2331 - General Physics II Credits: 4
  - PHY 2341 - General Physics II Laboratory Credits: 1
- Note: MTH 1410 counts as a Quantitative Literacy General Studies course; the Physics courses count as Natural and Physical Science General Studies courses.*

## Required Courses: 25 credits

### Chemistry Core

- CHE 1800 - General Chemistry I Credits: 4
- CHE 1801 - General Chemistry I Laboratory Credits: 1
- CHE 1810 - General Chemistry II Credits: 4
- CHE 1811 - General Chemistry II Laboratory Credits: 1
- CHE 3000 - Analytical Chemistry Credits: 3
- CHE 3010 - Analytical Chemistry Laboratory Credits: 2
- CHE 3100 - Organic Chemistry I Credits: 4
- CHE 3110 - Organic Chemistry II Credits: 4
- CHE 3120 - Organic Chemistry Laboratory I Credits: 1
- CHE 3130 - Organic Chemistry Laboratory II Credits: 1

## Additional Required Chemistry Courses: 24 credits

Additional Courses Required by the American Chemical Society for a Certified B.S.

- CHE 3300 - Inorganic Chemistry Credits: 3
- CHE 4100 - Instrumental Analysis Credits: 3
- CHE 4110 - Instrumental Analysis Laboratory Credits: 2
- CHE 4310 - Biochemistry I Credits: 4
- CHE 4450 - Physical Chemistry: Quantum Mechanics and Spectroscopy Credits: 4
- CHE 4460 - Physical Chemistry: Thermodynamics and Kinetics Credits: 4
- CHE 4480 - Physical Chemistry Laboratory: Quantum and Spectroscopy Credits: 2
- CHE 4490 - Physical Chemistry Laboratory: Thermodynamics and Kinetics Credits: 2

## Electives: 6 credits

A minimum of 6 upper-division semester hours in chemistry courses selected from the list below.

Restrictions: CHE 4950 and CHE 4960 do not count as electives; however, CHE 4300 can be completed as both an elective and Senior Experience course.

- CHE 3050 - Environmental Chemistry Credits: 3
- CHE 3700 - Forensic Chemistry Credits: 4
- CHE 3710 - Forensic Biochemistry Credits: 4
- CHE 3810 - Chemistry Literature and Research Credits: 1
- CHE 3980 - Internship in Chemistry Credits: 1-15
- CHE 4010 - Advanced Organic Chemistry Credits: 3
- CHE 4020 - Synthetic Organic Chemistry Credits: 3
- CHE 4130 - Quality in the Chemical Industry Credits: 2
- CHE 4160 - QA/QC Methods Laboratory Credits: 1
- CHE 4300 - Advanced Inorganic Chemistry Credits: 4
- CHE 4320 - Biochemistry II Credits: 4
- CHE 4350 - Biochemistry Laboratory Credits: 2
- CHE 4360 - Computational Biochemistry Laboratory Credits: 2
- CHE 4370 - Undergraduate Research in Chemistry Credits: 1-2
- CHE 4390 - Advanced Biochemistry Laboratory Credits: 3
- CHE 4800 - Special Topics in Chemistry Credits: 4

## Senior Experience: 3-4 credits

Students must complete a Senior Experience course offered by the Department of Chemistry and Biochemistry.

- CHE 4950 - Senior Experience in Chemistry **Credits: 3**  
or
- CHE 4960 - Senior Experience in Biochemistry **Credits: 3**  
or
- CHE 4300 - Advanced Inorganic Chemistry **Credits: 4**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Ancillary Courses	22 credits
Required Courses	25 credits
Additional Required Chemistry Courses	24 credits
Electives	6 credits
Senior Experience	3-4 credits
Unrestricted Electives	3-16 credits

Total for the Chemistry Major for ACS Certified, B.S.	120 credits
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**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Chemistry Major, B.A.

[Department of Chemistry and Biochemistry](#)

[College of Letters, Arts and Sciences](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

The Bachelor of Arts in Chemistry degree program offers students exposure to the wide breadth of chemistry, with the ability to tailor their degree with upper-division electives. This program is designed for students who plan a career in a field related to chemistry and may be especially attractive to those desiring secondary education licensure or careers in technical writing, sales, or marketing in chemically related industries. Students should consult with the department advisor for assistance with degree planning for specific careers after graduation.

## Student Outcomes

- Apply the fundamental principles of chemistry and/or biochemistry, showing core competency in chemistry areas (general, analytical, organic, biochemistry, and physical chemistry).
- Design and conduct experiments using appropriate techniques and equipment
- Conduct scientific inquiry in an ethical manner
- Handle chemicals and chemical waste safely
- Search, critically evaluate, and properly cite scientific literature
- Use effective oral and written communication skills

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1410 - Calculus I\*
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** PHY 2010 - College Physics I\* or PHY 2311 - General Physics I\*
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

\* The listed courses are required ancillary courses for the major and can also fulfill general studies requirements

\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

## Required Ancillary Courses: 8 credits

- MTH 1410 - Calculus I **Credits: 4**

Select one of the following Physics lecture courses:

- PHY 2010 - College Physics I **Credits: 4**  
or
- PHY 2311 - General Physics I **Credits: 4**

*Note: MTH 1410 counts as a Quantitative Literacy General Studies course; the Physics courses count as Natural and Physical Science General Studies courses.*

## Required Courses: 30 credits

- CHE 1800 - General Chemistry I Credits: 4
- CHE 1801 - General Chemistry I Laboratory Credits: 1
- CHE 1810 - General Chemistry II Credits: 4
- CHE 1811 - General Chemistry II Laboratory Credits: 1
- CHE 3000 - Analytical Chemistry Credits: 3
- CHE 3010 - Analytical Chemistry Laboratory Credits: 2
- CHE 3100 - Organic Chemistry I Credits: 4
- CHE 3110 - Organic Chemistry II Credits: 4
- CHE 3120 - Organic Chemistry Laboratory 1 Credits: 1
- CHE 3130 - Organic Chemistry Laboratory II Credits: 1
- CHE 3190 - Survey of Physical Chemistry Credits: 4
- CHE 3200 - Survey of Physical Chemistry Laboratory Credits: 1

## Electives: 6 credits

A minimum of 6 upper-division semester hours in chemistry courses selected from the list below.

Restrictions: CHE 4950 and CHE 4960 do not count as electives; however, CHE 4300 can be completed as both an elective and Senior Experience course.

- CHE 3050 - Environmental Chemistry Credits: 3
- CHE 3300 - Inorganic Chemistry Credits: 3
- CHE 3700 - Forensic Chemistry Credits: 4
- CHE 3710 - Forensic Biochemistry Credits: 4
- CHE 3810 - Chemistry Literature and Research Credits: 1
- CHE 3980 - Internship in Chemistry Credits: 1-15
- CHE 4010 - Advanced Organic Chemistry Credits: 3
- CHE 4020 - Synthetic Organic Chemistry Credits: 3
- CHE 4100 - Instrumental Analysis Credits: 3
- CHE 4110 - Instrumental Analysis Laboratory Credits: 2
- CHE 4130 - Quality in the Chemical Industry Credits: 2
- CHE 4160 - QA/QC Methods Laboratory Credits: 1
- CHE 4300 - Advanced Inorganic Chemistry Credits: 4
- CHE 4310 - Biochemistry I Credits: 4
- CHE 4320 - Biochemistry II Credits: 4
- CHE 4350 - Biochemistry Laboratory Credits: 2
- CHE 4360 - Computational Biochemistry Laboratory Credits: 2
- CHE 4370 - Undergraduate Research in Chemistry Credits: 1-2
- CHE 4390 - Advanced Biochemistry Laboratory Credits: 3
- CHE 4800 - Special Topics in Chemistry Credits: 4

## Senior Experience: 3-4 credits

Students must complete a Senior Experience course offered by the Department of Chemistry and Biochemistry.

- CHE 4300 - Advanced Inorganic Chemistry **Credits:** 4  
or
- CHE 4950 - Senior Experience in Chemistry **Credits:** 3  
or
- CHE 4960 - Senior Experience in Biochemistry **Credits:** 3

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Required Ancillary Courses	8 credits
Required Courses	30 credits
Major Electives	6 credits
Senior Experience	3-4 credits
Unrestricted Electives	36-49 credits
Total for the Chemistry Major, B.A.	120 credits

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree.**

**Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Chemistry Major, B.A. with Secondary Science Teacher Licensure Concentration*

[Department of Chemistry and Biochemistry](#)

[College of Letters, Arts and Sciences](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

Degree seeking candidates who wish to obtain Colorado licensure for Secondary Science Education with a major in Chemistry must earn a Bachelor of Arts (BA) degree. Included in the requirements for the Chemistry major with a concentration in Secondary Science teaching is a core curriculum designed to ensure that the Chemistry education program meets the Colorado Science Licensure Standards and addresses the objectives of the General Science content area examination. The core curriculum adds a firm foundation in Biology, Physics, Earth and Space Science, and Mathematics. The Colorado Academic Standards in Science are strongly emphasized within the curriculum. Science Licensure candidates must declare their major with the appropriate concentration in Secondary Science Licensure.

## Student Outcomes

### Secondary Education

- Students in Secondary/K-12 Education teacher licensure programs will demonstrate awareness of multiculturalism, diversity, equity, and inclusion.
- Students in Secondary/K-12 Education teacher licensure program will gain readiness and eligibility for student teaching.
- Teacher candidates will successfully complete student teaching.

### Chemistry Major, B.A.

- Apply the fundamental principles of chemistry and/or biochemistry, showing core competency in chemistry areas (general, analytical, organic, biochemistry and physical chemistry).
- Design and conduct experiments using appropriate techniques and equipment.
- Conduct scientific inquiry in an ethical manner.
- Handle chemicals and chemical waste safely.
- Search, critically evaluate, and properly cite scientific literature.
- Use effective oral and written communication skills.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 123 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)

- Quantitative Literacy (3 credits)
  - **Recommended:** Students may fulfill this General Studies requirement with MTH 1410 - Calculus I or its prerequisites.
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** Students may fulfill this General Studies requirement with Additional Content Courses for Secondary Science Licensure Concentration.
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** Students may fulfill this requirement with EDS 3130 - Foundations of Educational Psychology and Philosophy and EDS 3150 - Critical Sociocultural Lenses for Teachers, which also meet requirements under Foundation and Method Courses for Secondary Education.
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

Students can consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

- Students can fulfill this requirement with EDS 3150 - Critical Sociocultural Lenses for Teachers.

## Chemistry Major Core Courses: 36 credits

- CHE 1800 - General Chemistry I Credits: 4
- CHE 1801 - General Chemistry I Laboratory Credits: 1
- CHE 1810 - General Chemistry II Credits: 4
- CHE 1811 - General Chemistry II Laboratory Credits: 1
- CHE 3000 - Analytical Chemistry Credits: 3
- CHE 3010 - Analytical Chemistry Laboratory Credits: 2
- CHE 3100 - Organic Chemistry I Credits: 4
- CHE 3110 - Organic Chemistry II Credits: 4
- CHE 3120 - Organic Chemistry Laboratory I Credits: 1
- CHE 3130 - Organic Chemistry Laboratory II Credits: 1
- CHE 3190 - Survey of Physical Chemistry Credits: 4
- CHE 3200 - Survey of Physical Chemistry Laboratory Credits: 1
- Upper Division Chemistry Electives: 6 credit hours

## Additional Content Courses Required for Secondary Science Licensure: 29 credits

Six or more credits in this category can also satisfy General Studies requirements for Natural and Physical Sciences.

### Biology (8 credits):

- BIO 1080 - General Biology I Credits: 3
- BIO 1081 - General Biology II Credits: 3
- BIO 1090 - General Biology Laboratory I Credits: 1
- BIO 1091 - General Biology Laboratory II Credits: 1

### Physics (10 credits):

- PHY 2010 - College Physics I Credits: 4
- PHY 2020 - College Physics II Credits: 4
- PHY 2030 - College Physics I Laboratory Credits: 1
- PHY 2040 - College Physics II Laboratory Credits: 1

### Earth and Space Science (7 credits):

- GEL 1010 - Physical Geology Credits: 4
- MTR 1400 - Weather and Climate Credits: 3
- or
- GEG 1100 - Introduction to Physical Geography Credits: 3

### Mathematics:

- MTH 1410 - Calculus I Credits: 4

## Secondary Education Foundation and Methods Courses: 28 credits

All the courses in this area are required for Secondary Science Licensure. Some course pairs must be taken together; please see an advisor in the School of Education for more detail on recommended sequence. You should complete your General Studies and at least half of your major and additional content area courses before beginning Teacher Education courses.

- EDS 3130 - Foundations of Educational Psychology and Philosophy Credits: 4 \*
- EDS 3140 - First Field Experience in Secondary Education Credits: 1 \*
- EDS 3150 - Critical Sociocultural Lenses for Teachers Credits: 3 \*
- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners Credits: 3
- EDT 3010 - Integrating Educational Technology into Teaching Credits: 3
- SED 3600 - Exceptional Learners in the Classroom Credits: 3
- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools Credits: 3 \*\*

- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools Credits: 1 \*\*
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools Credits: 3 \*\*
- SCI 3950 - Teaching Science in Secondary Schools Credits: 3 \*\*
- SCI 3960 - Field Experience in Teaching Science in Secondary Schools Credits: 1 (60-hour field experience)\*\*

*\* Requires at least provisional admission to the School of Education*

*\*\*Requires formal admission to the School of Education*

## Senior Experience: 12 credits

- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 Credits: 6,12

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Chemistry Major Courses	36 credits
Additional Content Courses Required for Secondary Science Licensure	29 credits
Foundation and Methods Courses	28 credits
Senior Experience	12 credits
<b>Total for the Chemistry Major, B.A. with Secondary Science Teacher Licensure Concentration</b>	<b>Minimum 123 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree.

Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

Up to 15 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.

## Chemistry Major, B.S.

[Department of Chemistry and Biochemistry](#)

Available Program Format(s): [In-Person](#)

[College of Letters, Arts and Sciences](#)

## About the Program

The Bachelor of Science in Chemistry degree program provides students an in-depth study of the physical sciences, with an emphasis on chemistry. This program equips students with the chemical knowledge required for pursuing a career as a chemist in industry or government, attending graduate school in chemistry, or attending a professional school such as medicine, pharmacy, or dentistry. Students should consult with the department advisor for assistance with degree planning for specific careers after graduation.

## Student Outcomes

- Apply the fundamental principles of chemistry and/or biochemistry, showing core competency in chemistry areas (general, analytical, organic, biochemistry, and physical chemistry).
- Design and conduct experiments using appropriate techniques and equipment
- Conduct scientific inquiry in an ethical manner
- Handle chemicals and chemical waste safely
- Search, critically evaluate, and properly cite scientific literature
- Use effective oral and written communication skills

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1410 - Calculus I\*
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** PHY 2010 - College Physics I\*  
OR PHY 2311 - General Physics I\*
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

\* The listed courses are required ancillary courses for the major and can also fulfill general studies requirements

\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

## Required Ancillary Courses: 22 credits

All students must complete the following courses. These courses can also count towards the General Studies Requirements.

- MTH 1410 - Calculus I Credits: 4
- MTH 2410 - Calculus II Credits: 4
- MTH 2420 - Calculus III Credits: 4

Select one of the following Physics Lecture/Lab sequences:

- PHY 2010 - College Physics I Credits: 4
- PHY 2030 - College Physics I Laboratory Credits: 1
- PHY 2020 - College Physics II Credits: 4
- PHY 2040 - College Physics II Laboratory Credits: 1

or

- PHY 2311 - General Physics I Credits: 4
- PHY 2321 - General Physics I Laboratory Credits: 1
- PHY 2331 - General Physics II Credits: 4
- PHY 2341 - General Physics II Laboratory Credits: 1

## Required Major Courses: 40 credits

- CHE 1800 - General Chemistry I Credits: 4
- CHE 1801 - General Chemistry I Laboratory Credits: 1
- CHE 1810 - General Chemistry II Credits: 4
- CHE 1811 - General Chemistry II Laboratory Credits: 1
- CHE 3000 - Analytical Chemistry Credits: 3
- CHE 3010 - Analytical Chemistry Laboratory Credits: 2
- CHE 3100 - Organic Chemistry I Credits: 4
- CHE 3110 - Organic Chemistry II Credits: 4
- CHE 3120 - Organic Chemistry Laboratory I Credits: 1
- CHE 3130 - Organic Chemistry Laboratory II Credits: 1
- CHE 3300 - Inorganic Chemistry Credits: 3
- CHE 4450 - Physical Chemistry: Quantum Mechanics and Spectroscopy Credits: 4
- CHE 4460 - Physical Chemistry: Thermodynamics and Kinetics Credits: 4
- CHE 4480 - Physical Chemistry Laboratory: Quantum and Spectroscopy Credits: 2
- CHE 4490 - Physical Chemistry Laboratory: Thermodynamics and Kinetics Credits: 2

## Electives: 10 credits

A minimum of 10 semester hours in upper-division, chemistry courses from the list below. CHE 4950 and CHE 4960 do not count as electives; however, CHE 4300 can be completed as both an elective and Senior Experience course.

The following courses are appropriate electives:

- CHE 3050 - Environmental Chemistry Credits: 3
- CHE 3700 - Forensic Chemistry Credits: 4
- CHE 3710 - Forensic Biochemistry Credits: 4
- CHE 3810 - Chemistry Literature and Research Credits: 1
- CHE 3980 - Internship in Chemistry Credits: 1-15
- CHE 4010 - Advanced Organic Chemistry Credits: 3
- CHE 4020 - Synthetic Organic Chemistry Credits: 3
- CHE 4100 - Instrumental Analysis Credits: 3
- CHE 4110 - Instrumental Analysis Laboratory Credits: 2
- CHE 4130 - Quality in the Chemical Industry Credits: 2
- CHE 4160 - QA/QC Methods Laboratory Credits: 1
- CHE 4300 - Advanced Inorganic Chemistry Credits: 4
- CHE 4310 - Biochemistry I Credits: 4
- CHE 4320 - Biochemistry II Credits: 4
- CHE 4350 - Biochemistry Laboratory Credits: 2
- CHE 4360 - Computational Biochemistry Laboratory Credits: 2
- CHE 4370 - Undergraduate Research in Chemistry Credits: 1-2
- CHE 4390 - Advanced Biochemistry Laboratory Credits: 3
- CHE 4800 - Special Topics in Chemistry Credits: 4

## Senior Experience: 3-4 credits



Students must complete a Senior Experience course offered by the Department of Chemistry and Biochemistry.

- CHE 4300 - Advanced Inorganic Chemistry **Credits: 4**  
or
- CHE 4950 - Senior Experience in Chemistry **Credits: 3**  
or
- CHE 4960 - Senior Experience in Biochemistry **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Ancillary Courses	22 credits
Required Major Courses	40 credits
Electives	10 credits
Senior Experience	3-4 credits
Unrestricted Electives	8-21 credits
<b>Total for the Chemistry Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Chemistry Minor

Students must complete 19 semester hours, plus associated prerequisites within the framework of specific courses, to qualify for a minor in chemistry.

A grade of "C-" or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required.

## Required Courses

- CHE 1810 - General Chemistry II **Credits: 4**
- CHE 1811 - General Chemistry II Laboratory **Credits: 1**

**Subtotal: 5 credits**

## Electives

14 semester credit hours of chemistry elective courses are required, such that, when added to the 5 semester credit hours from the "Required Courses" above, 19 total semester credit hours are completed. Information about allowable elective courses are outlined below.

- Any CHE 3000-level or 4000-level courses are acceptable with the following specifications:
  - Two of these courses must be laboratories
  - No more than 3 semester credit hours from any combination of CHE 3890, CHE 4650, and CHE 4370
  - Either of the following Physical Chemistry sequences are acceptable:
    - Survey of Physical Chemistry lecture and laboratory (CHE 3190 and CHE 3200)
    - Physical Chemistry: Quantum Mechanics and Spectroscopy lecture and laboratory (CHE 4450 and CHE 4480)
- Exceptions: The following courses are not acceptable for the chemistry minor:
  - Senior Experience Courses (CHE 4300, CHE 4950, and CHE 4960) since these are already University requirements
  - Crime Scene Investigation I and II Courses (CHE 3600 and CHE 3610)
    - Students interested in these courses should seek the criminalistics minor.

Recommended course sequences are available in the department office and on the department website. To ensure greater success in planning a minor, students should consult with a faculty or department advisor to ensure their desired course schedule will fulfill the requirements outlined above.

**Subtotal: 14 credits**

**Total for Minor: 19 credits**

## Criminalistics Minor

The Criminalistics Minor, offered by the Department of Chemistry & Biochemistry, is designed to complement Majors in Chemistry, Biochemistry, and Criminal Justice. Students who combine this minor with a Chemistry or Biochemistry major receive a rigorous foundation in the scientific principles used in forensic science laboratories as well as applied skills relevant to scientific analysis of criminal cases. These students are prepared for work in a variety of forensic laboratory positions or for graduate studies in the field. Students who combine this minor with a Criminal Justice major receive a broad law enforcement background with understanding of all phases of criminal investigation. The core courses for the minor cover the ethical and legal aspects of this field as well as the relevant scientific principles at a level understandable among students with a non-science background. The upper-level courses are flexible and include courses for both science and non-science majors.

## Core Courses

- CHE 1100 - Principles of Chemistry Credits: 4
- CHE 1150 - Principles of Chemistry Laboratory Credits: 1
- CHE 2710 - Introduction to Criminalistics Credits: 3
- CHE 2711 - Introduction to Criminalistics Laboratory Credits: 1
- CHE 3600 - Crime Scene Investigation I Credits: 4
- CJC 4650 - Ethics for the Criminal Justice Professional Credits: 3

## Elective Courses

- CHE 2750 - Arson and Explosives Credits: 3
- CHE 2760 - Field Testing and Laboratory Analysis of Drugs Credits: 1
- CHE 3610 - Crime Scene Investigation II Credits: 4
- CHE 3700 - Forensic Chemistry Credits: 4
- CHE 3710 - Forensic Biochemistry Credits: 4

**Subtotal:** 8 credits

**Total for Minor:** 24 credits

### Notes:

- CHE 1800 General Chemistry I may be substituted for CHE 1100 Principles of Chemistry.
- CHE 1801 General Chemistry Lab may be substituted for CHE 1150 Principles of Chemistry Laboratory.
- CJC 4650 requires CJC 1010 Introduction to Criminal Justice as a prerequisite

## Quality in the Chemical Industry Certificate

The Quality in the Chemical Industry certificate program provides students an in-depth study of the practical application of chemistry in the many industries that rely on chemical analysis. This program equips students with the knowledge of advanced instrumentation, industry standards and practices, and quality assurance / quality control (QA/QC) required for pursuing a successful career as a chemist in industry or government. Students should consult with the department advisor for assistance with degree planning for specific careers after graduation.

This is a certificate program, available to current students, post-baccalaureate students, or current members of the chemical industry seeking additional skills and training for career advancement. A grade of "C" or better is required for each course in this program to count toward the awarded certificate.

## Required Courses

- CHE 1810 - General Chemistry II Credits: 4

- CHE 1811 - General Chemistry II Laboratory Credits: 1
- CHE 3000 - Analytical Chemistry Credits: 3
- CHE 3010 - Analytical Chemistry Laboratory Credits: 2
- CHE 4100 - Instrumental Analysis Credits: 3
- CHE 4110 - Instrumental Analysis Laboratory Credits: 2
- CHE 4130 - Quality in the Chemical Industry Credits: 2
- CHE 4160 - QA/QC Methods Laboratory Credits: 1
- JMP 2610 - Introduction to Technical Writing Credits: 3
- Credits: 22

## Department of Chicana and Chicano Studies

Location: Rectory Building, 101

Phone: 303-615-0711

E-Mail:

Website: [Chicana/o Studies Department Website](#)

### Chicano Studies Major, B.A.

[Department of Chicana and Chicano Studies](#)

[College of Letters, Arts and Sciences](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

The Chicana/o Studies Department (CHS) adheres to the core values of social justice, human rights, empowerment, cultural responsiveness and service to community. Our teaching, scholarship and mentoring are informed by Liberatory theories and pedagogical practices articulated in the work of scholars such as Paolo Freire who assumes that the teacher is not all-knowing or neutral; the teacher shares their knowledge within their philosophical framework and both teachers and students have a vested interest in the reciprocal process of learning. He states in Pedagogy of Freedom Ethics, Democracy, and Civic Courage, "To teach is not to transfer knowledge but to create the possibilities for the production or construction of knowledge...Whoever teaches learns in the act of teaching, and whoever learns teaches in the act of learning" (p.30-31). Moreover, as bell hooks notes, "The classroom, with all its limitations, remains a location of possibility. In that field of possibility, we have the opportunity to labor for freedom, to demand of ourselves and our comrades, an openness of mind and heart that allows us to face reality even as we collectively imagine ways to move beyond boundaries, to transgress. This is education as the practice of freedom" (Teaching to Transgress: Education as the Practice of Freedom, 1994, p. 207).

Our mission is to prepare and empower culturally responsive students to engage in critical thinking about the sociohistorical, multicultural, intersectional, and global contexts in which they live, learn and work; understand the changing demographics in US society; and to articulate and analyze public policy issues and implications grounded in the diverse experiences, expressions, social conditions of Chicano/a/x and Latino/a/x and Indigenous communities.

Students must choose one concentration within the major.

The Cultural Studies concentration is designed for students who are interested in topics that study aspects of Chicano/a-Latino/ a cultural production which range from Chicano/a art, film, popular culture; music; religion; literature.

The Social Practice concentration is designed for students interested in working within the diverse Chicano/a and Latina/o communities locally, regionally, nationally and internationally. Potential employment opportunities include, but are not limited to, human services, governmental services, the non-profit sector, legal professions, education, family literacy, community organizing, and labor. Adhering to the interdisciplinary nature of Chicana/o Studies, these courses will rely on the vast scholarship on the above mentioned fields, in addition to having opportunities to work with identified community partners in service learning, internships, and field study.

## Student Outcomes

- Analyze literary works including reference to genre, theme, and tone use of language.
- Identify and analyze cultural texts and artifacts as relevant sources of cultural production.
- Explain phenomena that shape gender roles and relations within Chicana/o & Latina/o communities; i.e. patriarchy, machismo, marianismo, virgin/whore dichotomy.
- Demonstrate intermediate competency in the principle domains of the Spanish language among Chicana/o & Latina/o populations in the U.S.
- Identify the sociolinguistic factors that reflect the evolution and utilization of the Spanish language among Chicana/o & Latina/o populations in the U.S.
- Demonstrate the ability to utilize praxis: theory + action + reflection, in multiple settings.
- Analyze public policy issues that impact Chicana/o & Latina/o communities: i.e. legal, health care, globalization, free trade, immigration, education and climate change.
- Outline/explain major historical moments and figures that have shaped Chicana/o Latina/o socio- cultural experiences.
- Compare and contrast diverse religious and spiritual experiences in Chicana/o Latina/o communities.
- Recognize the diverse indigenous peoples and communities throughout Meso-America and the contemporary Southwest, which have Chicana/o & Latina/o identities.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Core Required of All Concentrations: 25 credits

- CHS 1000 - Introduction to Chicana/o Studies Credits: 3
- CHS 2010 - Survey of Chicana/o Literature Credits: 3 (ENG 2410)
- CHS 3460 - Chicana Feminisms Credits: 3 (formerly "La Chicana")
- CHS 4850 - Research Experience in Chicana/o Studies Credits: 3
- SPA 1010 - Elementary Spanish I Credits: 5
- SPA 1020 - Elementary Spanish II Credits: 5
- SPA 2110 - Spanish Reading and Communication I Credits: 3
- or
- SPA 2120 - Spanish Reading and Communication II Credits: 3

## Social Practice Concentration: 15 credits

### Required Courses: 9 credits

- CHS 3100 - Social Justice and Activism in the Chicana/o Community **Credits: 3** (HON 3101, SWK 3110); (formerly The Chicano Community)
- CHS 3200 - Chicanos and the Law **Credits: 3** (CJC 3720)
- CHS 3300 - Education of Chicano Children **Credits: 3**

### Electives: Choose 6 credits

- CHS 3210 - The Chicano Family **Credits: 3**
- CHS 3660 - Poverty, Race and Gender **Credits: 3** (SOC 3660, SWK 3660, GWS 3660) (formerly Women and Gender)
- CHS 4010 - The Chicano Movement **Credits: 3**
- CHS 4050 - Chicana/o Mental Health Perspectives **Credits: 3**

## Cultural Studies Concentration: 15 credits

### Required Courses: 9 credits

- CHS 2200 - Survey of Chicano/a Cultural Studies **Credits: 3**
- CHS 3400 - The Chicano Novel **Credits: 3**
- CHS 3410 - Chicano Folklore of the Southwest **Credits: 3**

### Electives: Choose 6 credits

- CHS 2600 - Chicana/o and Latina/o Religious Cultures **Credits: 3**
- CHS 3000 - History of Meso-America: Pre-Columbian and Colonial Periods **Credits: 3**
- CHS 3020 - Chicana/o History, 1836 to the Present **Credits: 3**
- CHS 2000 - Living Culture and Language of the Mexican and Chicano **Credits: 3**

- CHS 3010 - The Mexican Revolution **Credits: 3**
- CHS 4210 - Chicanas and the Politics of Gender **Credits: 3**

## Elective Options

For either concentration students may choose from among the following elective courses:

- CHS 2020 - Chicano Poetry and Drama Credits: 3
- CHS 2100 - Women of Color Credits: 3
- CHS 2500 - Borderland Studies: Variable Topics Credits: 3
- CHS 3025 - Contemporary Chicana/o Art Credits: 3
- CHS 3210 - The Chicano Family Credits: 3
- CHS 3600 - Mexico and Chicana/o Politics Credits: 3
- CHS 3800 - Topics in Chicano Studies Credits: 3
- CHS 3980 - Internship in Chicana and Chicano Studies Credits: 1-15

## Senior Experience: 3 credits

Students must complete any 3-credit hour Senior Experience course. The course within the Chicano Studies department that may be used to fulfill this requirement is:

- CHS 4850 - Research Experience in Chicana/o Studies Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Courses	25 credits
Selected Concentration	15 credits
Senior Experience	0-3 credits
Unrestricted Electives	44-62 credits
<b>Total for the Chicano Studies Major, B.A.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## *Chicano Studies Major, B.A. with Secondary Social Studies Teacher Licensure Concentration*

## About the Program

The Chicana/o Studies Major with a Concentration in Secondary Social Studies Licensure is designed for those students who plan to teach secondary Social Studies in Colorado. The program includes a Chicana/o Studies Major, a Social Studies focus, and Secondary Education courses required by the Colorado Department of Education for licensure.

Students interested in a Chicana/o Studies Major only should search the catalog separately for that program.

## Student Outcomes

- Analyze literary works including reference to genre, theme, and tone use of language;
- Identify and analyze cultural texts and artifacts as relevant sources of cultural production;
- Explain phenomena that shape gender roles and relations within Chicana/o & Latina/o communities; i.e. patriarchy, machismo, marianismo, virgin/whore dichotomy;
- Demonstrate intermediate competency in the principle domains of the Spanish language among Chicana/o & Latina/o populations in the U.S.
- Identify the sociolinguistic factors that reflect the evolution and utilization of the Spanish language among Chicana/o & Latina/o populations in the U.S.
- Demonstrate the ability to utilize praxis: theory + action + reflection, in multiple settings;
- Analyze public policy issues that impact Chicana/o & Latina/o communities: i.e. legal, health care, globalization, free trade, immigration, education and climate change;
- Outline/explain major historical moments and figures that have shaped Chicana/o Latina/o socio-cultural experiences;
- Compare and contrast diverse religious and spiritual experiences in Chicana/o Latina/o communities;
- Recognize the diverse indigenous peoples & communities throughout Meso-America and the contemporary Southwest, which have Chicana/o & Latina/o identities.
- Demonstrate mastery of pedagogical strategies in Social Studies for secondary school teaching.
- Connect Literacy and Math-Utilize literacy, including Culturally and Linguistically Diverse (CLD), strategies as well as mathematics when teaching Social Studies.
- Create Inclusive Teaching Environment-Create a safe, inclusive and respectful learning environment that facilitates Social Studies learning for diverse populations, including CLD students.

- Plan and deliver effective instruction in History, Civics, and Geography.
- Demonstrate professionalism as a teacher candidate through ethical conduct, reflection, and leadership.
- Demonstrate knowledge of first and second language acquisition and teaching strategies for CLD students.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 121 semester hours are required for graduation.
- All courses required for teacher licensure must be passed with a grade of C- or higher. Students should note that programs differ in the minimum grade required.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1610 - Integrated Mathematics I (required in the Foundations and Strategies section of the program)
- Arts and Humanities (6 credits)
  - **Recommended:** CHS 2010 - Survey of Chicana/o Literature
- Historical (3 credits)
  - **Recommended:** HIS 1040 - World History since 1500
- Natural and Physical Sciences (6 credits)
  - **Recommended:** GEG 1100 - Introduction to Physical Geography
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** Two of the Following: PSC 1010 - American National Government; ANT 2330 - Cross-Cultural Communication; ECO 2010 - Principles of Macroeconomics; GEG 1000 - World Regional Geography
- Global Diversity (0 or 3 credits\*\*)

- CHS 3800 - Topics in Chicano Studies Credits: 3

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.
- This requirement can be satisfied with any CHS course with ESSJ designation

## Chicano Studies Major: 24 credits

The Chicana/o Studies Department (CHS) adheres to the core values of social justice, human rights, empowerment, cultural responsiveness and service to community. Our teaching, scholarship and mentoring are informed by liberatory theories and pedagogical practices articulated in the work of scholars such as Paolo Freire, bell hooks, Angela Valenzuela, who assume that the teacher is not all-knowing or neutral; the teacher shares their knowledge within their philosophical framework and both teachers and students have a vested interest in the reciprocal process of learning.

Our mission is to prepare and empower culturally responsive students to engage in critical thinking about the sociohistorical, multicultural, intersectional, and global contexts in which they live, learn and work; understand the changing demographics in US society; and to articulate and analyze public policy issues and implications grounded in the diverse experiences, expressions, social conditions of Chicano/a/x and Latino/a/x and Indigenous communities.

- CHS 1000 - Introduction to Chicana/o Studies Credits: 3
- CHS 2000 - Living Culture and Language of the Mexican and Chicano Credits: 3
- CHS 2010 - Survey of Chicana/o Literature Credits: 3
- CHS 3020 - Chicana/o History, 1836 to the Present Credits: 3
- CHS 3300 - Education of Chicano Children Credits: 3
- CHS 3460 - Chicana Feminisms Credits: 3
- CHS 4850 - Research Experience in Chicana/o Studies Credits: 3

Take one of the following courses:

- CHS 2500 - Borderland Studies: Variable Topics Credits: 3
- CHS 2600 - Chicana/o and Latina/o Religious Cultures Credits: 3
- CHS 3660 - Poverty, Race and Gender Credits: 3

## Additional Social Science Courses for this Concentration: 33 credits

All students must complete thirty-three (33) credits of Social Science courses for this concentration. Note that twelve credits below can also satisfy General Studies requirements in these categories: Historical (3 credits), Natural and Physical Sciences (3 credits), Social and Behavioral Sciences (6 credits).

- HIS 1030 - World History to 1500 Credits: 3
- HIS 1040 - World History since 1500 Credits: 3
- HIS 1210 - American History to 1865 Credits: 3
- HIS 1220 - American History since 1865 Credits: 3
- ANT 2330 - Cross-Cultural Communication Credits: 3
- ECO 2010 - Principles of Macroeconomics Credits: 3
- ECO 2020 - Principles of Microeconomics Credits: 3
- GEG 1000 - World Regional Geography Credits: 3
- GEG 1100 - Introduction to Physical Geography Credits: 3
- PSC 1010 - American National Government Credits: 3
- PSC 2230 - Introduction to International Relations Credits: 3

## Foundations and Strategies for Secondary Teaching: 34 credits

Many of the courses in this section of the degree program require admission to the MSU Denver School of Education. Please see a School of Education advisor or the MSU Denver School of Education website for details.

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners Credits: 3
- CLD 3910 - Assessment of English Language Learners Credits: 3
- EDS 3130 - Foundations of Educational Psychology and Philosophy Credits: 4
- EDS 3140 - First Field Experience in Secondary Education Credits: 1
- EDS 3150 - Critical Sociocultural Lenses for Teachers Credits: 3
- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools Credits: 3
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools Credits: 1
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools Credits: 3
- EDT 3010 - Integrating Educational Technology into Teaching Credits: 3
- HIS 4010 - Methods of Teaching Social Science: Secondary School Credits: 3

- HIS 4020 - Field Experience in Teaching Social Studies in Secondary Schools Credits: 1
- MTH 1610 - Integrated Mathematics I Credits: 3
- SED 3600 - Exceptional Learners in the Classroom Credits: 3

## Senior Experience: 12 credits

Student Teaching offers an essential conclusion to this degree program. Typically, students should register for 12 credits of EDS 4290 in their final semester. Students who register for only 6 credits of EDS 4290 should also register for 6 credits of CLD 4590 Culturally and Linguistically Diverse: ESL Student Teaching Seminar.

- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 Credits: 6,12

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Chicano Studies Major	24 credits
Additional Social Science Courses for this Concentration	33 credits
Foundations and Strategies for Secondary Teaching	34 credits
Senior Experience	12 credits
<b>Total for the Chicano Studies Major, B.A. with Concentration in Secondary Social Studies Licensure</b>	<b>121 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

Up to 15 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.

## Chicano Studies Minor

A grade of "C" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## Required Courses:

- CHS 1000 - Introduction to Chicana/o Studies Credits: 3
- CHS 2010 - Survey of Chicana/o Literature Credits: 3
- CHS 3100 - Social Justice and Activism in the Chicana/o Community Credits: 3 (HON 3101, SWK 3110); (formerly The Chicano Community)
- CHS 3460 - Chicana Feminisms Credits: 3 (formerly "La Chicana")

## Electives\*: 9

Choose 9 credits from the other available courses housed in CHS in consultation with a Chicana/o Studies faculty advisor.

Total: 21

## Department of Communication Studies

Location: Central Classroom 120

Phone: 303-615-0400

E-Mail: [CommStudies@msudenver.edu](mailto:CommStudies@msudenver.edu)

Website: [Communication Studies Department Website](http://CommunicationStudiesDepartmentWebsite)

## Communication Studies Major, B.A.

[Department of Communication Studies](#)

Available Program Format(s): [In-Person](#)

[College of Letters, Arts and Sciences](#)

## About the Program

Communication Studies majors develop the skills and abilities necessary to succeed in a wide variety of contexts - from professional life to personal relationships, personal growth to community building, to promoting diversity and yourself. The major is designed to allow students to chart their own course of study across personal, professional, and public contexts. Students have the option of selecting a formal concentration in *Professional and Organizational Communication* or *Rhetoric and Public Culture*. To effectively tailor the degree to your personal and professional goals, elective courses should be selected in consultation with a Communication Studies advisor.



## Student Outcomes

1. Articulate and advocate for communication as an orientation for evaluating and addressing issues and problems in personal, professional, and public contexts.
2. Develop and apply communication strategies appropriate to purpose, context, technology, and audience.
3. Communicate with excellence in oral, written, and/or visual modes.
4. Collaborate effectively with others in groups and teams.
5. Cultivate a critical awareness of diverse experiences and viewpoints in order to practice ethical communication.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Communication Studies Core: 24 credits

*Select one of these courses:*

- COMM 1010 - Presentational Speaking **Credits: 3**  
or
- COMM 1100 - Fundamentals of Oral Communication **Credits: 3**

*Complete this course:*

- COMM 2200 - Introduction to Interpersonal Communication **Credits: 3**

*Select two of the following courses:*

- COMM 2030 - Intercultural Communication **Credits: 3**
- COMM 2040 - Group Communication **Credits: 3**
- COMM 2300 - Introduction to Organizational Communication **Credits: 3**
- COMM 2400 - Introduction to Rhetoric and Popular Culture **Credits: 3**

*Complete all of the following courses:*

- COMM 3000 - Diversity and Communication in the U.S. **Credits: 3**
- COMM 3100 - Communication Theory **Credits: 3**
- COMM 4100 - Communication Ethics **Credits: 3**

*Select one of the following research methods courses:*

- COMM 3110 - Applied Communication Research Methods **Credits: 3**  
or
- COMM 3400 - Rhetorical Criticism **Credits: 3**

## Option One: Communication Studies Major: 18 credits

Communication Studies students may select any five Elective Courses (15 credit hours) based on their own interests, goals, and aspirations. The majority of students' elective courses should be upper-division. Consult with a faculty advisor when selecting these courses.

Students also complete a Capstone/Senior Experience Course (3 credit hours).



## Elective Courses: 15 credits

Select any **five** courses of the following courses:

- COMM 2010 - Gender and Communication **Credits: 3**
- COMM 2020 - Introduction to Health Communication **Credits: 3**
- COMM 2030 - Intercultural Communication **Credits: 3**
- COMM 2040 - Group Communication **Credits: 3**
- Or any COMM course 3000-level and above

## Capstone/Senior Experience: 3 credits

Complete **one** of the following three courses:

- COMM 4910 - Applied Communication Research Project **Credits: 3**
- COMM 4920 - Senior Seminar **Credits: 3**
- COMM 4930 - Senior Communication Internship **Credits: 3-6**

## Option Two: Communication Studies Major with Concentration in Professional and Organizational Communication: 18 credits

The majority of students' concentration and/or elective courses should be upper-division. Consult with a faculty advisor when selecting these courses.

Students electing a Concentration in Professional and Organizational Communication must complete the Communication Studies Core and the following:

### Concentration Courses: 9 credits

Students must complete any **three** of the following courses:

- COMM 3010 - Business and Professional Speaking **Credits: 3**
- COMM 3030 - Teamwork and Collaboration **Credits: 3**
- COMM 3040 - Crisis Communication **Credits: 3**
- COMM 3310 - Communication Systems and Structures in Organizations **Credits: 3**
- COMM 3320 - Communication and Quality of Work/Life **Credits: 3**
- COMM 3330 - Organizational Culture and Identity **Credits: 3**
- COMM 3340 - Leadership Communication **Credits: 3**
- COMM 4320 - Organizational Communication Consulting **Credits: 3**
- COMM 4330 - Organizational Learning and Development **Credits: 3**

## Elective Courses: 6 credits

Students must complete any **two** courses from the following:

- COMM 2010 - Gender and Communication **Credits: 3**
- COMM 2020 - Introduction to Health Communication **Credits: 3**
- COMM 2030 - Intercultural Communication **Credits: 3**
- COMM 2040 - Group Communication **Credits: 3**
- Or any other COMM course at the 3000-level or above.

## Capstone/Senior Experience: 3 credits

Students must complete **one** of the following courses:

- COMM 4910 - Applied Communication Research Project **Credits: 3**
- COMM 4920 - Senior Seminar **Credits: 3**
- COMM 4930 - Senior Communication Internship **Credits: 3-6**

## Option Three: Communication Studies Major with Concentration in Rhetoric and Public Culture: 18 credits

The majority of students' concentration and/or elective courses should be upper-division. Consult with a faculty advisor when selecting these courses.

Students electing a Concentration in Rhetoric and Public Culture must complete the Communication Studies Core and the following:

### Concentration Courses: 9 Credit Hours

Students must complete any **three** of the following courses:

- COMM 3010 - Business and Professional Speaking **Credits: 3**
- COMM 3020 - Advanced Public Speaking **Credits: 3**
- COMM 3040 - Crisis Communication **Credits: 3**
- COMM 3410 - Rhetoric and Public Culture **Credits: 3**
- COMM 3420 - Arguing Constructively **Credits: 3**
- COMM 3430 - Communication in Politics **Credits: 3**
- COMM 4410 - Techniques of Persuasion **Credits: 3**
- COMM 4420 - Freedom of Speech **Credits: 3**
- COMM 4440 - Sports Discourse in Media and Culture **Credits: 3**
- COMM 4450 - Social Movement Rhetoric **Credits: 3**

## Elective Courses: 6 credits

Students must complete any **two** courses of the following courses:

- COMM 2010 - Gender and Communication **Credits:** 3
- COMM 2020 - Introduction to Health Communication **Credits:** 3
- COMM 2030 - Intercultural Communication **Credits:** 3
- COMM 2040 - Group Communication **Credits:** 3
- Or any other COMM course at the 3000-level or above.

### Capstone/Senior Experience: 3 credits

Students must complete **one** of the following courses:

- COMM 4910 - Applied Communication Research Project **Credits:** 3
- COMM 4920 - Senior Seminar **Credits:** 3
- COMM 4930 - Senior Communication Internship **Credits:** 3-6

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Major Requirements	24 credits
Concentration/Additional Courses	18 credits
Senior Experience	counted in above sections
Unrestricted Electives	42-57 credits
<b>Total for the Communication Studies Major, B.A.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Communication Studies Minor

Students seeking a Communication Studies Minor are required to take a minimum of 21 semester hours, 12 of which must be upper division. A grade of "C-" or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required.

Students must take COMM 1010 as their General Studies Oral Communication requirement. This course is required for all

Communication Studies majors and minors but is not counted in the total hours required for the major or minor.

## Communication Studies Core (9 Credit Hours)

*All students must take:*

- COMM 1100 - Fundamentals of Oral Communication **Credits:** 3

*And two of the following three courses:*

- COMM 2200 - Introduction to Interpersonal Communication **Credits:** 3
- COMM 2300 - Introduction to Organizational Communication **Credits:** 3
- COMM 2400 - Introduction to Rhetoric and Popular Culture **Credits:** 3

## Electives (12 Credit Hours)

- Choose any four COMM courses at the 3000-level or above.

## Department of Earth and Atmospheric Sciences

Location: Science Building, 2nd Floor - #2028

Phone: 303-615-1177

E-Mail: [cas@msudenver.edu](mailto:cas@msudenver.edu)

Website: [Earth and Atmospheric Sciences Department Website](#)

## Applied Geology Major, B.S.

[Department of Earth and Atmospheric Sciences](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s):  
[In-Person](#)

## About the Program

The Applied Geology program prepares students for exciting careers in the geosciences or fascinating graduate programs in an array of specialties that are critical in today's changing world, with a broad and versatile spectrum of opportunities in resource exploration, environmental mitigation and remediation, engineering geology, natural hazard science, geoscience education, museum science, crime

scene investigation, soil science, water science, paleontology, planetary geology, seismology, volcanology, scientific illustration and writing, and so much more. Not only does the Applied Geology program at MSU Denver provide students with a strong geology content knowledge, but it also links its course offerings with professional, workforce-ready, practical hands-on skills and application, some exclusive to this program, that will give graduates an edge and propel them forward in their careers or graduate studies. As a highly interdisciplinary STEM science, geology not only combines office, lab, and fieldwork to varying degrees, it is also an ideal home for uniting interests in multiple sciences, and for intersecting with other fields such as art, history, business, and computer applications.

## Student Outcomes

Upon completion of this program, students will be able to:

1. Identify and explain geoscientific concepts, principles, and processes.
2. Apply appropriate field and laboratory geoscientific technologies and techniques.
3. Demonstrate competency in scientific communication.
4. Evaluate and interpret geoscientific information and data.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)

- Students may fulfill this requirement with MTH 1210 - Introduction to Statistics which is required for the Applied Geology Major, B.S.
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - Students may fulfill this requirement by taking courses required for the Applied Geology Major, B.S. such as: PHY 2010 - College Physics I, PHY 2030 - College Physics I Laboratory, CHE 1800 - General Chemistry I, CHE 1801 - General Chemistry I Laboratory, GEL 1010 - Physical Geology, and/or GEL 1030 - Historical Geology.
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

## Additional Required Courses: 20-22 credits

- MTH 1210 - Introduction to Statistics **Credits: 4**
- MTH 1120 - College Trigonometry **Credits: 3** Note: Students that do not place into MTH 1120 are required to take additional coursework to satisfy the math prerequisites.  
or
- MTH 1410 - Calculus I **Credits: 4**  
Math through Calculus I is recommended.
- PHY 2010 - College Physics I **Credits: 4**
- PHY 2030 - College Physics I Laboratory **Credits: 1**
- CHE 1800 - General Chemistry I **Credits: 4**
- CHE 1801 - General Chemistry I Laboratory **Credits: 1**
- Technology Course (Choose one of the following courses)
  - CET 1215 - Civil Engineering Graphics **Credits: 3**  
or
  - EVE 1215 - Engineering Graphics: Solid Modeling **Credits: 3**  
or
  - GIS 2250 - Geographic Information Systems **Credits: 4**  
or
  - MTH 2540 - Scientific Computing with Python **Credits: 4**

## Required Courses: 29 credits

- GEL 1010 - Physical Geology Credits: 4
- GEL 1030 - Historical Geology Credits: 4
- GEL 2530 - Introduction to Geologic Fieldwork Credits: 2
- GEL 3050 - Introduction to Mineralogy and Optical Mineralogy Credits: 4
- GEL 4450 - Sedimentary Geology and Stratigraphy Credits: 4
- GEL 4460 - Structural Geology and Mapping Credits: 4
- GEL 3120 - Geomorphology Credits: 4
- GEL 3530 - Field Geology: Variable Topics Credits: 3

## Geology Field Course Electives: 4 credits

Choose from the following upper division field courses for a total of at least 4 Geology field course credits.

- GEL 3510 - Advanced Geology of Red Rocks Park and Vicinity **Credits: 1**
- GEL 3520 - Advanced Garden of the Gods-Front Range Geology **Credits: 2**
- GEL 3540 - Geologic Hazards: Denver and Vicinity **Credits: 2**
- GEL 3550 - Advanced Geology of the Great Sand Dunes National Monument **Credits: 2**  
Note: GEL 3530 is a required course, but the course may be repeated up to 3 times under different topics. The repeated credits may count towards this field course requirement.
- GEL 3530 - Field Geology: Variable Topics **Credits: 3**

## Geology Electives: 11 credits

Choose a minimum of 11 upper division GEL credits from this list, paying special attention to the course rotation and offerings.

- GEL 3440 - Energy and Mineral Resources Credits: 4
- GEL 4000 - Geologic Hazards Credits: 3
- GEL 4050 - Igneous and Metamorphic Petrology Credits: 4
- GEL 4250 - Hydrogeology (Groundwater) Credits: 4
- GEL 4950 - Internship in Geology Credits: 2-15  
Up to 3 credits of internship credit can apply to the major.

## Senior Experience Course: 3 credits

- GEL 4970 - Undergraduate Research in Geology Credits: 3

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Additional Requirements	20-22 credits
Major Requirements	29 credits
Geology Field Course Electives	4 credits
Geology Electives	11 credits
Senior Experience	3 credits
Unrestricted Electives	15-29 credits
<b>Total for the Applied Geology Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Climate Change Minor*

Climate Change is one of the most relevant and pressing issues of our time. The Climate Change Minor creates an opportunity for students with any background to understand the science of climate change as well as some ways to plan for or mitigate the problem. The focus is on an understanding of climate change from an earth systems science perspective, though societal implications are also addressed.

## Required Courses

- MTR 1400 - Weather and Climate **Credits: 3**  
or
- GEG 1100 - Introduction to Physical Geography **Credits: 3**
- MTR 1600 - Global Climate Change **Credits: 3**
- GEG 3410 - Biogeography **Credits: 3**
- MTR 3330 - Climatology **Credits: 3**
- MTR 3340 - Climate Change Science **Credits: 3**
- GEG 4700 - Sustainability in Resource Management **Credits: 3**  
or
- GEG 4720 - Planning for Climate Change **Credits: 3**

Total: 18 credits

## *Environmental Science Major, B.S.*

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

### About the Program

Environmental Science is a discipline that will prepare students to understand - and help solve - some of the most pressing challenges facing the world today. From sustainable growth and pollution control to learning about water problems and ecosystem degradation, students learn to analyze environmental challenges and find possible solutions. The Environmental Science degree explores ecological resiliency through a wide range of field, laboratory, and classroom courses on topics including, but not limited to, soil science, water resources and management, mountain environments, waste remediation, and geospatial sciences. Students tackle these environmental problems from the perspective of timely global challenges such as climate change and human population growth. This interdisciplinary major allows students to choose from a variety of courses to tailor a degree plan to their interests and keep them diversified in a constantly growing and changing field.

### Student Outcomes

- Students will be able to identify and explain environmental processes and human - environment interactions.
- Students will be able to apply interdisciplinary perspectives and approaches to environmental problems.
- Students will be able to critically assess and evaluate environmental problems at a local and global scale.
- Students will be able to acquire the ability to monitor and sample environmental conditions.
- Students will be able to design effective oral presentations and scientific papers.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** Students may use the required course MTH 1210 - Introduction to Statistics to fulfill this requirement.
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** Several General Studies courses are required for the Environmental Science major and those courses can also count here. Those courses include, ENV 1200 - Introduction to Environmental Science, BIO 1080 - General Biology I, BIO 1081 - General Biology II, BIO 1090 - General Biology Laboratory I, BIO 1091 - General Biology Laboratory II, CHE 1800 - General Chemistry I, CHE 1810 - General Chemistry II, CHE 1801 - General Chemistry I Laboratory, CHE 1801 - General Chemistry I Laboratory, CHE 1811 - General Chemistry II Laboratory
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Additional Requirements: 22 credits

All students must complete the following courses:

- BIO 1080 - General Biology I Credits: 3
- BIO 1081 - General Biology II Credits: 3
- BIO 1090 - General Biology Laboratory I Credits: 1

- BIO 1091 - General Biology Laboratory II Credits: 1
- CHE 1800 - General Chemistry I Credits: 4
- CHE 1810 - General Chemistry II Credits: 4
- CHE 1801 - General Chemistry I Laboratory Credits: 1
- CHE 1811 - General Chemistry II Laboratory Credits: 1
- MTH 1410 - Calculus I Credits: 4

## Environmental Science Core Requirements: 27 credits

This list of courses is designed to expose students to each of the various aspects of Environmental Science.

- ENV 1200 - Introduction to Environmental Science **Credits: 3**
- ENV 2100 - Environmental Sampling and Analysis **Credits: 3**
- ENV 3420 - Soil Resources **Credits: 3**
- ENV 3422 - Methods of Soil Analysis and Sampling **Credits: 1**
- ENV 4200 - Environmental Policy and Planning **Credits: 3**
- MTH 1210 - Introduction to Statistics **Credits: 4**
- GIS 2250 - Geographic Information Systems **Credits: 4**

Students are required to take one ecosystem/ecology course from the following list:

- ENV 3300 - Principles of Ecological Restoration **Credits: 3**  
-or-
- ENV 3700 - Mountain Environments **Credits: 3**  
-or-
- ENV 4420 - Wetlands **Credits: 3**  
-or-
- ENV 4440 - Limnology **Credits: 3**  
-or-
- ENV 4450 - Stream Ecology **Credits: 3**

Students are required to take one waste/remediation course from the following list:

- ENV 3010 - Applied Pollution Science **Credits: 3**  
-or-
- ENV 3710 - Environmental Remediation **Credits: 3**  
-or-
- ENV 3720 - Waste Management **Credits: 3**

## Environmental Science Electives: 15 credits

Students are required to take 15 credits of Environmental Science Electives and can choose any upper division ENV course to satisfy this requirement. Before choosing electives, students should see an advisor to discuss particular courses and associated career paths. All courses must be passed with at least a C- to count towards degree

completion. Directed Study and Internship credits may only be used towards 6 credits combined of elective credits.

- ENV 3000-4999 Any Upper Division ENV Course
- ENV 300X-499X Any Upper Division ENV Variable Topic or Omnibus Course

## Environmental Science Senior Experience: 3 credits

Students may choose one of the two following senior experience courses in Environmental Science.

- ENV 4960 - Global Environmental Challenges **Credits: 3**  
-or-
- ENV 4970 - Environmental Field Studies **Credits: 3**

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Additional Requirements	22 credits
Environmental Science Core	27 credits
Environmental Science Electives	15 credits
Environmental Science Senior Experience	3 credits
Unrestricted Electives	17-29 credits
<b>Total for Environmental Science Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## *Environmental Science Major, B.S., with Secondary Science Teacher Licensure Concentration*

[Department of Earth and  
Atmospheric Sciences](#)

[College of Letters, Arts and  
Sciences](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

Degree seeking candidates who wish to obtain Colorado Secondary Science teacher licensure with a major in Environmental Science must earn a Bachelor of Science (BS) degree. The interdisciplinary requirements for the Environmental Science major with a concentration in Secondary Science is designed to ensure that the Environmental Science education program meets the Colorado Science Licensure Standards and addresses the objectives of the Science content area examination. The core curriculum provides a firm foundation in Biology, Physics, Chemistry, Earth and Space Science, and Mathematics. The Colorado Academic Standards in Science are also strongly emphasized within the curriculum. Science Licensure candidates must declare their major with the appropriate concentration in Secondary Science Licensure.

## Student Outcomes

### Secondary Education

- Students in Secondary/K-12 Education teacher licensure programs will demonstrate awareness of multiculturalism, diversity, equity, and inclusion.
- Students in Secondary/K-12 Education teacher licensure program will gain readiness and eligibility for student teaching
- Teacher candidates will successfully complete student teaching

### Environmental Science Major B.S.

- Students will be able to identify and explain environmental processes and human - environment interactions.
- Students will be able to apply interdisciplinary perspectives and approaches to environmental problems.
- Students will be able to critically assess and evaluate environmental problems at a local and global scale.
- Students will be able to acquire the ability to monitor and sample environmental conditions.
- Students will be able to design effective oral presentations and scientific papers.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 122 semester hours are required for graduation in this program.

- A grade of C- or better is required for each course in this program to count toward the bachelor's degree.
- A minimum GPA of 2.75 in the Environmental Science Major and Additional Content Courses for Secondary Science Licensure is needed to apply for student teaching.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion. Those recommended courses below can satisfy additional degree program requirements beyond General Studies.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** Students may fulfill this General Studies requirement with MTH 1210 or MTH 1410 under Mathematics Courses for Secondary Science Licensure. (Note: depending on the course selected, this may exceed 3 credits.)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** Students may fulfill this General Studies requirement with Additional Content Courses or Environmental Science Core Courses for Secondary Science Licensure Concentration. (Note: depending on the courses selected, this total may exceed 6 credits.)
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** Students may fulfill this requirement with EDS 3130 - Foundations of Educational Psychology and Philosophy and EDS 3150 - Critical Sociocultural Lenses for Teachers, which also meet requirements under Foundation and Methods Courses for Secondary Education. (Note: depending on the courses selected, this total may exceed 6 credits.)
- Global Diversity (0-3 credits\*)

*\*Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

Students can consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.



- Students can fulfill this requirement with EDS 3150 - Critical Sociocultural Lenses for Teachers.

## Environmental Science Major Core Courses: 46 credits

Below are major requirements for the Environmental Science Major with Teacher Licensure.

### Environmental Science Core

- BIO 1080 - General Biology I **Credits: 3**
- BIO 1081 - General Biology II **Credits: 3**
- BIO 1090 - General Biology Laboratory I **Credits: 1**
- BIO 1091 - General Biology Laboratory II **Credits: 1**
- CHE 1800 - General Chemistry I **Credits: 4**
- CHE 1801 - General Chemistry I Laboratory **Credits: 1**
- CHE 1810 - General Chemistry II **Credits: 4**
- CHE 1811 - General Chemistry II Laboratory **Credits: 1**
- ENV 1200 - Introduction to Environmental Science **Credits: 3**
- ENV 3400 - Water Resources **Credits: 3**
- ENV 4200 - Environmental Policy and Planning **Credits: 3**
- GEL 1010 - Physical Geology **Credits: 4**

Select one of the following courses:

- MTR 1400 - Weather and Climate **Credits: 3**
- or
- MTR 1600 - Global Climate Change **Credits: 3**

### Environmental Science Major Electives

Students must take 12 credits of additional Environmental Science (ENV) courses, 3 credits of which may be Geology (GEL) courses, selected in consultation with an Environmental Science advisor.

Select 9 credits of ENV courses:

- ENV 2000-4999 ENV Electives

Select 3 credits of ENV or GEL courses:

- ENV 2000-4999 ENV Electives
- or
- GEL 2000-4999 GEL Electives

## Additional Content Courses Required for Science Licensure: 18 credits

**Physics** (take all four of these courses):

- PHY 2010 - College Physics I **Credits: 4**
- PHY 2020 - College Physics II **Credits: 4**
- PHY 2030 - College Physics I Laboratory **Credits: 1**
- PHY 2040 - College Physics II Laboratory **Credits: 1**

**Math** (take both of the following courses):

- MTH 1210 - Introduction to Statistics **Credits: 4**
- MTH 1410 - Calculus I **Credits: 4**

## Foundation and Methods Courses for Secondary Education: 28 credits

All students must complete the following courses in Foundation and Methods Courses for Secondary Education. Before registering for these courses, students should obtain provisional admission to the School of Education. An application can be found [HERE](#). Six or more credits in this category can also satisfy General Studies requirements for Social and Behavioral Sciences. Three credits in this category can also satisfy ESSJ requirement.

- EDS 3130 - Foundations of Educational Psychology and Philosophy Credits: 4 \*
- EDS 3140 - First Field Experience in Secondary Education Credits: 1 \*
- EDS 3150 - Critical Sociocultural Lenses for Teachers Credits: 3 \*
- EDT 3010 - Integrating Educational Technology into Teaching Credits: 3
- SED 3600 - Exceptional Learners in the Classroom Credits: 3
- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners Credits: 3
- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools Credits: 3 \*\*
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools Credits: 1 \*\*
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools Credits: 3 \*\*
- SCI 3950 - Teaching Science in Secondary Schools Credits: 3 \*\*
- SCI 3960 - Field Experience in Teaching Science in Secondary Schools Credits: 1 \*\*

*\* Requires at least provisional admission to the School of Education*

*\*\* Requires formal admission to the School of Education*

## Senior Experience: 12 credits

- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 Credits: 6,12

## Summary of Requirements

General Studies Requirements	33 credits
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ESSJ Requirement	0-3 credits
Environmental Science Major Core Courses	46 credits
Additional Content Courses Required for Science Licensure	18 credits
Foundation and Methods Courses for Secondary Education	28 credits
Senior Experience	12 credits
<b>Total for the Environmental Science Major, B.S. with Secondary Science Teacher Licensure Concentration</b>	<b>122 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

Up to 15 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.

## Environmental Science Minor

Environmental Science is a discipline that prepares you to understand - and help solve- some of the most pressing challenges facing the world today. From sustainable growth and pollution control to learning about water problems and ecosystem degradation, students learn to analyze environmental challenges and find possible solutions. The Environmental Science minor allows you to explore ecological resiliency through a wide range of field, laboratory, and classroom courses on topics including, but not limited to, soil science, water resources and management, mountain environments, waste remediation, and environmental policy. Students seeking an environmental science minor must complete a minimum of 22 semester hours.

### Required Courses

- ENV 1200 - Introduction to Environmental Science Credits: 3
- ENV 2100 - Environmental Sampling and Analysis Credits: 3
- ENV 3420 - Soil Resources Credits: 3
- ENV 3422 - Methods of Soil Analysis and Sampling Credits: 1
- ENV 4200 - Environmental Policy and Planning Credits: 3

**Subtotal: 13 credits**

## Environmental Science Electives

Select at least 9 semester hours from any Environmental Science course.

- ENV 2000:4999: Any Environmental Sciences Course
- ENV 200X:499X: Any ENV Variable Topics Course

**Subtotal: 9 Credits**

**Total for Environmental Science Minor: 22 credits**

*Note: All courses must be passed with a C- or better to count towards the minor.*

## Geographic Information Systems (GIS) Certificate

The GIS certificate option serves working professionals and students interested in developing proficiency in Geospatial Sciences. GIS education has become an integral part of many academic disciplines and professions, including natural resources, environmental science, geography, geology, planning, anthropology, civil engineering, criminal justice, business, biology, health sciences, social sciences, and others. In order to develop a high-level of proficiency, the GIS course requirements for the GIS Certificate are similar to those of the Geospatial Sciences Majors. Students must complete each course in a certificate program with a grade of "C" or better; students must also maintain a GPA of 3.0 or above in the GIS certificate program. Students should consult with a department advisor to prepare a program plan.

### Required Courses (4 credits)

- GIS 2250 - Geographic Information Systems Credits: 4

### GIS Required Block 1 (6 credits)

Select two (2) courses from the following list:

- GIS 3250 - Cartography Credits: 3
- GIS 3410 - Web Mapping Credits: 3
- GIS 4840 - Remote Sensing Credits: 3
- GIS 4870 - Spatial Databases Credits: 3

### GIS Required Block 2 (4 credits)

Select one (1) course from the following list:

- GIS 4850 - Spatial Modeling in Raster Credits: 4
- GIS 4860 - GIS Applications Credits: 4

## Elective Courses

Select 3 credit hours from any upper division GIS course

- GIS 3000-4999 Upper Division GIS Course

## GIS Certificate Total Credits

Required Course GIS 2250	4 credits
GIS Block 1	6 credits
GIS Block 2	4 credits
Additional Elective Courses*	3 credits
Total for GIS Certificate	17 credits

## *Geographical Information Systems (GIS) Minor*

The GIS Minor gives students an opportunity to develop skills in geospatial data development, analysis, and visualization that can be applied to myriad disciplines where location data is important to decision-making. Many disciplines dealing with people, resources, planning, and design benefit from an understanding of spatial data. Students must complete each course with a grade of "C-" or better.

## GIS Required Course (4 credits)

- GIS 2250 - Geographic Information Systems Credits: 4

Total Credits: 4

## GIS Required Block 1 (6 credits)

Select two (2) courses from the list:

- GIS 3250 - Cartography Credits: 3
- GIS 3410 - Web Mapping Credits: 3
- GIS 4840 - Remote Sensing Credits: 3
- GIS 4870 - Spatial Databases Credits: 3

Total Credits: 6

## GIS Required Block 2 (4 credits)

Select one (1) course from the following list:

- GIS 4850 - Spatial Modeling in Raster Credits: 4
- GIS 4860 - GIS Applications Credits: 4

Total Credits: 4

## Elective Courses (6 credits)

Select 6 credits from the following list:

- GIS 1220 - Digital Earth: Geospatial Technologies Credits: 4
- GIS 3000-4999 GIS Upper Division Courses
- GEG 3000-4999 Geography Upper Division Courses

Total Credits: 6

## Credit Totals for GIS Minor

Required Course GIS 2250	4 credits
GIS Block 1	6 credits
GIS Block 2	4 credits
Additional Elective Courses*	6 credits
Total for GIS Minor	20 credits

\* NOTE: Directed Study and Internship classes are limited towards the minor. GIS 3920 - Directed Study in Geospatial Sciences and GEG 3920 - Directed Study in Geography cannot count more than 3 credits towards the minor. GIS 4950 - Internship in GIS and GEG 4950 - Internship in Geography cannot count more than 3 credits towards the minor.

## *Geography Major, B.A.*

[Department of Earth and Atmospheric Sciences](#)

[College of Letters, Arts and Sciences](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

Geographers are among the government officials, community leaders, activists, researchers, and business people who use data-driven research to develop solutions to complex environmental, social, economic, and political problems. Geography is unique in bridging the social sciences and the natural sciences, and in providing geospatial analyses of environmental and socio-economic problems. The program provides a foundation for understanding problems and

implementing equitable solutions to improve the quality of human-environment dynamics. Engagement in environmental, social justice and ethical issues is facilitated through applied research and learning in the Denver Metropolitan Area. The Geography curriculum combines fundamental courses in natural and social systems and geospatial science with specialized electives within four disciplinary sub-fields - Political Economy Approaches to Sustainability, Geographic Information Science, Physical Geography, and Planning. Students have flexibility in choosing courses and pursuing their areas of interest. The major prepares students for professional careers in both the private and public sectors as well as for graduate studies.

## Student Outcomes

1. Examine the relationships between human and physical systems.
2. Demonstrate competency in both writing and oral presentation of geographic information.
3. Evaluate geographical information for its appropriateness for practical uses, such as decision-making and problem solving.
4. Select and apply analytic tools to examine spatial issues, problems, and conflicts.
5. Design, plan, and evaluate solutions for complex multi-dimensional geographical problems.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)

- **Recommended:** For students interested in upper division coursework or graduate study in Geographic Information Science or Physical Geography: MTH 1110 - College Algebra for Calculus, or the equivalent ( MTH 1109 - College Algebra Stretch, Part II or MTH 1111 - College Algebra for Calculus with Laboratory), or a higher algebra course.
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** Students may fulfill this requirement by taking GEG 1100 - Introduction to Physical Geography and GEG 1910 - Global Water Concerns. While both courses will count for General Studies, only one is required (and will count) for the Geography major.
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** Students may fulfill this requirement by taking GEG 1000 - World Regional Geography, GEG 1300 - Introduction to Human Geography, and/or GEG 1700 - Global Sustainability. While two courses will count for General Studies, only one is required (and will count) for the Geography major.
- Global Diversity (0 or 3 credits\*\*)
  - **Recommended:** Students may fulfill this requirement by taking GEG 1000 - World Regional Geography, GEG 1300 - Introduction to Human Geography, GEG 1910 - Global Water Concerns, or GEG 3230 - Latin American Geographies, which also may count for the major.

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.
  - **Recommended:** Students may fulfill this requirement by taking GEG 2700 - Geographies of Environmental Justice (which does not count towards the major), or GEG 3300 - Indigenous

## Recommended Prerequisite Courses

For students interested in upper division coursework or graduate study in Geographic Information Science or Physical Geography: At least one algebra course ( MTH 1110 - College Algebra for Calculus or higher) and one statistics course ( MTH 1210 - Introduction to Statistics or higher) are recommended. Students are encouraged to meet with an advisor to discuss upper division course prerequisites, optional courses, minors, and electives which support their interests.

## Required Courses: 13 credits

Students should select one course from each area listed below. These courses provide an introduction to the main sub-fields of Geography, and methods of geographic inquiry. Four courses are required. All courses must be passed with at least a "C-" to count towards the major.

### Cultural/Human Geography: 3 credits

- GEG 1000 - World Regional Geography Credits: 3
- GEG 1300 - Introduction to Human Geography Credits: 3
- GEG 1700 - Global Sustainability Credits: 3

### Physical Geography: 3 credits

- GEG 1100 - Introduction to Physical Geography Credits: 3
- GEG 1910 - Global Water Concerns Credits: 3

### Geographic Information Science: 4 credits

- GIS 2250 - Geographic Information Systems Credits: 4

### Theory and Research Methods: 3 credits

- GEG 3100 - Geography Methods and Applications Credits: 3

## Geography Electives: 24 credits

Students are required to select a minimum of 24 credits of elective courses in Geography (GEG) or Geographic Information Science (GIS) from any of the core geographical knowledge areas listed below. Students may take courses from multiple areas towards the major. At least 22 credits must be from upper division courses (3000- and 4000-level). All courses must be passed with at least a "C-" to count towards the major.

## 1. Political Economy Approaches to Sustainability

Courses integrate physical and social sciences with planning and spatial analysis as a foundation for understanding problems and implementing solutions to improve the quality of the built environment, economies, and policies to promote sustainability and social justice.

- GEG 3300 - Indigenous Geographies of North America Credits: 3
- GEG 3360 - Economic Geography Credits: 3
- GEG 3700 - Urban Sustainability Credits: 3
- GEG 3720 - Global Sustainable Development Credits: 3
- GEG 4700 - Sustainability in Resource Management Credits: 3
- GEG 4720 - Planning for Climate Change Credits: 3

## 2. Geographic Information Science

Courses develop theoretical knowledge and technical training in Geographic Information Systems, remote sensing, cartography and database systems in order to define and solve problems in the management, conservation, and improvement of natural and human environments.

- GIS 1220 - Digital Earth: Geospatial Technologies Credits: 4
- GIS 3250 - Cartography Credits: 3
- GIS 3410 - Web Mapping Credits: 3
- GIS 4810 - GIS Programming Credits: 3
- GIS 4840 - Remote Sensing Credits: 3
- GIS 4850 - Spatial Modeling in Raster Credits: 4
- GIS 4860 - GIS Applications Credits: 4
- GIS 4870 - Spatial Databases Credits: 3
- GIS 3000-4999 Any UD Geographic Information Science course

## 3. Physical Geography

Courses examine natural processes and phenomena at the Earth surface, and their connections with human activities.

- GEG 3120 - Geomorphology Credits: 4
- GEG 3330 - Climatology Credits: 3
- GEG 3410 - Biogeography Credits: 3
- GEG 3420 - Soil Resources Credits: 3
- GEG 3422 - Methods of Soil Analysis and Sampling Credits: 1
- GEG 4150 - Hydrology (Surface Water) Credits: 4

## 4. Urban and Regional Processes and Planning

Courses provide students with the skills to address the social, economic, environmental, and spatial relationships that shape urban regions.

- GEG 3600 - Urban Geography Credits: 3
- GEG 3610 - Principles of Urban and Regional Planning Credits: 3
- GEG 3630 - Transportation Planning and Land Use Credits: 3
- GEG 4430 - Habitat Planning Credits: 3
- GEG 4610 - Advanced Urban and Regional Planning Credits: 3

## 5. Independent Research and Individualized Experience

This core area allows students to pursue individual interests via directed study or internship experiences, and to explore additional coursework in Geography, as opportunities arise.

- GEG 3920 - Directed Study in Geography Credits: 2-6  
\*Maximum of 3 credits can count towards the major.
- GEG 4950 - Internship in Geography Credits: 2-15  
\*Maximum of 3 credits can count towards the major.
- GEG 3000-4999 Any UD Geography Course

## Senior Experience: 3 credits

All Geography majors are required to take the Geography capstone course, which culminates the degree by providing an opportunity for hands-on geographic inquiry. This course must be passed with at least a "C-" to count towards the major.

- GEG 4975 - Geography Capstone Credits: 3

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Major Requirements	13 credits
Geography Electives	24 credits
Unrestricted Electives	43-47 credits
Senior Experience Course	3 credits
Total for Geography Major, B.A.	120 credits

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree.**

**Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Geography Minor

Geographers are among the government officials, community leaders, activists, researchers, and business people who use data-driven research to develop solutions to complex environmental, social, economic, and political problems. Geography is unique in bridging the social sciences and the natural sciences, and in providing geospatial analyses of environmental and socio-economic problems. The program provides a foundation for understanding problems and implementing equitable solutions to improve the quality of human-environment dynamics. The Geography Minor combines fundamental courses in natural and social systems and geospatial science with specialized electives within four disciplinary sub-fields – Political Economy Approaches to Sustainability, Geographic Information Science, Physical Geography, and Planning. Students have flexibility in choosing courses and pursuing their areas of interest. Students must complete each course with a grade of "C-" or better.

## Required Courses

Students are required to complete two courses, each from a different course area listed below. These courses provide an introduction to the main sub-fields of Geography, and methods of geographic inquiry. Two courses are required. (6-7 credits minimum). All courses must be passed with at least a "C-" to count towards the minor.

### Cultural Human Geography

- GEG 1000 - World Regional Geography Credits: 3
- GEG 1300 - Introduction to Human Geography Credits: 3
- GEG 1700 - Global Sustainability Credits: 3

### Physical Geography

- GEG 1100 - Introduction to Physical Geography Credits: 3
- GEG 1910 - Global Water Concerns Credits: 3

### Geographic Information Science

- GIS 2250 - Geographic Information Systems Credits: 4

### Theory and Methods of Geography

- GEG 3100 - Geography Methods and Applications Credits: 3

## Elective Courses

Students are required to select a minimum of 14-15 credits of elective courses in Geography (GEG) or Geographic Information Science (GIS) from any of the core geographical knowledge areas listed below. Students may take courses from multiple areas towards the minor. All courses must be passed with at least a "C-" to count towards the minor.

## 1. Political Economy Approaches to Sustainability

Courses integrate physical and social sciences with planning and spatial analysis as a foundation for understanding problems and implementing solutions to improve the quality of the built environment, economies, and policies to promote sustainability and social justice.

- GEG 3300 - Indigenous Geographies of North America Credits: 3
- GEG 3360 - Economic Geography Credits: 3
- GEG 3700 - Urban Sustainability Credits: 3
- GEG 3720 - Global Sustainable Development Credits: 3
- GEG 4700 - Sustainability in Resource Management Credits: 3
- GEG 4720 - Planning for Climate Change Credits: 3

## 2. Geographic Information Science

Courses develop theoretical knowledge and technical training in Geographic Information Systems, remote sensing, cartography and database systems in order to define and solve problems in the management, conservation, and improvement of natural and human environments.

- GIS 1220 - Digital Earth: Geospatial Technologies Credits: 4
- GIS 3250 - Cartography Credits: 3
- GIS 3410 - Web Mapping Credits: 3
- GIS 4810 - GIS Programming Credits: 3
- GIS 4840 - Remote Sensing Credits: 3
- GIS 4850 - Spatial Modeling in Raster Credits: 4
- GIS 4860 - GIS Applications Credits: 4
- GIS 4870 - Spatial Databases Credits: 3
- GIS 300-4999 Any UD Geographic Information Science class

## 3. Physical Geography

Courses examine natural processes and phenomena at the Earth surface, and their connections with human activities.

- GEG 3410 - Biogeography Credits: 3
- GEL 3120 - Geomorphology Credits: 4
- GEG 3330 - Climatology Credits: 3

- GEG 3420 - Soil Resources Credits: 3
- GEG 3422 - Methods of Soil Analysis and Sampling Credits: 1
- GEG 4150 - Hydrology (Surface Water) Credits: 4

## 4. Urban and Regional Processes and Planning

Courses provide students with the skills to address the social, economic, and spatial relationships that shape urban regions.

- GEG 3600 - Urban Geography Credits: 3
- GEG 3610 - Principles of Urban and Regional Planning Credits: 3
- GEG 3630 - Transportation Planning and Land Use Credits: 3
- GEG 4430 - Habitat Planning Credits: 3
- GEG 4610 - Advanced Urban and Regional Planning Credits: 3

## 5. Independent Research and Individualized Experience

This core area allows students to pursue individual interests via directed study or internship experiences, and to explore additional coursework in Geography, as opportunities arise.

- GEG 3920 - Directed Study in Geography Credits: 2-6  
\*Maximum of 3 credits can count towards the minor.
- GEG 4950 - Internship in Geography Credits: 2-15  
\*Maximum of 3 credits can count towards the minor.
- GEG 4975 - Geography Capstone Credits: 3
- GEG 3000-4999 Any UD Geography Course

## Summary of Geography Minor Requirements

Required Courses	6-7 credits
Geography Electives	14-15 credits
<b>Total for Geography Minor</b>	<b>20-22 credits</b>

## *Geology - See Applied Geology Major, B.S.*

Please see the Applied Geology Major, B.S.

## *Geology Minor*

Geology is a particularly integrative field because in order to understand Earth's physical processes, the vast network of

interconnections within the Earth system must also be considered. As a consequence, geology incorporates ideas and perspectives from many different fields such as chemistry, physics, biology, astronomy, water science, environmental science, mathematics, art, and more. These many connections make geology an appropriate and fascinating minor for students with any major. The geology minor offers a strong foundation for understanding how Earth has developed and changed through time. Students should consult with a department advisor to assist with program planning. Students must complete each course with a grade of "C-" or better.

## Core Courses

- GEL 1010 - Physical Geology Credits: 4
- GEL 1030 - Historical Geology Credits: 4
- GEL 3050 - Introduction to Mineralogy and Optical Mineralogy Credits: 4 \*
- GEL 4450 - Sedimentary Geology and Stratigraphy Credits: 4 \*
- GEL 4460 - Structural Geology and Mapping Credits: 4 \*

**Subtotal: 20 credits**

## Elective Courses

Students are required to select at least 4 semester hours from the list below.

- GEL 1020 - Geology of Colorado Credits: 3
- GEL 2530 - Introduction to Geologic Fieldwork Credits: 2 \*
- GEL 3120 - Geomorphology Credits: 4 \*
- GEL 3420 - Soil Resources Credits: 3 \*
- GEL 3440 - Energy and Mineral Resources Credits: 4 \*
- GEL 3510 - Advanced Geology of Red Rocks Park and Vicinity Credits: 1 \*
- GEL 3520 - Advanced Garden of the Gods-Front Range Geology Credits: 2 \*
- GEL 3530 - Field Geology: Variable Topics Credits: 3 \*
- GEL 3550 - Advanced Geology of the Great Sand Dunes National Monument Credits: 2 \*
- GEL 3920 - Directed Study in Geology Credits: 2-6 \*
- GEL 4050 - Igneous and Metamorphic Petrology Credits: 4 \*
- GEL 4150 - Hydrology (Surface Water) Credits: 4 \*
- GEL 4250 - Hydrogeology (Groundwater) Credits: 4 \*
- GEL 3540 - Geologic Hazards: Denver and Vicinity Credits: 2 \*
- ENV 3700 - Mountain Environments Credits: 3 \*
- ENV 4000 - Geologic Hazards Credits: 3 \*
- ENV 4010 - Environmental Hazards and GIS Credits: 3 \*

**Subtotal: 4 credits**

**Total for Minor: 24 credits**

*\* Course requires additional prerequisites or corequisites*

## Meteorology Major, B.S.

[Department of Earth and Atmospheric Sciences](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

## About the Program

The mission of the meteorology program is to provide students with an understanding of the chaotic atmosphere. Meteorology is an applied science that combines the fields of physics, chemistry, mathematics, and computer science into an application of understanding the atmosphere. The program exposes students to all these disciplines, while in parallel applying these concepts to mesoscale, synoptic, and global scale phenomena. Students will be prepared for careers in a wide range of atmospheric science vocations, as well as further studies in graduate school. Students may pick from two concentrations. The Professional Meteorology concentration prepares students for careers with the National Weather Service or other government jobs by fulfilling their requirements. The Applied Meteorology concentration prepares students for a variety of other less math-intensive careers in meteorology, including some private industry, broadcasting, or other science-related careers. An advisor can help students choose the best concentration to fit their goals.

## Student Outcomes

- Describe the general characteristics of the atmosphere, including physical processes and weather systems.
- Select and interpret appropriate weather and climate data, including in-situ and remotely sensed information, for different situations.
- Synthesize multiple types of weather and climate data to formulate short, medium, and long-range weather forecasts.
- Organize, analyze, and prepare written scientific reports.
- Create and deliver scientific presentations using multimedia techniques.
- Apply mathematical and statistical techniques to the analysis and interpretation of atmospheric dynamics, thermodynamics, and radiation processes.
- Apply scientific computing skills using appropriate software and structured programming.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of D or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** Students may fulfill this requirement with MTH 1410 - Calculus I, or by taking any of the prerequisite courses that lead to MTH 1410
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** Students may fulfill this requirement by taking courses required for the meteorology major such as MTR 1400 - Weather and Climate and the physics courses required for the major.
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*)

*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

## Meteorology Core Required Courses: 26 credits

Students in both concentrations must take the following courses.

- MTR 1400 - Weather and Climate Credits: 3
- MTR 2020 - Weather and Climate Lab for Scientists Credits: 1
- MTR 2410 - Weather Observing Systems Credits: 3
- MTR 3000 - Weather Discussion Credits: 1
- MTR 3040 - Computer Programming for Meteorologists Credits: 3
- MTR 3330 - Climatology Credits: 3
- MTR 3400 - Synoptic Meteorology Credits: 3
- MTR 3410 - Weather Analysis Techniques Credits: 3
- MTR 3420 - Radar and Satellite Meteorology Credits: 3
- MTR 3430 - Atmospheric Thermodynamics Credits: 3

Select one of the following two concentrations:

## Professional Meteorology Concentration: 43 credits

- MTR 3440 - Physical Meteorology Credits: 3
- MTR 3450 - Dynamic Meteorology Credits: 3
- MTR 4400 - Advanced Synoptic Meteorology Credits: 4
- MTR 4500 - Mesometeorology Credits: 3
- CHE 1800 - General Chemistry I Credits: 4
- PHY 2311 - General Physics I Credits: 4
- PHY 2321 - General Physics I Laboratory Credits: 1
- PHY 2341 - General Physics II Laboratory Credits: 1
- MTH 1410 - Calculus I Credits: 4
- MTH 2410 - Calculus II Credits: 4
- MTH 2420 - Calculus III Credits: 4
- MTH 3210 - Probability and Statistics Credits: 4
- MTH 3420 - Differential Equations Credits: 4

Note: These math course requirements get students close to completion of a math minor. Should students choose to declare and complete an optional math minor, choosing one of the following courses relevant to meteorology should complete the requirements: CS 1050 - Computer Science 1, MTH 2520 - R Programming, MTH 2540 - Scientific Computing with Python, MTH 3130 - Applied Methods in Linear Algebra, MTH 3220 - Statistical Methods, MTH 3270 - Data Science.

## Professional Meteorology Concentration Electives: 3 credits



Students choose a minimum of 3 credits from the list below:

- MTR 2000-4999 (any MTR prefix course in the 2000-level or higher may count towards these elective credits)
- GIS 2250 - Geographic Information Systems Credits: 4
- CS 1050 - Computer Science 1 Credits: 4
- MTH 2520 - R Programming Credits: 4
- MTH 2540 - Scientific Computing with Python Credits: 4
- MTH 3130 - Applied Methods in Linear Algebra Credits: 4
- MTH 3220 - Statistical Methods Credits: 4
- MTH 3270 - Data Science Credits: 4

## Applied Meteorology Concentration: 16 credits

- MTH 1410 - Calculus I **Credits: 4**
- MTH 3210 - Probability and Statistics **Credits: 4**
- MTR 3500 - Hazardous Weather **Credits: 3**  
or
- MTR 4500 - Mesometeorology **Credits: 3**
- PHY 2010 - College Physics I **Credits: 4**  
or
- PHY 2311 - General Physics I **Credits: 4**
- PHY 2030 - College Physics I Laboratory **Credits: 1**  
or
- PHY 2321 - General Physics I Laboratory **Credits: 1**

## Applied Meteorology Concentration Electives: 6 credits

Students choose a minimum of 6 credits from the list below:

- MTR 2000-4999 (any MTR prefix course in the 2000-level or higher may count towards these elective credits)
- ENV 3700 - Mountain Environments Credits: 3
- ENV 4470 - Snow Hydrology Credits: 3
- GEG 3410 - Biogeography Credits: 3
- GEL 4150 - Hydrology (Surface Water) Credits: 4
- GIS 2250 - Geographic Information Systems Credits: 4
- CS 1050 - Computer Science 1 Credits: 4
- MTH 2520 - R Programming Credits: 4
- MTH 2540 - Scientific Computing with Python Credits: 4
- GIS 4840 - Remote Sensing Credits: 3

## Senior Experience: 3 credits

- MTR 4600 - Meteorology Research Seminar Credits: 3

## Summary of Requirements

<u>Professional Meteorology Concentration</u>	
General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Meteorology Required Core Courses	26 credits
Concentration Required Courses	43 credits
Concentration Electives	3 credits
Senior Experience	3 credits
Unrestricted Electives	9-21 credits
<b>Total for the Meteorology Major B.S. with Professional Meteorology Concentration</b>	<b>120 credits</b>
<u>Applied Meteorology Concentration</u>	
General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Meteorology Required Core Courses	26 credits
Concentration Required Courses	16 credits
Concentration Electives	6 credits
Senior Experience	3 credits
Unrestricted Electives	33-45 credits
<b>Total for the Meteorology Major B.S. with Applied Meteorology Concentration</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Meteorology Minor*

[College of Letters, Arts and Sciences](#)

[Department of Earth and Atmospheric Sciences](#)

Meteorology is the study of weather and climate. Meteorologists use their understanding of the science of the atmosphere to forecast the

weather. The meteorology program aims to help students understand the complex nature of the atmosphere and uses atmospheric science to explore various weather phenomena. Denver, with its diverse weather, is an interesting place to study meteorology. From severe weather like hail and tornadoes to predicting heavy snowfall and examining events like Chinook winds and fire weather, there is much to explore in a variety of courses. Several classes also focus on how a changing climate can impact weather patterns. Students in the minor complete three required courses, then choose from a variety of elective courses to reach 19 credits total.

A grade of "D" or better is required for courses in this program to count toward the minor.

## Required Courses: 7 credits

- MTR 1400 - Weather and Climate Credits: 3
- MTR 2020 - Weather and Climate Lab for Scientists Credits: 1
- MTR 3400 - Synoptic Meteorology Credits: 3

## Approved Meteorology Electives: 12 credits

Students may take any MTR prefix course as an approved meteorology minor elective. Suggested courses may include, but are not limited to, the following:

- MTR 1600 - Global Climate Change Credits: 3
- MTR 2050 - Community Climate Initiatives Credits: 2
- MTR 2410 - Weather Observing Systems Credits: 3
- MTR 3000 - Weather Discussion Credits: 1
- MTR 3040 - Computer Programming for Meteorologists Credits: 3
- MTR 3100 - Air Pollution Credits: 3
- ENV 3200 - Climate Change and Ecosystems Credits: 3
- MTR 3330 - Climatology Credits: 3
- MTR 3340 - Climate Change Science Credits: 3
- MTR 3410 - Weather Analysis Techniques Credits: 3
- MTR 3420 - Radar and Satellite Meteorology Credits: 3
- MTR 3430 - Atmospheric Thermodynamics Credits: 3
- MTR 3440 - Physical Meteorology Credits: 3
- MTR 3450 - Dynamic Meteorology Credits: 3
- MTR 3500 - Hazardous Weather Credits: 3
- MTR 3710 - Meteorology Internship Credits: 1-6
- MTR 3777 - Field Observations of Severe Weather Credits: 3
- MTR 3920 - Directed Study in Meteorology Credits: 1-5
- MTR 4210 - Forecasting Laboratory Credits: 1
- MTR 4400 - Advanced Synoptic Meteorology Credits: 4
- MTR 4500 - Mesometeorology Credits: 3
- MTR 4600 - Meteorology Research Seminar Credits: 3

**Total for Meteorology Minor: 19 credits**

## *Sustainability Studies Minor*

The Sustainability Studies Minor offers a comprehensive understanding of global sustainability challenges, providing students with the knowledge and skills to enhance career opportunities in both the private and public sectors. Students gain an analytical and conceptual framework for sustainability and practical tools for professional practice, exploring indicators for measuring development and identifying barriers to sustainability transformations. The curriculum covers resources, energy, and sustainable development, taught by faculty from the Department of Earth and Atmospheric Sciences. This interdisciplinary minor can complement fields such as business, economics, education, engineering, environmental science, management, political science, sociology, and tourism. It consists of 18 total credits, including 12 required credits covering ecological, economic, and social aspects, as well as 6 elective credits. A grade of "C-" or better is required for each course.

## Required Introductory Course

Students are required to take an introductory course that provides a foundation in sustainability studies (3 credits).

- GEG 1700 - Global Sustainability Credits: 3

## Ecological Dimension

Students choose one of the following courses on the ecological dimension of sustainability (3 credits)

- GEG 3410 - Biogeography Credits: 3
- GEG 4430 - Habitat Planning Credits: 3

## Economic Dimension

Students choose one of the following courses on the economic dimension of sustainability (3 credits)

- GEG 3360 - Economic Geography Credits: 3
- GEG 3720 - Global Sustainable Development Credits: 3
- GEG 4700 - Sustainability in Resource Management Credits: 3

## Social Dimension

Students choose one of the following courses on the social dimension of sustainability (3 credits)

- GEG 2300 - Geographic Analysis of Social Issues Credits: 3
- GEG 2700 - Geographies of Environmental Justice Credits: 3

- GEG 3700 - Urban Sustainability Credits: 3
- Required Courses Subtotal: 12 credits**

## Elective Courses

Students are required to select at least 6 semester hours from the list below.

Students are required to select at least 6 semester hours from the list below.

Students may take a maximum of one of the following introductory courses for the minor (3 credits).

- ENV 1200 - Introduction to Environmental Science **Credits: 3**
- GEG 1300 - Introduction to Human Geography **Credits: 3**
- GEG 1910 - Global Water Concerns **Credits: 3**
- MTR 1600 - Global Climate Change **Credits: 3**  
Students should take one or two of the following elective courses (3-6 credits)
- GEG 2300 - Geographic Analysis of Social Issues **Credits: 3**
- GEG 2700 - Geographies of Environmental Justice **Credits: 3**
- GEG 3300 - Indigenous Geographies of North America **Credits: 3**
- GEG 3360 - Economic Geography **Credits: 3**
- GEG 3410 - Biogeography **Credits: 3**
- GEG 3440 - Energy and Mineral Resources **Credits: 4**
- GEG 3600 - Urban Geography **Credits: 3**
- GEG 3610 - Principles of Urban and Regional Planning **Credits: 3**
- GEG 3630 - Transportation Planning and Land Use **Credits: 3**
- GEG 3700 - Urban Sustainability **Credits: 3**
- GEG 3720 - Global Sustainable Development **Credits: 3**
- GEG 3920 - Directed Study in Geography **Credits: 2-6**
- GEG 4430 - Habitat Planning **Credits: 3**
- GEG 4610 - Advanced Urban and Regional Planning **Credits: 3**
- GEG 4700 - Sustainability in Resource Management **Credits: 3**
- GEG 4720 - Planning for Climate Change **Credits: 3**
- GEG 4950 - Internship in Geography **Credits: 2-15**
- GEG 4970 - Sustainability Practice Seminar **Credits: 3**
- GEG 4975 - Geography Capstone **Credits: 3**
- GIS 2250 - Geographic Information Systems **Credits: 4**
- GIS 4860 - GIS Applications **Credits: 4**
- ENV 3400 - Water Resources **Credits: 3**
- ENV 3620 - Resource Use and the Environment **Credits: 3**
- ENV 4960 - Global Environmental Challenges **Credits: 3**
- HLDR 3010 - Sustainable Hospitality and Tourism **Credits: 3**

- RTM 4000 - Destination Development **Credits: 3**
- SWK 3070 - Environmental Justice in Social Work **Credits: 3**

**Elective Subtotal: 6 credits**

**Total for Minor: 18 credits**

## Department of English

Location: King Center, 4th floor

Phone: 303-615-1800

E-Mail:

General and Advising Questions: [msudenver-English@msudenver.edu](mailto:msudenver-English@msudenver.edu)

English Transfer Courses: [English\\_Transfers@msudenver.edu](mailto:English_Transfers@msudenver.edu)

Website: [English Department Website](#)

### *Creative Writing Minor*

Students in the creative writing minor study and write poetry, fiction, drama, and/or nonfiction in workshops and studios. Our unique program is structured around choice; students work with faculty advisors to develop distinct pathways to graduation, taking specific writing and educational goals into account. Workshop is at the heart of the program. Creative Writing brings together individualized attention from professors and peer collaboration within our strong community. Students also may participate in the publication of *The MSU Roadrunner Review*, one of the few biannual undergraduate creative writing journals in the country. Required courses in the broader English department expose students to a variety of representative texts and approaches to critical reading. Coursework built around imaginative and purposeful thinking, writing, and reading leads students to deeper examinations of their lives and communities. Our program includes instruction on the marketing of finished manuscripts; students and alumni have an excellent publication record. Student accomplishments range from small press publications to recognition as a National Book Award finalist. Alumni have gone on to study in MFA programs, and many use their transferable skills in fields such as the arts, business, medicine, and law. *To receive credit for any ENG prefix courses, the student must receive a grade of "C-" or better.*

### Introduction to Creative Writing (3 credits)

- ENG 2500 - Introduction to Creative Writing Credits: 3

### Workshops, Bootcamps, Journal (8 credits)

Choose 2-3 courses:

- ENG 3521 - Poetry Writing Workshop Credits: 4
- ENG 3522 - Fiction Writing Workshop Credits: 4
- ENG 3523 - Drama Writing Workshop Credits: 4
- ENG 3524 - Creative Nonfiction Writing Workshop Credits: 4
- ENG 3800 - Creative Writing Bootcamp Credits: 1
- ENG 3810 - Creative Writing Journal Credits: 4

## Studio or Internship (8 credits)

Choose 2 courses:

- ENG 3821 - Poetry Studio Credits: 4
- ENG 3822 - Speculative Fiction Studio Credits: 4
- ENG 3823 - Screenwriting Studio Credits: 4
- ENG 3824 - Short Story Studio Credits: 4
- ENG 3825 - Adaptation Studio Credits: 4
- ENG 3826 - Novel Studio Credits: 4
- ENG 3827 - Micro Narrative Studio Credits: 4
- ENG 3828 - Video Game Writing Studio Credits: 4

Total Credits = 19

## *Disability Studies Minor*

Disability Studies (DS) is an interdisciplinary field that studies the political, social, and cultural aspects of disability.

MSU Denver has many well-established programs that treat disability from an interventionist perspective, such as Social Work, Human Services, and Nursing. In contrast to fields that focus on treating disability, DS focuses disability as an identity. It treats disability history and culture as rich and often different from the history and culture of non-disabled people.

A DS approach differs from an interventionist approach in several key ways. While an interventionist approach typically understands disability as a problem that impacts primarily the disabled person and relies on the expertise of non-disabled people to diagnose and treat disability, a DS approach sees disability as a social issue that affects everyone and understands disabled people themselves as authorities. Interventionist approaches aim to eliminate disability and accommodate it on a case-by-case basis while DS approaches see disability as a form of difference that is normal, and therefore the aim is to build a more accessible world.

Because of this difference in approach, DS can complement and enhance interventionist programs without duplicating or competing with them.

The minor we propose requires students to take 18 credits of courses, including one required course and five electives. The courses are from ENG, GWS, HIS, JMP, MDL, MUS, SED, SLHS, and SWK.

Minor Learning Objectives (to be included in the minor, a course needs to engage with 3+)

1. Students will explore disability identity, culture, and pride, including physical, intellectual, and emotional disabilities, and understand that disability is not a monolithic identity but a broad spectrum of identities.
2. Students will explore how various approaches/models of disability and ableism shape how disability is defined and experienced.
3. Students will explore disability and accessibility as critical components of diversity, equity, and inclusion frameworks.
4. Students will analyze and critique existing inclusive pedagogical practices and apply them to students with disabilities.
5. Students will describe intersections of disability with other forms of oppression, including racism, sexism, heterosexism, and classism.
6. Students will evaluate how historical and current policies, values, and biases have contributed to current issues for individuals with disabilities, including the ways in which disability has been stigmatized, segregated, and pathologized.
7. Discuss the ongoing challenges and opportunities in the struggle for Disability Justice, and imagine a vision for a more inclusive, equitable, and just world for disabled people.
8. Students will differentiate models of disability, including medical, social, and cultural, and provide examples of cultural institutions that further each.
9. Students will connect Disability Studies with Critical Study and Theory to discuss institutional power, individual positionality.

## Required Core: 3 Credits

Select one course. Course must be passed with a grade of "C" or better.

- ENG 2513 - Disability Rhetorics **Credits: 3**
- SLHS 3000 - Foundations of Disability Studies through Media **Credits: 3**

## Electives: 15 credits

Select 15 credits from the below courses. Courses must be passed with a grade of C or better. Some sections of ENG 3980 and ENG 4850 will be accepted, with faculty approval.

- ASL 1010 - American Sign Language I Credits: 3
- ASL 1020 - American Sign Language II Credits: 3
- ASL 1030 - American Sign Language III Credits: 3
- ENG 2513 - Disability Rhetorics Credits: 3
- ENG 3980 - Internship in English Credits: 1-15

- ENG 4850 - Undergraduate Research in English Credits: 1-3
- GWS 3230 - Bodies and Embodiment Credits: 3
- GWS 3270 - Beauty Cultures Credits: 3
- GWS 4240 - Gender and Violence Credits: 3
- HIS 3463 - Getting Schooled: A History of American Education Credits: 3
- JMP 1450 - Media Literacy Credits: 3
- JMP 3630 - Producing Digital Documents Credits: 3
- MUS 3390 - The Inclusive Music Classroom Credits: 2
- SED 3100 - Communication Supports for Inclusive Classrooms Credits: 3
- SED 3300 - Introduction to Responsive Pedagogy Credits: 3
- SED 4100 - Including Students with Significant Support Needs Credits: 3
- SLHS 3000 - Foundations of Disability Studies through Media Credits: 3
- SWK 3120 - Unraveling Inequalities in Social Work Practice Credits: 3

**Program Total: 18 credits**

## ***English Major, B.A.***

[Department of English](#)

[College of Letters, Arts  
and Sciences](#)

Available Program Format(s): [Online](#),  
[In-Person](#), [Hybrid](#)

### **About the Program**

For students majoring in English, the program provides a foundation in literature, language, writing, visual literacy, and teaching. Thus students' command of written language, their ability to analyze concepts, and their broad understanding of human nature and social realities will enable them to be competitive in a variety of fields, including education, business, and civil service or, with appropriate graduate work, in professions such as law and higher education.

The English Major requires concentration in one of the following:

- creative writing
- literature, film and media studies
- professional writing and rhetoric
- secondary school teaching, leading to licensure

Students who are considering a major in the English Department are expected to consult with faculty for advising. Students in elementary or secondary licensure programs should consult with advisors in the School of Education as well.

### **Student Outcomes**

With completion of any of the concentrations in the English Major, students should be able to do the following:

- Produce polished writing in a variety of genres appropriate to audience and purpose
- Understand how language is used, and the factors accounting for variation in language use
- Identify and use appropriate methods in their research, assess their sources, and cite all sources professionally
- Analyze texts appropriate to the discipline, with an understanding of the ways in which texts can reflect or shape historical and cultural contexts.
- Apply appropriate disciplinary criticism or theory
- Examine diverse perspectives among the world-views, power structures, and experiences of individuals, groups, communities, and/or cultures, in historical and contemporary contexts, specifically through the lenses of race and ethnicity, global perspectives, and/or sexual and gender identities.

## **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## **Program Requirements**

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- To receive major or minor credit for any ENG or LING prefix course or courses in the teacher licensure program, the student must receive a grade of "C-" or better.

## **General Studies Requirements: 33 credits**

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)

- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## English Major Core: 12-14 credits

Students in all concentrations, with the exception of the Secondary English Teacher Licensure Concentration, take the following courses. Note: The English Major, B.A. with Secondary English Teacher Licensure Concentration core is listed under that specific concentration.

Both of the following courses (2 credits):

- ENG 2001 - Introduction to English Careers **Credits: 1**
- ENG 3001 - English Careers **Credits: 1**

Select three of the following (10-12 credits total).

Note: Students choosing a concentration in Creative Writing must take ENG 2500; students with a concentration in Literature, Film and Media Studies must take ENG 2100 and ENG 2860; and students with a concentration in Professional Writing and Rhetoric must take ENG 3525.

- ENG 2100 - Introduction to Literary Studies **Credits: 4**
- ENG 2500 - Introduction to Creative Writing **Credits: 3**
- ENG 2860 - Introduction to Film and Media Studies **Credits: 4**
- ENG 3525 - Scholarly Writing **Credits: 3**
- LING 3011 - Analyzing English **Credits: 4**

## Creative Writing Concentration: 30-32 credits

The Creative Writing concentration is comprised of courses through which students develop advanced writing skills in genres such as fiction, poetry, creative nonfiction, drama, and screenwriting. Our unique program is structured around choice; students work with faculty advisors to develop distinct pathways to graduation, taking specific writing and educational goals into account. Workshop is at

the heart of the program; Creative Writing brings together individualized attention from professors and peer collaboration within our strong community. Students also may participate in the publication of The MSU Roadrunner Review, one of the few biannual undergraduate creative writing journals in the country. Required courses in the broader English department expose students to a variety of representative texts and approaches to critical reading. Coursework built around imaginative and purposeful thinking, writing, and reading leads students to deeper examinations of their lives and communities. Our program includes instruction on the marketing of finished manuscripts; students and alumni have an excellent publication record. Student accomplishments range from small press publications to recognition as a National Book Award finalist. A number of alumni have gone on to study in MFA and PhD programs. Many students use their transferable skills, including the ability to analyze and critique texts, communicate persuasively and effectively, understand other points of view, and build effective, often research based arguments, in a variety of fields beyond the arts, including education, business, medicine, and law.

With completion of the Creative Writing concentration in the English Major, students should be able to do the following:

- Produce effective, revised writing with consideration of audience and purpose.
- Analyze and critically respond to texts: creative, craft-based, or cultural.
- Demonstrate advanced writing skills in a specific genre, with attention to form, language, and devices.

## Required Courses

In satisfying the requirements of the concentration, students may not count courses taken to fulfill the English BA Core requirements. Additionally, a course may be used to satisfy only one requirement.

Students must complete a minimum of 30 credits total in the concentration.

### Literature or Film and Media Studies: 3-4 credits

Select one course at the 3000-level or above, from the following courses:

- ENG 3100 - Chaucer, Shakespeare, Milton Credits: 4
- ENG 3111 - Studies in Early Anglophone Literature Credits: 4
- ENG 3112 - Studies in Early World Literature Credits: 4
- ENG 3113 - Studies in Later Anglophone Literature Credits: 4
- ENG 3114 - Studies in Later World Literature Credits: 4
- ENG 3120 - Literature and Film: Variable Topics Credits: 4
- ENG 3130 - Literary Genre: Novel Credits: 4
- ENG 3140 - Literary Genre: Poetry Credits: 4
- ENG 3160 - Literary Genre: Drama Credits: 4

- ENG 3180 - Literary Genre: Narrative Credits: 4
- ENG 3240 - African American Literature Credits: 4
- ENG 3242 - Contemporary Native American Literature Credits: 4
- ENG 3250 - Black Women Writers Credits: 3
- ENG 3350 - Essential Shakespeare Credits: 4
- ENG 3360 - LGBTQ+ Literature Credits: 4
- ENG 3430 - Classical Mythology Credits: 4
- ENG 3440 - Myth and Literature Credits: 4
- ENG 3465 - Anti-Racist Children's Literature Credits: 3
- ENG 3470 - Young Adult Literature Credits: 4
- ENG 3475 - Literature of the Oppressed Credits: 4
- ENG 3480 - The Chicano Novel Credits: 3
- ENG 3615 - Theory! Credits: 4
- ENG 3621 - Gender Theory Credits: 4
- ENG 3710 - Film History Credits: 4
- ENG 3720 - Film and Media Studies Topics: Variable Topic Credits: 4
- ENG 3722 - Native American Cinema Credits: 4
- ENG 3725 - Studies in Cinema: Gender in Mainstream American Film Credits: 4
- ENG 3750 - Cinema Genre: Variable Topics Credits: 4
- ENG 4110 - Advanced Studies in Literature: Variable Topics Credits: 4
- ENG 4114 - Multi-Ethnic Women's Literature Credits: 4
- ENG 4115 - Hip-Hop and Literature Credits: 4
- ENG 4116 - Harlem Renaissance Credits: 4
- ENG 4130 - Writers and Their Worlds Credits: 4
- ENG 4630 - Cinema Director: Variable Topics Credits: 4

## Writing Workshops: 8 credits

Select two of the following courses:

- ENG 3521 - Poetry Writing Workshop Credits: 4
- ENG 3522 - Fiction Writing Workshop Credits: 4
- ENG 3523 - Drama Writing Workshop Credits: 4
- ENG 3524 - Creative Nonfiction Writing Workshop Credits: 4

## Writing Studios: 8 credits

Select two of the following courses:

- ENG 3821 - Poetry Studio Credits: 4
- ENG 3822 - Speculative Fiction Studio Credits: 4
- ENG 3823 - Screenwriting Studio Credits: 4
- ENG 3824 - Short Story Studio Credits: 4
- ENG 3825 - Adaptation Studio Credits: 4
- ENG 3826 - Novel Studio Credits: 4
- ENG 3827 - Micro Narrative Studio Credits: 4
- ENG 3828 - Video Game Writing Studio Credits: 4

## Workshop, Studio, Magazine, Bootcamp, or Internship: 4 credits

Select one or more of the following, for a total of 4 credits:

- ENG 3521 - Poetry Writing Workshop Credits: 4
- ENG 3522 - Fiction Writing Workshop Credits: 4
- ENG 3523 - Drama Writing Workshop Credits: 4
- ENG 3524 - Creative Nonfiction Writing Workshop Credits: 4
- ENG 3800 - Creative Writing Bootcamp Credits: 1
- ENG 3810 - Creative Writing Journal Credits: 4
- ENG 3821 - Poetry Studio Credits: 4
- ENG 3822 - Speculative Fiction Studio Credits: 4
- ENG 3823 - Screenwriting Studio Credits: 4
- ENG 3824 - Short Story Studio Credits: 4
- ENG 3825 - Adaptation Studio Credits: 4
- ENG 3826 - Novel Studio Credits: 4
- ENG 3827 - Micro Narrative Studio Credits: 4
- ENG 3828 - Video Game Writing Studio Credits: 4
- ENG 3980 - Internship in English Credits: 1-15

## Electives: 3-4 credits

- Select any 2000-level or above ENG course: ENG 2101-4999

## Senior Experience: 4 credits

- ENG 4520 - Creative Writing Capstone Credits: 4

## Literature, Film and Media Studies Concentration: 31-32 credits

The Literature, Film and Media Studies concentration (LFMS) encompasses a range of American, British, and World literatures and film media, through which students learn to critically engage with the artistic, narrative, and persuasive techniques of written and visual media and examine how such works record and influence the complex interactions between people and cultures in history. With grounding in a rich and diverse array of cultural production from different times and places, students develop both broader cultural knowledge and facility with understanding and navigating multiple points of view. Because of their command of written language and visual literacy, and their ability to deal with ideas and concepts as well as facts, English majors concentrating in LFMS are prepared to pursue graduate work in such areas as writing, advanced studies in the humanities, library sciences, or law, and are valued in many fields. Either alone or paired with other specialized minors, licensures or certificates, the LFMS degree can prepare students for careers in an array of professional fields, including teaching, academe, law, politics, business, health, non-profits, journalism, and entertainment.

With completion of the Literature, Film and Media Studies concentration in the English Major, students should be able to do the following:

- Interpret and analyze literary, filmic, and digital texts, with an understanding of contexts as well as formal and stylistic elements.
- Apply appropriate criticism, theory, concepts, and/or terminology to readings, interpretations, or analyses of literary, filmic, and/or digital texts.
- Create an original text or project that demonstrates understanding of disciplinary content and relevant skills.

## Required Courses

In satisfying the requirements of the concentration, students may not count courses taken to fulfill the English BA Core requirements. Additionally, a course may be used to satisfy only one requirement.

Students must complete a minimum of 30 credits total in the concentration.

### Theory of Literature and Film: 4 credits

- ENG 3615 - Theory! Credits: 4

### Literature, Film and Media Studies: 20 credits

Students take five or more courses for a total of 20 credit hours in Literature, Film and Media Studies, 3000-level or above.

- ENG 3100 - Chaucer, Shakespeare, Milton Credits: 4
- ENG 3111 - Studies in Early Anglophone Literature Credits: 4
- ENG 3112 - Studies in Early World Literature Credits: 4
- ENG 3113 - Studies in Later Anglophone Literature Credits: 4
- ENG 3114 - Studies in Later World Literature Credits: 4
- ENG 3120 - Literature and Film: Variable Topics Credits: 4
- ENG 3130 - Literary Genre: Novel Credits: 4
- ENG 3140 - Literary Genre: Poetry Credits: 4
- ENG 3160 - Literary Genre: Drama Credits: 4
- ENG 3180 - Literary Genre: Narrative Credits: 4
- ENG 3240 - African American Literature Credits: 4
- ENG 3242 - Contemporary Native American Literature Credits: 4
- ENG 3250 - Black Women Writers Credits: 3
- ENG 3350 - Essential Shakespeare Credits: 4
- ENG 3360 - LGBTQ+ Literature Credits: 4
- ENG 3430 - Classical Mythology Credits: 4
- ENG 3440 - Myth and Literature Credits: 4
- ENG 3465 - Anti-Racist Children's Literature Credits: 3
- ENG 3470 - Young Adult Literature Credits: 4

- ENG 3475 - Literature of the Oppressed Credits: 4
- ENG 3480 - The Chicano Novel Credits: 3
- ENG 3621 - Gender Theory Credits: 4
- ENG 3710 - Film History Credits: 4
- ENG 3720 - Film and Media Studies Topics: Variable Topic Credits: 4
- ENG 3722 - Native American Cinema Credits: 4
- ENG 3725 - Studies in Cinema: Gender in Mainstream American Film Credits: 4
- ENG 3750 - Cinema Genre: Variable Topics Credits: 4
- ENG 4110 - Advanced Studies in Literature: Variable Topics Credits: 4
- ENG 4114 - Multi-Ethnic Women's Literature Credits: 4
- ENG 4115 - Hip-Hop and Literature Credits: 4
- ENG 4116 - Harlem Renaissance Credits: 4
- ENG 4130 - Writers and Their Worlds Credits: 4
- ENG 4630 - Cinema Director: Variable Topics Credits: 4
- ENG 4633 - Spike Lee Credits: 4

## Electives: 3-4 credits

Take one or more courses for a minimum of 3 credits, any ENG 2000-level or above.

Note: students cannot count ENG 2810 or ENG 2850 toward this requirement.

## Senior Experience: 4 credits

- ENG 4500 - Senior Project Credits: 4

## Professional Writing and Rhetoric Concentration: 25-26 credits

The Professional Writing and Rhetoric (PWR) concentration of the English B. A. provides a program of study that focuses on how language and writing are connected to identity and shape actions and attitudes. Students learn to analyze and understand others' perspectives and acquire the skills to broaden and effectively articulate and defend their own perspectives. Students choose from classes that study professional writing; topics in current rhetoric, like disability rhetorics, environmental rhetorics or the language of race; contemporary and classical rhetorical and composition theory; and topics such as visual literacy, social media, or the history of authorship. This concentration provides students the opportunity to hone analysis and writing skills, as well as to conduct original, undergraduate research, to compose and interpret texts using multiple modes, to learn to tutor or teach writing, and to become effective, nuanced communicators.

With completion of the Professional Writing and Rhetoric concentration in the English Major, students should be able to do the following:



- Interpret and explain major theories of PWR as an intellectual field and the relationship of rhetoric to language and visual literacies.
- Analyze rhetorical situations, identify arguments, and read texts rhetorically.
- Generate persuasive written discourse with a proficiency in language and documentation style specific to the task with attention to audiences and genres.
- Conduct research with attention to ethical practices.
- Analyze the ways that identity - including but not limited to language, race, socio-economic class, religion, sex, and gender - both constructs and is constructed by rhetoric.

## Required Courses

In satisfying the requirements of the concentration, students may not count courses taken to fulfill the English BA Core requirements. Additionally, a course may be used to satisfy only one requirement.

Students must take at least 15 credits at 3000-level or above. Total credit hours completed, including English core and concentration, must be at least 40.

## Professional Writing and Rhetoric: 18 credits

Complete at least 18 credit hours total from the following courses:

- ENG 2505 - Rhetoric of War Credits: 3
- ENG 2510 - Introduction to Rhetoric and Composition Credits: 4
- ENG 2512 - Social Media and Power Credits: 3
- ENG 2513 - Disability Rhetorics Credits: 3
- ENG 2580 - Climate Change Advocacy Writing Credits: 3
- ENG 3501 - Studies in Rhetoric and Writing: Style Credits: 4
- ENG 3503 - Rhetoric and Visual Literacy Credits: 4
- ENG 3505 - Concepts of Authorship Credits: 4
- ENG 3506 - Introduction to Editing Credits: 4
- ENG 3507 - Writing Reviews and Criticism Credits: 4
- ENG 3508 - Rhetoric of Humor: Parody, Satire, and Comedy Credits: 4
- ENG 3510 - Composition Studies: Theories and Practice Credits: 4
- ENG 3513 - Race Talk Credits: 3
- ENG 3520 - Research Methods in Rhetoric and Composition Credits: 4
- ENG 3526 - Writing in the Sciences Credits: 3
- ENG 3527 - Professional Writing Credits: 3
- ENG 3535 - Essentials of Grant Writing Credits: 4
- ENG 3672 - Research in Writing Centers Credits: 1
- ENG 3673 - Future Applications of Writing Tutoring Skills Credits: 1

## Additional Electives: 3-4 credits

- Select at least one ENG or LING course, minimum 3 credits, 2000-level or above.

## Senior Experience: 4 credits

- ENG 4540 - Professional Writing and Rhetoric Capstone Credits: 4

## Secondary English Teacher Licensure Concentration:

Please visit the English Major, B.A. with Secondary English Teacher Licensure Concentration program page for the details of this concentration

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Major Core Requirements	12-14 credits
Selected Concentration	26-32 credits
Senior Experience	counted in concentration
Unrestricted Electives	38-62 credits
<b>Total for the English Major, B.A.</b>	<b>120 credits</b>
<i>Note: Secondary Education Licensure Totals on that program page</i>	

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## English Major, B.A. with Secondary English Teacher Licensure Concentration

[Department of English](#)  
[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#), [Hybrid](#)

## About the Program

Candidates seeking an undergraduate degree and licensure in English will major in English with a concentration in Secondary English Teacher Licensure. This concentration, offered in conjunction with the School of Education, prepares degree seeking, future secondary teachers of English to understand and teach the diverse subject matter required for licensure. This program equips students with a wide variety of language principles and skills; practical experience in developing and teaching the processes of writing; sound knowledge of approaches to literature and literary genres; periods and authors (including a special focus on young adult literature); and an understanding of communication and media as used in English studies. In addition to meeting specified state and departmental requirements, this program offers students the opportunity to develop further specialization in writing, language, or literature to complement the major. The major provides student with a background in the Colorado Academic Standards for English and prepares them to pass the required content exam for licensure.

## Student Outcomes

### Secondary Education

- Students in Secondary/K-12 Education teacher licensure programs will demonstrate awareness of multiculturalism, diversity, equity, and inclusion.
- Students in Secondary/K-12 Education teacher licensure program will gain readiness and eligibility for student teaching
- Teacher candidates will successfully complete student teaching

### English Major B.A.

- Students can produce polished writing in a variety of genres appropriate to audience and purpose
- Understand how language is used, and the factors accounting for variation in language use
- Students identify and use appropriate methods in their research, assess their sources, and cite all sources professionally
- A student can analyze texts appropriate to the discipline, with an understanding of the ways in which texts can reflect or shape historical and cultural contexts.
- Students can apply appropriate disciplinary criticism or theory
- Examine diverse perspectives among the world-views, power structures, and experiences of individuals, groups, communities, and/or cultures, in historical and contemporary contexts, specifically through the lenses of race and ethnicity, global perspectives, and/or sexual and gender identities.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## English Major: 44-45 credits

Students must complete a minimum of 44 credit hours toward the English Major. Students who meet course requirements (via transfer

course equivalents, for instance) without meeting the credit hour total should consult with an advisor on appropriate elective course options.

## Literature Core: 24 credits

- ENG 2100 - Introduction to Literary Studies **Credits: 4**
- ENG 2210 - American Literature: Beginnings through the Civil War **Credits: 4**  
or
- ENG 2220 - American Literature: Civil War to Present **Credits: 4**
- ENG 2330 - British Literature: Late 1700s to the Present **Credits: 4**
- ENG 3100 - Chaucer, Shakespeare, Milton **Credits: 4**  
or
- ENG 3350 - Essential Shakespeare **Credits: 4**
- ENG 3430 - Classical Mythology **Credits: 4**  
or
- ENG 3440 - Myth and Literature **Credits: 4**
- ENG 3475 - Literature of the Oppressed **Credits: 4**

## Language Core: 4 credits

- LING 3011 - Analyzing English Credits: 4

## Composition Core: 3-4 credits

Students will take one of the following:

- ENG 3510 - Composition Studies: Theories and Practice Credits: 4
- ENG 3525 - Scholarly Writing Credits: 3
- ENG 3527 - Professional Writing Credits: 3

## Linguistics Course: 4 credits

Students will take one of the following:

- LING 3020 - History of the English Language Credits: 4
- LING 3050 - Language and Society Credits: 4

## Teaching English Core: 9 credits

- ENG 4601 - Methods in Secondary English I: Literacies and Literature Credits: 4
- ENG 4602 - Methods in Secondary English II: Writing and Assessment Credits: 4 \*\*
- ENG 4641 - Field Experience in Teaching English in Secondary Schools Credits: 1 \*\*

## Foundation and Methods for Secondary Education: 24 credits

- EDS 3130 - Foundations of Educational Psychology and Philosophy Credits: 4 \*
- EDS 3140 - First Field Experience in Secondary Education Credits: 1 \*
- EDS 3150 - Critical Sociocultural Lenses for Teachers Credits: 3 \*
- EDT 3010 - Integrating Educational Technology into Teaching Credits: 3
- SED 3600 - Exceptional Learners in the Classroom Credits: 3
- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners Credits: 3
- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools Credits: 3 \*\*
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools Credits: 1 \*\*
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools Credits: 3 \*\*

## Senior Experience: 12 credits

- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 Credits: 6,12 \*\*

Note:

\* Requires at least provisional admission to the School of Education

\*\*Requires formal admission to the School of Education

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
English Major Courses	44-45 credits
Foundation and Methods for Secondary Education	24 credits
Senior Experience	12 credits
Unrestricted Electives	3-16 credits
<b>Total for the English Major, B.A. with Secondary English Teacher Licensure Concentration</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## ***Film and Media Studies Minor***

Students learn to think and write critically about Film and Media Studies as a significant form of culture. A minor in Film and Media Studies consists of seven courses: an introduction to the study of Film and Media Studies, one history course, one theory course, and four courses on particular topics in context. To receive credit for any ENG prefix course, the student must receive a grade of "C-" or better.

### **Required Courses**

- ENG 2860 - Introduction to Film and Media Studies Credits: 4
- ENG 3710 - Film History Credits: 4
- ENG 3615 - Theory! Credits: 4

### **Elective Courses**

3 Film and Media Studies electives at the 3000-level or above, with at least 1 at the 4000-level (12 credits)

- ENG 3700-3799
- ENG 3120 - Literature and Film: Variable Topics Credits: 4
- ENG 3720 - Film and Media Studies Topics: Variable Topic Credits: 4
- ENG 3750 - Cinema Genre: Variable Topics Credits: 4
- ENG 3770 - Multicultural Cinema Credits: 3
- ENG 4630 - Cinema Director: Variable Topics Credits: 4

**Total for Minor: 24 credits**

## ***Linguistics Major, B.A.***

[Department of English](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

### **About the Program**

The Linguistics program is an interdisciplinary study of human language. The core of the Linguistics major is the study and analysis of language structure (phonetics, phonology, morphology, syntax, and semantics) focusing not only on the structure of English but also that of other languages.

The Linguistics major is designed to help students gain knowledge about language and its significance in society, to aid students in critical thinking, and to prepare them for a world of linguistic diversity. This major is excellent for students who are planning careers in business, law, education, or writing. The major also prepares students for graduate programs in linguistics or a particular linguistics subfield, such as anthropological linguistics, socio-linguistics, psycholinguistics, computational linguistics, modern or classical languages, or ESL.

### **Student Outcomes**

- A student demonstrates the ability to transcribe and analyze speech sounds.
- A student can identify and explain the principles of synchronic language variation and/or diachronic language change.
- A student demonstrates the ability to perform morphosyntactic and/or semantic analysis.
- A student can integrate the relevant information found in textbooks and research materials into one's own written work.
- A student can explain and reflect on disciplinary and professional competencies and high-impact practices developed in coursework.

## **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## **Program Requirements**

- A total of 120 semester hours are required for graduation.
- No single course in the Linguistics program may be used to fulfill more than one requirement within the major (general studies and ESSJ courses not included).
- To receive credit for any ENG or LING prefix course, the student must receive a grade of "C-" or better. Students should note that programs differ in the minimum grade required.

## **General Studies Requirements: 33 credits**

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)

- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*Course may be repeated for credit under different topics, up to a limit of 9 credits.*

## Interdisciplinary Electives: 9 credits

Any three of the following interdisciplinary courses, for a minimum of 9 credits, may be chosen in consultation with a linguistics faculty advisor (at least one must be 3000/4000-level):

- ANT 2330 - Cross-Cultural Communication Credits: 3
- ANT 2500 - Anthropology of Language Credits: 3
- COMM 2010 - Gender and Communication Credits: 3
- FRE 3150 - French Phonetics: Theory and Practice Credits: 3
- FRE 4540 - Literature, Culture, and Translation Credits: 3
- GER 3150 - German Phonetics: Theory and Practice Credits: 3
- GER 3300 - Advanced German Grammar Credits: 3
- LING 2011 - Origins of English Words Credits: 3
- LING 3055 - Language and Law Credits: 4
- LING 3900 - Linguistics Omnibus Courses Credits: 3\*
- LING 4010 - Studies in Linguistics: Variable Topics Credits: 3 \*
- LING 4011 - Anthropological Linguistics Credits: 4
- LING 4012 - Historical Linguistics Credits: 4
- LING 4013 - Psycholinguistics Credits: 4
- LING 4016 - Introduction to Translation Studies Credits: 4
- PHI 2440 - Symbolic Logic Credits: 3
- PHI 3120 - Philosophy of Language Credits: 3
- PHI 3330 - Epistemology Credits: 3
- PHI 3530 - Philosophy of Mind Credits: 3
- SLHS 2100 - Language Acquisition and Development Credits: 3
- SLHS 3200 - Clinical Phonetics Credits: 3
- SPA 3150 - Spanish Phonetics: Theory and Practice Credits: 3
- SPA 4015 - Introduction to Spanish Translation I Credits: 3
- SPA 4025 - Introduction to Spanish Translation II Credits: 3
- SPA 4310 - History of the Spanish Language Credits: 3

*\*Course may be repeated for credit under different topics, up to a limit of 9 credits.*

## Senior Experience: 4 credits

- LING 4060 - Modern Language Theory Credits: 4

## Summary of Requirements

General Studies Requirements	33 credits
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*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Core Courses: 16 credits

- LING 2010 - Introduction to Linguistics Credits: 4
- LING 3040 - Morphology and Syntax Credits: 4
- LING 3044 - Phonetics Credits: 4
- LING 3045 - Phonology Credits: 4

## Linguistics Electives: 16 credits

Any four of the following courses, for a minimum of 16 credit hours, may be chosen in consultation with a linguistics faculty advisor:

- LING 2011 - Origins of English Words Credits: 3
- LING 3011 - Analyzing English Credits: 4
- LING 3020 - History of the English Language Credits: 4
- LING 3030 - Semantics Credits: 4
- LING 3050 - Language and Society Credits: 4
- LING 3055 - Language and Law Credits: 4
- LING 3070 - Old English Credits: 4
- LING 3073 - Old Norse Credits: 3
- LING 3075 - Latin Credits: 4
- LING 4010 - Studies in Linguistics: Variable Topics Credits: 3 \*
- LING 4011 - Anthropological Linguistics Credits: 4
- LING 4012 - Historical Linguistics Credits: 4
- LING 4013 - Psycholinguistics Credits: 4
- LING 4016 - Introduction to Translation Studies Credits: 4

ESSJ Requirement	0-3 credits
Required Core Courses	16 credits
Linguistic Electives	16 credits
Interdisciplinary Electives	9 credits
Senior Experience	4 credits
Unrestricted Electives	39-51 credits
Total for the Linguistics Major, B.A.	120 credits

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Linguistics Minor

The Linguistics program is an interdisciplinary study of human language. The Linguistics minor is designed to help students gain knowledge about language and its significance in society, to aid students in critical thinking, and to prepare them for a world of linguistic diversity.

To receive credit for any ENG or LING prefix course, the student must receive a grade of "C-" or better. Students should note that programs differ in the minimum grade required.

## Required Core Course: 4 credits

- LING 2010 - Introduction to Linguistics Credits: 4

## Linguistics Electives: 14 credits

14 credits of the following courses chosen in consultation with a linguistics faculty advisor:

- LING 2011 - Origins of English Words Credits: 3
- LING 3011 - Analyzing English Credits: 4
- LING 3020 - History of the English Language Credits: 4
- LING 3030 - Semantics Credits: 4
- LING 3040 - Morphology and Syntax Credits: 4
- LING 3044 - Phonetics Credits: 4
- LING 3045 - Phonology Credits: 4
- LING 3050 - Language and Society Credits: 4
- LING 3055 - Language and Law Credits: 4
- LING 3070 - Old English Credits: 4
- LING 3073 - Old Norse Credits: 3
- LING 3075 - Latin Credits: 4

- LING 4010 - Studies in Linguistics: Variable Topics Credits: 3 \*
- LING 4011 - Anthropological Linguistics Credits: 4
- LING 4012 - Historical Linguistics Credits: 4
- LING 4013 - Psycholinguistics Credits: 4
- LING 4016 - Introduction to Translation Studies Credits: 4
- LING 4060 - Modern Language Theory Credits: 4

*\*These courses may be repeated for credit under different topics up to a limit of 9 credits.*

## Interdisciplinary Electives: 3 credits

At least 3 credits of the following interdisciplinary courses chosen in consultation with a linguistics faculty advisor:

- ANT 2330 - Cross-Cultural Communication **Credits: 3**
- ANT 2500 - Anthropology of Language **Credits: 3**
- FRE 3150 - French Phonetics: Theory and Practice **Credits: 3**
- FRE 4540 - Literature, Culture, and Translation **Credits: 3**
- GER 3150 - German Phonetics: Theory and Practice **Credits: 3**
- GER 3300 - Advanced German Grammar **Credits: 3**
- LING 2011 - Origins of English Words **Credits: 3**
- LING 3055 - Language and Law **Credits: 4**
- LING 4010 - Studies in Linguistics: Variable Topics **Credits: 3 \***
- LING 4011 - Anthropological Linguistics **Credits: 4**
- LING 4012 - Historical Linguistics **Credits: 4**
- LING 4013 - Psycholinguistics **Credits: 4**
- LING 4016 - Introduction to Translation Studies **Credits: 4**
- PHI 2440 - Symbolic Logic **Credits: 3**
- PHI 3120 - Philosophy of Language **Credits: 3**
- PHI 3330 - Epistemology **Credits: 3**
- PHI 3530 - Philosophy of Mind **Credits: 3**
- SLHS 2100 - Language Acquisition and Development **Credits: 3**
- SLHS 3200 - Clinical Phonetics **Credits: 3**
- SPA 3150 - Spanish Phonetics: Theory and Practice **Credits: 3**
- SPA 4015 - Introduction to Spanish Translation I **Credits: 3**
- SPA 4025 - Introduction to Spanish Translation II **Credits: 3**
- SPA 4310 - History of the Spanish Language **Credits: 3**
- COMM 2010 - Gender and Communication **Credits: 3** or
- GWS 2770 - Gender and Communication **Credits: 3**

*\*This course may be repeated for credit under different topics up to a limit of 9 credits.*

from any ENG/LING prefix at the 2000-level or above. A minimum passing grade is a C-.

## Required Courses

Students must take at least 15 credits from Professional Writing and Rhetoric courses. At least six credits should be upper division.

- ENG 2505 - Rhetoric of War Credits: 3
- ENG 2510 - Introduction to Rhetoric and Composition Credits: 4
- ENG 2512 - Social Media and Power Credits: 3
- ENG 2513 - Disability Rhetorics Credits: 3
- ENG 2580 - Climate Change Advocacy Writing Credits: 3
- ENG 3501 - Studies in Rhetoric and Writing: Style Credits: 4
- ENG 3503 - Rhetoric and Visual Literacy Credits: 4
- ENG 3505 - Concepts of Authorship Credits: 4
- ENG 3506 - Introduction to Editing Credits: 4
- ENG 3507 - Writing Reviews and Criticism Credits: 4
- ENG 3508 - Rhetoric of Humor: Parody, Satire, and Comedy Credits: 4
- ENG 3510 - Composition Studies: Theories and Practice Credits: 4
- ENG 3513 - Race Talk Credits: 3
- ENG 3520 - Research Methods in Rhetoric and Composition Credits: 4
- ENG 3525 - Scholarly Writing Credits: 3
- ENG 3526 - Writing in the Sciences Credits: 3
- ENG 3527 - Professional Writing Credits: 3
- ENG 3535 - Essentials of Grant Writing Credits: 4
- ENG 3672 - Research in Writing Centers Credits: 1
- ENG 3673 - Future Applications of Writing Tutoring Skills Credits: 1
- ENG 4540 - Professional Writing and Rhetoric Capstone Credits: 4
- ENG 4850 - Undergraduate Research in English Credits: 1-3

## ENG/LING Elective

Students must take at least three credits from any ENG/LING prefix at the 2000, 3000, or 4000-level.

**Total Credit Hours Required for the Minor:**  
**18**

## Department of History

Location: Central Classroom Building, Room 211

**Total for Minor: 21 credits**

### *Literature Minor*

The Literature minor encompasses a range of American, British, and world texts. The program provides a strong foundation of courses in literature and fosters familiarity with major works and writers, critical theory, literary terminology, and research materials. Because of their command of written language, their ability to deal with ideas and concepts as well as facts, and their broader understanding of human nature and social realities, students who minor in Literature are valued in many fields, including teaching, academe, library and archive science, law, politics, business, health, non-profits, journalism, and entertainment.

To receive credit for any ENG prefix course, the student must receive a grade of "C-" or better.

**Required Course: 4 credits**

- ENG 2100 - Introduction to Literary Studies Credits: 4

**Literature Electives: 16 credits**

Take four or more Literature Electives, for a minimum of 16 credit hours total. **Only one course may be at the 2000-level.**

ENG 2100-2499, 3100-3449, 3451-3499, 3610-3629, 4100-4499

**Total Credits = 20**

### *Professional Writing and Rhetoric Minor*

The Professional Writing and Rhetoric minor provides a program of study that focuses on how language and writing are connected to identity and shape actions and attitudes. Students learn to analyze and understand others' perspectives and acquire the skills to broaden and effectively articulate and defend their own perspectives. Students choose from classes that study professional writing; topics in current rhetoric, like disability rhetorics, environmental rhetorics or the language of race; contemporary and classical rhetoric and composition theory, and topics such as visual literacy, social media, or the history of authorship. This minor provides students the opportunity to hone analysis and writing skills, as well as to conduct original undergraduate research, to compose and interpret texts using multiple modes, to learn to tutor or teach writing, and to become effective nuance communicators.

Students need to complete a total of 18 hours, including six upper-division credits. In addition, students will take at least three credits

Phone: 303-615-0500

E-Mail: [history@msudenver.edu](mailto:history@msudenver.edu)

Website: [History Department Website](#)

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## ***History Major, B.A.***

[Department of History](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

### **About the Program**

Everything has a history. From sugar to science, from the Colosseum in Rome to the ruins of Mesa Verde. MSU Denver History students study our complex past in small class settings with world-class historians and dedicated teachers. The major includes thirty-nine (39) credits of courses beyond the General Studies Historical requirement across different world regions, themes, and time periods. For maximum flexibility, many courses are available in both the on-campus and/or remote setting. Our students develop breadth while refining their critical thinking and research skills. The History Department believes in the power of a university education to liberate minds, and we are resolute in our service to students from traditionally marginalized communities. We hope you will join us as we explore the rich and complicated history of humans through time around the globe.

### **Student Outcomes**

- Locate sources-- Demonstrate the ability to locate sources when information is needed, and to evaluate the authenticity, validity, and reliability of resources applied to a specific purpose.
- Communicate in writing-- Communicate in writing with an awareness of audience, by using language conventions appropriate to the occasion and task.
- Employ historical knowledge-- Demonstrate historical knowledge of the United States, the world, and major regions of the world.
- Understand context-- Demonstrate, using historical sources, how context and contingency influence change over time.
- Interpret evidence-- Develop an effective historical interpretation and marshal primary and/or secondary source evidence to support it.

## **General Degree Requirements**

## **Program Requirements**

- A total of 120 credit hours are required for graduation at MSU Denver
- All students should check with a departmental advisor to make a proper selection of courses.
- Students majoring in History must have at least a 2.0 average in their History courses to graduate. Students should note that programs differ in the minimum grade required.
- Students interested in teaching History or other Social Studies subjects in secondary schools should instead consult the History Major, B.A. with Secondary Social Studies Teacher Licensure Concentration in this catalog.

## **General Studies Requirements: 33 credits**

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## **Ethnic Studies & Social Justice Requirement: 0 or 3 credits**

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.



## History Major Core: 12 credits

Students should complete four (4) introductory courses in History from the list below, one of which will also count for the Historical General Studies requirement.

- HIS 1005 - Ancient Civilizations **Credits: 3**
- HIS 1030 - World History to 1500 **Credits: 3**
- HIS 1035 - The Medieval World **Credits: 3**
- HIS 1040 - World History since 1500 **Credits: 3**
- HIS 1045 - Europe, Renaissance to the Present **Credits: 3**
- HIS 1150 - Race and Social Justice in U.S. History **Credits: 3**
- HIS 1210 - American History to 1865 **Credits: 3**
- HIS 1220 - American History since 1865 **Credits: 3**
- HIS 1250 - China and East Asia **Credits: 3**
- HIS 1270 - India and South Asia **Credits: 3**
- HIS 1300 - Introduction to Latin American History **Credits: 3**
- HIS 1600 - Women in World History **Credits: 3**
- HIS 1700 - Nature and Society **Credits: 3**
- HIS 1940 - Survey of African History **Credits: 3**

## History Major Electives: 27 credits

Besides the required Core courses, students must take 27 credits of electives in History selected in consultation with an advisor. At least 18 of the 27 credits must be upper-division (3000 or 4000 level) courses. Included in those credits must be at least THREE credits in American History (HIS 3400-3699), at least THREE credits in European History (HIS 3100-3399), and at least THREE credits in World History (HIS 3700-3799). The department recommends that students take a Historical Writing and Thinking course (HIS 3000-3050).

## Senior Experience: 3 credits

- HIS 4820 - Senior Seminar **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
History Major Core	12 credits
History Major Electives	27 credits
Senior Experience	3 credits

Unrestricted Electives	42-57 credits
<b>Total for the History Major, B.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *History Major, B.A. with Secondary Social Studies Teacher Licensure Concentration*

[Department of History](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

### About the Program

This program combines a History Major with a concentration in Secondary Social Studies licensure. It prepares teacher candidates to teach Social Studies subjects in diverse secondary schools with some additional training in culturally and linguistically diverse teaching.

### Student Outcomes

- Locate sources-- Demonstrate the ability to locate sources when information is needed, and to evaluate the authenticity, validity, and reliability of resources applied to a specific purpose.
- Communicate in writing-- Communicate in writing with an awareness of audience, by using language conventions appropriate to the occasion and task.
- Employ historical knowledge-- Demonstrate historical knowledge of the United States, the world, and major regions of the world.
- Understand context-- Demonstrate, using historical sources, how context and contingency influence change over time.
- Interpret evidence-- Develop an effective historical interpretation and marshal primary and/or secondary source evidence to support it.
- Demonstrate mastery of pedagogical strategies in Social Studies for secondary school teaching.
- Connect Literacy and Math--Utilize literacy, including Culturally and Linguistically Diverse (CLD), strategies as well as mathematics when teaching Social Studies.
- Create Inclusive Teaching Environment--Create a safe, inclusive and respectful learning environment that facilitates Social Studies learning for diverse populations, including CLD students.
- Plan and deliver effective instruction in History, Civics, and Geography.

- Demonstrate professionalism as a teacher candidate through ethical conduct, reflection, and leadership.
- Demonstrate knowledge of first and second language acquisition and teaching strategies for CLD students.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion. Courses recommended below will satisfy both General Studies and Major or Concentration requirements.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1610 - Integrated Mathematics I
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** GEG 1100 - Introduction to Physical Geography
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** Two of the following: ANT 2330 - Cross-Cultural Communication, ECO 2010 - Principles of Macroeconomics, ECO 2020 - Principles of Microeconomics, PSC 1010 - American National Government, PSC 2230 - Introduction to International Relations or PSY 1001 - Introductory Psychology
- Global Diversity (0-3 credits).

*\*\* Students will fulfill the Global Diversity requirement by taking an approved course within one of the following categories: Arts and Humanities; Historical; Natural and Physical sciences; or Social and Behavioral Sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Note that several History courses in this degree program can fulfill the ESSJ requirement.

## History Major: 42 credits

The History Major requires thirty-nine (39) credits of History courses beyond the Historical General Studies requirement. A grade of "C-" or better is required for each course in this program to count toward licensure. Note that students can register strategically to apply their General Studies Global Diversity course requirement and the

ESSJ course requirement toward History Major requirements below. All students should check with a departmental adviser to plan their selection of courses in the Major.

## History Teaching Major Core: 12 credits

Students should complete four (4) introductory courses in History from the list below, one of which will also count for the Historical General Studies requirement. The department recommends that students choose at least TWO American History courses for the degree program to prepare for teaching at the secondary level.

- HIS 1030 - World History to 1500 **Credits:** 3
- HIS 1032 - Islam in History: From the Prophet to the Present **Credits:** 3
- HIS 1040 - World History since 1500 **Credits:** 3
- HIS 1150 - Race and Social Justice in U.S. History **Credits:** 3
- HIS 1210 - American History to 1865 **Credits:** 3
- HIS 1220 - American History since 1865 **Credits:** 3
- HIS 1250 - China and East Asia **Credits:** 3
- HIS 1300 - Introduction to Latin American History **Credits:** 3
- HIS 1940 - Survey of African History **Credits:** 3

## Diversity and Human Rights Electives: 12 credits

Students need at least twelve (12) upper-division Diversity and Human Rights Elective credits for the History Major with a Social Studies Concentration. These are 3000-level History courses that offer preparation for teaching Secondary History in accordance with the Colorado Academic Standards (CAS). These standards were revised in 2022 to stress both the historical experiences of marginalized groups in the United States as well as Holocaust, Genocide, and Human Rights in World History.

Choose three (3) courses from this list of Electives offering Diverse Perspectives on American History

- HIS 3440 - American Slavery **Credits:** 3
- HIS 3490 - Native American History **Credits:** 3
- HIS 3560 - Chicana/o History, 1836 to the Present **Credits:** 3
- HIS 3580 - African American History II **Credits:** 3
- HIS 3660 - American Protest: The History of Social Movements from the Cold War to the Twenty-First Century **Credits:** 3
- HIS 3855 - History of Sexuality **Credits:** 3  
Choose one (1) course from this list of Holocaust/Human Rights Elective Courses in history
- HIS 3290 - Nazi Germany **Credits:** 3

- HIS 3781 - Holocaust and Genocide: Memory and Method **Credits: 3**
- HIS 3782 - History of Human Rights **Credits: 3**

## Broad History Electives: 15 credits

Fifteen (15) additional elective credits are needed for the History Major. At least six (6) credits of these remaining Electives must be taken at the upper-division (3000-4000) level. As many as nine (9) credits can be lower-division (HIS 1000-1999) Electives.

One recommended Elective for Teaching World History:

- HIS 3720 - Themes in World History: Variable Topics **Credits: 3**  
Additionally, there are some one-credit courses that can fulfill this fifteen-credit Elective category. These are:
- HIS 3990 - History Pedagogy Laboratory **Credits: 1**
- HIS 3991 - Undergraduate Teaching Assistant **Credits: 1-3**
- HIS 4020 - Field Experience in Teaching Social Studies in Secondary Schools **Credits: 1**

Note: HIS 3990 must be taken as a co-requisite with another HIS 3000-level course offered by the same instructor. HIS 3991 can be repeated with multiple instructors. HIS 4020 is required as a Foundations and Teachings Strategies course below.

## Major Capstone Course: 3 credits

The three-credit Social Studies methods course is typically taken along with HIS 4020 Field Experience in Teaching Social Studies in Secondary Schools.

- HIS 4010 - Methods of Teaching Social Science: Secondary School **Credits: 3**

## Additional Requirements for the Concentration in Secondary Social Studies Licensure

### Social Science Courses: 24-25 credits

All students must complete twenty-four or twenty-five credits in the following Social Science disciplines to prepare to teach secondary Social Studies. Note that six credits below can also satisfy the General Studies Social and Behavioral Sciences requirement. Additionally, GEG 1100 or GIS 1220 can satisfy three or four credits of the General Studies Natural and Physical Science requirement. So the subtotal of credits required for this section could drop to twelve if students also complete the recommended General Studies courses.

- ANT 2330 - Cross-Cultural Communication **Credits: 3**
- ECO 2010 - Principles of Macroeconomics **Credits: 3**

- ECO 2020 - Principles of Microeconomics **Credits: 3**
- PSC 1010 - American National Government **Credits: 3**
- PSC 2230 - Introduction to International Relations **Credits: 3**
- PSY 1001 - Introductory Psychology **Credits: 3**  
Select ONE Human Geography Course. Either GEG 1000 or GEG 1300.
- GEG 1000 - World Regional Geography **Credits: 3**  
OR
- GEG 1300 - Introduction to Human Geography **Credits: 3**  
Select ONE Natural Science Geography Course. Either GEG 1100 or GEG 1220.
- GEG 1100 - Introduction to Physical Geography **Credits: 3**  
OR
- GIS 1220 - Digital Earth: Geospatial Technologies **Credits: 4**

## Foundations and Strategies for Secondary Teaching: 28 credits

This Secondary Education Licensure Program prepares candidates to teach Social Studies courses in grades 6-12. With the courses and field experiences below, candidates satisfy the Colorado Department of Education Teacher Quality Standards for licensure in Secondary Education.

- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits: 4**
- EDS 3140 - First Field Experience in Secondary Education **Credits: 1**
- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits: 3**
- EDT 3010 - Integrating Educational Technology into Teaching **Credits: 3**
- SED 3600 - Exceptional Learners in the Classroom **Credits: 3**
- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**
- MTH 1610 - Integrated Mathematics I **Credits: 3**  
Note: students who take this course to meet the General Studies Quantitative Literacy requirement will not have three additional credits in this section of their degree program.
- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools **Credits: 3**
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools **Credits: 1**
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits: 3**
- HIS 4020 - Field Experience in Teaching Social Studies in Secondary Schools **Credits: 1**

## Senior Experience: 12 credits

Student Teaching offers an essential conclusion to this degree program. Typically, students should register for 12 credits of EDS 4290 in their final semester.

- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 **Credits:** 6,12

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
History Major	42 credits
Social Science Courses	24-25 credits
Foundations and Strategies for Secondary Teaching	28 credits
Senior Experience	12 credits
<b>Total Credits for History Major, B.A. with Concentration in Secondary Social Studies Licensure</b>	<b>124-125 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

Up to 15 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.

## History Minor

Everything has a history. From sugar to science, from the Colosseum in Rome to the ruins of Mesa Verde. MSU Denver History students study our complex past in small class settings with world-class historians and dedicated teachers. For maximum flexibility, many courses are available in both the on-campus and/or remote setting. Our students develop breadth while refining their critical thinking and research skills. The History Department believes in the power of a university education to liberate minds, and we are resolute in our service to students from traditionally marginalized communities. We hope you will join us as we explore the rich and complicated history of humans through time around the globe.

Students minoring in History complete twenty-one (21) credits of History courses.

## Minor Requirements

Students minoring in History will complete 21 credits of History courses. Those courses that fulfill MSU Denver General Studies requirements can also count within the History Minor. A History course taken to satisfy the MSU Denver ESSJ Graduation requirement can apply in the History Minor as well. Please see a History Advisor for details.

A minimum of nine credits in History courses must be upper-division (3000 or 4000 level), and the department recommends that students maximize the number of upper-division history courses that they take for the Minor. Students are also encouraged to take a Historical Writing and Thinking course (HIS 3000-3050).

Students should note that programs differ in the minimum grade required. History minors must have a GPA of 2.0 in the minor and an overall GPA of 2.0 to graduate.

## Total Credits for the History Minor

Upper-division Course Minimum (HIS 3000 - HIS 4999)	9 credits
Elective History Courses (HIS 1000 - HIS 4999)	12 credits
Minor Total	21 credits

## Department of Journalism and Media Production

Location: Central Classroom Building, Room 119

Phone: 303-615-1717

E-Mail: [JMader1@msudenver.edu](mailto:JMader1@msudenver.edu)

Website: [Journalism and Media Production Department Website](#)

## Broadcast Journalism Major, B.A.

[Department of Journalism and Media Production](#)

[College of Letters, Arts and Sciences](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

Students pursuing the B.A. degree in Broadcast Journalism focus on the methods and techniques for reporting, producing, and delivering news and news programs via radio, television, and video/film media, and social media. The program prepares individuals to be

professional broadcast journalists, editors, producers, directors, and managers.

Students in all JMP programs are expected to demonstrate common industry standards such as active participation, professional conduct, academic integrity, and adherence to deadlines.

## Student Outcomes

- Practice critical thinking and evaluation of sources.
- Apply Associated Press style guidelines to written projects.
- Create original works of reporting and news delivery.
- Analyze ethical and legal considerations in the broadcasting industry.
- Create an environment of professional, collaborative behavior.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## JMP Department Core: 12 credits

All Journalism and Media Production students begin with the following courses:

- JMP 1100 - Journalism Fundamentals Credits: 3
- JMP 1450 - Media Literacy Credits: 3
- JMP 2435 - Multimedia Writing and Production Credits: 3
- JMP 3425 - Creating Informational Media Credits: 3

## Broadcast Journalism Courses: 21 credits

All Broadcast Journalism majors take the following courses.

- JMP 2100 - Reporting Credits: 3
- JMP 3410 - Writing for Broadcast Media Credits: 3
- JMP 3430 - Performance for Broadcast Credits: 3
- JMP 3445 - Television Production Credits: 3
- JMP 3461 - Producing the TV Newscast Credits: 3
- JMP 3980 - Internship: Journalism and Media Production Credits: 3
- JMP 4443 - Advanced Television Production Credits: 3

## Major Electives: 9 credits

Students complete the major with nine credit hours of electives. Any JMP course is an acceptable elective, but the following list is particularly suited to the degree.

- JMP 2400 - Video Editing I Credits: 3
- JMP 2420 - Video Production I Credits: 3
- JMP 2800 - Introduction to Audio Production Credits: 3
- JMP 3300 - Multimedia Journalism I Credits: 3
- JMP 3420 - Video Production II Credits: 3
- JMP 3451 - Sports Broadcasting: Techniques and Practices Credits: 3
- JMP 3485 - Motion Graphics I Credits: 3

- JMP 3540 - Mobile and Social Media Communication Credits: 3
- JMP 4100 - Investigative Reporting Credits: 3
- JMP 4300 - Multimedia Journalism II Credits: 3
- JMP 4403 - Electronic Media Management Credits: 3
- JMP 4420 - Video Production III Credits: 3
- JMP 4443 - Advanced Television Production Credits: 3
- JMP 4485 - Motion Graphics II Credits: 3
- JMP 4890 - Social Documentary Credits: 1-4

## Senior Experience: 3 credits

- JMP 4500 - Ethical and Legal Issues in Journalism Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Department Core	12 credits
Major Requirements	21 credits
Major Electives	9 credits
Senior Experience	3 credits
Unrestricted Electives	39-42 credits
<b>Total for the Broadcast Journalism Major, B.A.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## *Journalism and Media Production Minor*

The Journalism and Media Production minor is designed to provide skills which increase employability for the student where journalism and technical writing, public relations, as well as media production expertise are valuable. In addition to the required 12-credit hours of department core courses, the student selects 9-credit hours from a specialized concentration and an additional 3 credits outside the concentration to complete the 24-credit minor. Industry standard behaviors, including creativity, professionalism, ethics, and adherence to deadlines, are also emphasized.

A grade of "C-" or better is required for each course to count toward the minor and prerequisites apply.

## Department Core

Students pursuing the Journalism and Media Production minor must complete the 12-credit hour department core, plus Communication Law.

- JMP 1100 - Journalism Fundamentals Credits: 3
- JMP 1450 - Media Literacy Credits: 3
- JMP 2435 - Multimedia Writing and Production Credits: 3
- JMP 3425 - Creating Informational Media Credits: 3
- JMP 3780 - Communication Law Credits: 3

## Concentration Selection

Choose **three (3) courses from one concentration**. Choose **one (1) elective course** from any of the remaining concentrations. At least **two (2) courses must be upper division**. Prerequisites apply.

### Broadcast Journalism Concentration

Pick three (3) courses from this concentration.

- JMP 2100 - Reporting Credits: 3
- JMP 2400 - Video Editing I Credits: 3
- JMP 2420 - Video Production I Credits: 3
- JMP 3430 - Performance for Broadcast Credits: 3
- JMP 3445 - Television Production Credits: 3
- JMP 3485 - Motion Graphics I Credits: 3
- JMP 4443 - Advanced Television Production Credits: 3

### Journalism Concentration

Pick three (3) courses from this concentration.

- JMP 2100 - Reporting Credits: 3
- JMP 2600 - Beginning Photojournalism Credits: 3
- JMP 3063 - Sports Photojournalism Credits: 3
- JMP 3300 - Multimedia Journalism I Credits: 3
- JMP 3530 - Drone Video Masterclass Credits: 3
- JMP 4100 - Investigative Reporting Credits: 3
- JMP 4400 - Long-form Nonfiction Writing Credits: 3
- JMP 4890 - Social Documentary Credits: 1-4

### Media Production Concentration

Pick three (3) courses from this concentration.

- JMP 2450 - Basic Media Production and Leadership Credits: 3
- JMP 2460 - Raster Graphics Credits: 3
- JMP 2465 - Vector Graphics Credits: 3
- JMP 2480 - Introduction to Animation Credits: 3

- JMP 3470 - Writing for Interactive Media Credits: 3
- JMP 3485 - Motion Graphics I Credits: 3
- JMP 3540 - Mobile and Social Media Communication Credits: 3
- JMP 3590 - Streaming Media Technologies Credits: 3
- JMP 3625 - UX and UI: The User Experience Credits: 3
- JMP 3630 - Producing Digital Documents Credits: 3
- JMP 4450 - Advanced Media Production and Leadership Credits: 3

## Public Relations Concentration

Pick three (3) courses from this concentration.

- JMP 2700 - Fundamentals of Public Relations Credits: 3
- JMP 3700 - Public Relations Writing Credits: 3
- JMP 3720 - Media and Influencer Relations Credits: 3
- JMP 3740 - Public Relations Research, Planning and Measurement Credits: 3
- JMP 4740 - Public Relations in Crises Credits: 3
- JMP 4750 - Public Relations Laboratory Credits: 3

## Technical Writing & Editing Concentration

Pick three (3) courses from this concentration.

- JMP 2610 - Introduction to Technical Writing Credits: 3
- JMP 3310 - International Technical Communications Credits: 3
- JMP 3330 - Technical Writing for Translation Credits: 3
- JMP 3550 - Data Visualization and Presentation Credits: 3
- JMP 3620 - Introduction to Technical Editing Credits: 3
- JMP 3645 - Writing Software and Hardware Documentation Credits: 3
- JMP 3670 - Writing for the Environmental Industry Credits: 3

## Video Production Concentration

Pick three (3) courses from this concentration.

- JMP 2400 - Video Editing I Credits: 3
- JMP 2420 - Video Production I Credits: 3
- JMP 2800 - Introduction to Audio Production Credits: 3
- JMP 3440 - Scriptwriting for Video Credits: 3
- JMP 3445 - Television Production Credits: 3
- JMP 3485 - Motion Graphics I Credits: 3
- JMP 3590 - Streaming Media Technologies Credits: 3
- JMP 3800 - Audio Post-Production Credits: 3

## Credit Totals

Core: 12 Credits  
Concentration: 9 Credits  
Elective: 3 Credits

**Total Credits: 24**

## *Journalism Major, B.A.*

[Department of Journalism and Media Production](#)

[College of Letters, Arts and Sciences](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

Students pursuing the B.A. degree in Journalism prepare for careers in news and information media. By gaining a sound education in the basics of gathering information and preparing it for an audience, students present their work across multiple platforms. This degree includes instruction in news writing and gathering; editing; reporting; photojournalism; journalism law and policy; and professional standards and ethics.

Students in all JMP programs are expected to demonstrate common industry standards such as active participation, professional conduct, academic integrity, and adherence to deadlines.

## Student Outcomes

- Think critically and evaluate sources.
- Apply Associated Press style guidelines to their writing.
- Create original works of reporting.
- Analyze ethical and legal considerations in the field.
- Promote an environment of professional, collaborative behavior.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students

should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## JMP Department Core: 12 credits

All Journalism and Media Production students begin with the following courses:

- JMP 1100 - Journalism Fundamentals Credits: 3
- JMP 1450 - Media Literacy Credits: 3
- JMP 2435 - Multimedia Writing and Production Credits: 3
- JMP 3425 - Creating Informational Media Credits: 3

## Journalism Courses: 19 credits

All Journalism majors take the following courses:

- JMP 2100 - Reporting **Credits: 3**
- JMP 2600 - Beginning Photojournalism **Credits: 3**
- JMP 2700 - Fundamentals of Public Relations **Credits: 3**
- JMP 3300 - Multimedia Journalism I **Credits: 3**

- JMP 3510 - Portfolio Presentation **Credits: 1**
- JMP 3980 - Internship: Journalism and Media Production **Credits: 3**
- JMP 4100 - Investigative Reporting **Credits: 3**  
or
- JMP 4400 - Long-form Nonfiction Writing **Credits: 3**

## Major Electives: 9 credits

Students complete the Journalism major with nine credit hours of additional JMP course work. At least three credit hours must be upper division. Any JMP course is an acceptable elective, but the following list is particularly suited to the degree.

- JMP 2400 - Video Editing I Credits: 3
- JMP 2420 - Video Production I Credits: 3
- JMP 2800 - Introduction to Audio Production Credits: 3
- JMP 3130 - Sports Writing Credits: 3
- JMP 3400 - Short-form Nonfiction Writing Credits: 3
- JMP 3410 - Writing for Broadcast Media Credits: 3
- JMP 3445 - Television Production Credits: 3
- JMP 3461 - Producing the TV Newscast Credits: 3
- JMP 3530 - Drone Video Masterclass Credits: 3
- JMP 3550 - Data Visualization and Presentation Credits: 3
- JMP 3560 - Column Writing Credits: 3
- JMP 3570 - Covering the Environment Credits: 3
- JMP 3970 - Journalism Field Experience Credits: 3
- JMP 4000 - News Media Leadership Credits: 3
- JMP 4300 - Multimedia Journalism II Credits: 3
- JMP 4890 - Social Documentary Credits: 1-4

## Senior Experience: 3 credits

- JMP 4500 - Ethical and Legal Issues in Journalism Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Department Core	12 credits
Major Required Courses	19 credits
Major Electives	9 credits
Senior Experience	3 credits
Unrestricted Electives	41-44 credits



Total for the Journalism Major, B.A.	120 credits
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Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## ***Media Production and Leadership Major, B.S.***

[Department of Journalism and Media Production](#)

[College of Letters, Arts and Sciences](#)

Available Program  
Format(s): [In-Person](#)

### **About the Program**

Students pursuing the B.S. degree in Media Production and Leadership are exposed to a variety of methods for leading others towards implementing media technology ethically, to better communicate with audiences. Today, professional communicators who want to change corporate culture and society using information and entertainment need to rely on a team of technical experts in writing; audio and video production; and web design to maximize the effectiveness and results of media related projects. The Media Production and Leadership degree teaches students to engage in this growing field and become effective leaders.

Students in all JMP programs are expected to demonstrate common industry standards such as active participation, professional conduct, academic integrity, and adherence to deadlines.

### **Student Outcomes**

- Apply industry standard pre-production, production and post-production processes
- Develop successful strategies for delivering content to an audience
- Analyze ethical and legal considerations in media production
- Define and articulate complex technical details of a media production to a broad audience
- Evaluate media productions for measures of success and areas to improve

### **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)

- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

### **Program Requirements**

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

### **General Studies Requirements: 33 credits**

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

### **Ethnic Studies & Social Justice Requirement: 0 or 3 credits**

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

### **JMP Department Core: 12 credits**

All Journalism and Media Production students begin with the following courses:

- JMP 1100 - Journalism Fundamentals Credits: 3
- JMP 1450 - Media Literacy Credits: 3
- JMP 2435 - Multimedia Writing and Production Credits: 3
- JMP 3425 - Creating Informational Media Credits: 3

## Media Production and Leadership Courses: 24 credits

All Media Production and Leadership majors take the following courses:

- JMP 2450 - Basic Media Production and Leadership Credits: 3
- JMP 3470 - Writing for Interactive Media Credits: 3
- JMP 3540 - Mobile and Social Media Communication Credits: 3
- JMP 3550 - Data Visualization and Presentation Credits: 3
- JMP 3590 - Streaming Media Technologies Credits: 3
- JMP 3625 - UX and UI: The User Experience Credits: 3
- JMP 3780 - Communication Law Credits: 3
- JMP 4450 - Advanced Media Production and Leadership Credits: 3

## Major Electives: 3 credits

Students complete the major with three credit hours of electives. Any JMP course is an acceptable elective, but the following list is particularly suited to the degree.

- JMP 2400 - Video Editing I Credits: 3
- JMP 2420 - Video Production I Credits: 3
- JMP 2460 - Raster Graphics Credits: 3
- JMP 2465 - Vector Graphics Credits: 3
- JMP 2480 - Introduction to Animation Credits: 3
- JMP 2800 - Introduction to Audio Production Credits: 3
- JMP 3485 - Motion Graphics I Credits: 3
- JMP 3630 - Producing Digital Documents Credits: 3

## Senior Experience: 3 credits

Students finish the degree with the approved Senior Experience course.

- JMP 4790 - Senior Seminar Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Department Core	12 credits
Major Requirements	24 credits
Major Electives	3 credits

Senior Experience	3 credits
Unrestricted Electives	42-45 credits
<b>Total for the Media Production and Leadership Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Public Relations Certificate

A Certificate in Public Relations is a 15-credit program that gives working professionals the skills they need to help their organizations communicate and engage with important stakeholders, internal and external. Students will learn to create compelling content for websites, social media and printed products. They will learn best practices in public relations and organizational communication and the process to develop strategy and execute a campaign. Strategies for handling potential crises also is covered.

## Required Courses

- JMP 2700 - Fundamentals of Public Relations Credits: 3
- JMP 3700 - Public Relations Writing Credits: 3
- JMP 3740 - Public Relations Research, Planning and Measurement Credits: 3
- JMP 4740 - Public Relations in Crises Credits: 3

## Elective Courses

Choose one of these electives.

- JMP 3540 - Mobile and Social Media Communication Credits: 3
- JMP 3720 - Media and Influencer Relations Credits: 3

**Total for Certificate: 15 credit hours**

## Public Relations Major, B.S.

[Department of Journalism and Media Production](#)

[College of Letters, Arts and Sciences](#)

Program Available  
Format(s): [In-Person](#)

## About the Program

Students pursuing the B.S. degree in Public Relations build on the fundamentals in a program that focuses on the theories and methods for helping organizations and individuals nurture their reputations so that they can achieve their goals; employing communication strategies and tactics that influence internal and external stakeholders and prospects in the general public; and that prepares individuals to function as public relations assistants, technicians, and managers. Students receive instruction in public relations theory; related principles of persuasion, marketing and journalism; message/image design; image management; media relations; community relations; public affairs; and internal and external communication.

Students in all JMP programs are expected to demonstrate common industry standards such as active participation, professional conduct, academic integrity, and adherence to deadlines.

### Student Outcomes

- Think critically and evaluate sources.
- Apply Associated Press style guidelines to their writing.
- Create original works of reporting.
- Analyze ethical and legal considerations in the field.
- Demonstrate professional, collaborative behavior.
- Create strategic PR plans and execute tactical activities.
- Work collaboratively within a team and professional environment.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)

- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## JMP Department Core: 12 credits

All Journalism and Media Production students begin with the following courses:

- JMP 1100 - Journalism Fundamentals Credits: 3
- JMP 1450 - Media Literacy Credits: 3
- JMP 2435 - Multimedia Writing and Production Credits: 3
- JMP 3425 - Creating Informational Media Credits: 3

## Public Relations Courses: 21 credits

All Public Relations majors take the following specialized courses, including a Portfolio Review and approved Senior Experience course. Public Relations Lab is a repeatable course and may be taken for up to six credit hours.

- JMP 2700 - Fundamentals of Public Relations Credits: 3
- JMP 3540 - Mobile and Social Media Communication Credits: 3
- JMP 3700 - Public Relations Writing Credits: 3
- JMP 3740 - Public Relations Research, Planning and Measurement Credits: 3
- JMP 3980 - Internship: Journalism and Media Production Credits: 3
- JMP 4740 - Public Relations in Crises Credits: 3
- JMP 4750 - Public Relations Laboratory Credits: 3

## Major Electives: 9 credits

Students complete the major with nine credit hours of electives, three of which need to be upper division. Any JMP course is an acceptable elective, but the following list is particularly suited to the degree.

- JMP 2450 - Basic Media Production and Leadership Credits: 3
- JMP 2460 - Raster Graphics Credits: 3
- JMP 2465 - Vector Graphics Credits: 3
- JMP 3300 - Multimedia Journalism I Credits: 3
- JMP 3470 - Writing for Interactive Media Credits: 3
- JMP 3510 - Portfolio Presentation Credits: 1
- JMP 3580 - Making Media Social Credits: 3
- JMP 3670 - Writing for the Environmental Industry Credits: 3
- JMP 3720 - Media and Influencer Relations Credits: 3
- JMP 3780 - Communication Law Credits: 3
- JMP 3970 - Journalism Field Experience Credits: 3

## Senior Experience: 3 credits

- JMP 4500 - Ethical and Legal Issues in Journalism Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Department Core	12 credits
Major Required Courses	21 credits
Major Electives	9 credits
Senior Experience	3 credits
Unrestricted Electives	39-42 credits
<b>Total for the Public Relations Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree.

Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Sport Media Minor

The Sport Media Minor includes courses from the Departments of Human Performance and Sport, and Journalism and Media Production. This minor consists of 21 semester hours, six of which must be upper division. This minor is designed to provide skills that

will increase employment opportunities in the field of sport media. Students in this minor will take a common core in HPS courses related to Sport Management and in JMP related to news media. Students will then hone their skills in elective course work in SM and/or JMP to complete the degree. Students must earn at least a "C-" in a course for it to count in the minor.

## Required Courses

- JMP 1000 - Introduction to Journalism and Mass Media Credits: 3
- SM 2050 - Introduction to Sport Management Credits: 3
- SM 3100 - Sport Media Operations Credits: 3

**Subtotal: 9 credits**

## Elective Courses

Students must select 12 credits of elective coursework. Six credits must be upper division.

- HPS 399C Field Experience Credits: 3 (Offered under ESS 3990 - Field Experience Credits: 1, 2 or 3)
- JMP 2400 - Video Editing I Credits: 3
- JMP 2420 - Video Production I Credits: 3 \*
- JMP 2600 - Beginning Photojournalism Credits: 3
- JMP 2700 - Fundamentals of Public Relations Credits: 3
- JMP 3063 - Sports Photojournalism Credits: 3
- JMP 3130 - Sports Writing Credits: 3
- JMP 3400 - Short-form Nonfiction Writing Credits: 3
- SM 2070 - Sport Venue Management Credits: 3
- SM 2730 - Sport in Society Credits: 3
- SM 3600 - Sport Promotion Credits: 3
- SM 3650 - Technology and Social Media in Sport Credits: 3

*\*Prerequisite Required (JMP 2400)*

**Subtotal: 12 credits**

**Total for Sport Media Minor: 21 credits**

## Strategic Communication Certificate

Many organizations employ an integrated communication model whereby Marketing, Communication, and Public Relations merge into one role or department that is referred to as Strategic Communication. To effectively operate in this environment, one must understand the roles and functions of all three areas. This program provides students and industry professionals the opportunity to expand their strategic communication knowledge and skills to bolster their preparedness for greater career opportunities.

This certificate program is available to current students, post-baccalaureate students, and members of the Marketing, Communication, and Public Relations industries seeking additional skills and training for career advancement.

Students may supplement their coursework by earning a Strategic Communication Certificate. Students must complete 18 credit hours. This includes four core courses and two electives. Students may apply courses they are required to complete for a major or minor in Communication Studies, Marketing, and Public Relations toward this certificate.

A grade of "C" or better is required in all courses to complete the certificate requirements. Students should note that programs may differ in the minimum grade required. Check each course description for specific prerequisites or corequisites.

## Required Courses

Below is the list of required courses. Each course is 3 credits for a total of 12 credits. Students will then select two elective courses. Each elective course option is 3 credits for a total of 6 elective credits. 12 required credits + 6 elective credits = 18 credits to complete the certification.

- COMM 3030 - Teamwork and Collaboration Credits: 3
- JMP 2700 - Fundamentals of Public Relations Credits: 3
- JMP 3700 - Public Relations Writing Credits: 3
- MKT 3200 - Digital Marketing Fundamentals Credits: 3

## Elective Public Relations Courses

- JMP 3720 - Media and Influencer Relations Credits: 3
- JMP 3740 - Public Relations Research, Planning and Measurement Credits: 3
- JMP 4740 - Public Relations in Crises Credits: 3

## Elective Marketing Courses

- MKT 3000 - Principles of Marketing Credits: 3
- MKT 3250 - Professional Selling Credits: 3
- MKT 4110 - Brand Management Credits: 3
- MKT 4300 - Social Media Marketing Credits: 3

## Elective Communication Studies Courses

- COMM 3000 - Diversity and Communication in the U.S. Credits: 3
- COMM 3010 - Business and Professional Speaking Credits: 3
- COMM 3340 - Leadership Communication Credits: 3
- COMM 4320 - Organizational Communication Consulting Credits: 3

Certificate Total: 18 credits

## *Technical Writing and Editing Major, B.S.*

[Department of Journalism and Media Production](#)

[College of Letters, Arts and Sciences](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

Students pursuing the B.S. degree in Technical Writing and Editing are immersed in both the theory and production practices of delivering technical information to diverse audiences including industries, government, NGO's and general laypeople. Students hone their writing style to meet professional standards; develop editing skills in content and copy rules; further their digital design ability; and create reports, proposals, manuals, etc., all while learning the unique demands of multiple industries.

Students in all JMP programs are expected to demonstrate common industry standards such as active participation, professional conduct, academic integrity, and adherence to deadlines.

## Student Outcomes

- Evaluate the currency, authenticity, validity and reliability of resources and document those resources according to publication standards
- Demonstrate, in writing, industry-standard style, language conventions and processes for professional communication and technical writing
- Demonstrate effective use of technologies appropriate to the technical communication industry.
- Analyze, synthesize and incorporate numeric data, as well as visual materials including images, figures, charts and tables into technical documents; and
- Prepare persuasive documents with well-reasoned arguments, applying the conventions of technical and scientific writing.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## JMP Department Core: 12 credits

All Journalism and Media Production students begin with the following courses:

- JMP 1100 - Journalism Fundamentals Credits: 3
- JMP 1450 - Media Literacy Credits: 3
- JMP 2435 - Multimedia Writing and Production Credits: 3
- JMP 3425 - Creating Informational Media Credits: 3

## Technical Writing and Editing Courses: 15 credits

All Technical Writing and Editing majors take the following courses and select one of two specialties:

- JMP 2610 - Introduction to Technical Writing Credits: 3
- JMP 3310 - International Technical Communications Credits: 3
- JMP 3550 - Data Visualization and Presentation Credits: 3
- JMP 3620 - Introduction to Technical Editing Credits: 3
- JMP 3630 - Producing Digital Documents Credits: 3

## Select One of the Following:

### International Technical Communication: 6 credits

Choose 6 credit hours from the following:

- ANT 2330 - Cross-Cultural Communication Credits: 3
- BUS 1950 - Business Communication Credits: 3
- BUS 3040 - Global Corporate Social Responsibility and Sustainability Credits: 3
- JMP 3330 - Technical Writing for Translation Credits: 3
- JMP 3645 - Writing Software and Hardware Documentation Credits: 3

### Technical Writing: 6 credits

Choose 6 credit hours from the following:

- JMP 3330 - Technical Writing for Translation Credits: 3
- JMP 3470 - Writing for Interactive Media Credits: 3
- JMP 3625 - UX and UI: The User Experience Credits: 3
- JMP 3645 - Writing Software and Hardware Documentation Credits: 3
- JMP 3670 - Writing for the Environmental Industry Credits: 3

## Major Electives: 6 credits

Students complete the major with six credit hours of electives. Any JMP course is an acceptable elective, but the following list is particularly suited to the degree.

- JMP 2400 - Video Editing I Credits: 3
- JMP 2420 - Video Production I Credits: 3
- JMP 2450 - Basic Media Production and Leadership Credits: 3
- JMP 2460 - Raster Graphics Credits: 3
- JMP 2465 - Vector Graphics Credits: 3
- JMP 3780 - Communication Law Credits: 3
- JMP 3980 - Internship: Journalism and Media Production Credits: 3

## Senior Experience: 3 credits

- JMP 4790 - Senior Seminar Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Department Core	12 credits
Major Required Courses	15 credits
International Technical Communications or Technical Writing	6 credits
Major Electives	6 credits
Senior Experience	3 credits
Unrestricted Electives	42-48 credits
<b>Total for the Technical Writing and Editing Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## *Video Production Major, B.S.*

[Department of Journalism and Media Production](#)

[College of Letters, Arts and Sciences](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

Students pursuing the B.S. degree in Video Production are immersed in all aspects of working with video, be that a short film or documentary; television package or commercial; demonstration or educational video; music video or a public service announcement. Students cover theories, concepts, techniques, and practical applications employed in various areas of industry including entertainment, business, government, and the many applications within the media production field. Students also work through conception, pre-production, production and post-production stages, as they develop increasingly specialized skills throughout their studies.

They cap their work in the program with a video thesis or an internship in video production.

Students in all JMP programs are expected to demonstrate common industry standards such as active participation, professional conduct, academic integrity, and adherence to deadlines.

### Student Outcomes

- Demonstrating a working knowledge of the basic functionality of industry standard computer-based video editing programs.
- Executing specific video editing functions such as insert and overwrite edits, selective audio and video track edits, trim edits, split edits, and audio and video level control & mixing, as well as saving and exporting completed videos.
- Determining efficient digital media management techniques while building and executing video editing workflows.
- Assessing and selecting appropriate visual and auditory communication aesthetics when creating video programs.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)



- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## JMP Department Core: 12 credits

All Journalism and Media Production students begin with the following courses:

- JMP 1100 - Journalism Fundamentals Credits: 3
- JMP 1450 - Media Literacy Credits: 3
- JMP 2435 - Multimedia Writing and Production Credits: 3
- JMP 3425 - Creating Informational Media Credits: 3

## Video Production Courses: 24 credits

All Video Production majors take the following courses.

- JMP 2400 - Video Editing I Credits: 3
- JMP 2420 - Video Production I Credits: 3
- JMP 2800 - Introduction to Audio Production Credits: 3
- JMP 3440 - Scriptwriting for Video Credits: 3
- JMP 3485 - Motion Graphics I Credits: 3
- JMP 3590 - Streaming Media Technologies Credits: 3
- JMP 3780 - Communication Law Credits: 3
- JMP 4420 - Video Production III Credits: 3

## Electives: 6 credits

Students complete the Video Production major with six credit hours of additional JMP course work. Any JMP course is an acceptable elective, but the following list is particularly suited to the degree.

- JMP 2480 - Introduction to Animation Credits: 3
- JMP 2600 - Beginning Photojournalism Credits: 3
- JMP 3530 - Drone Video Masterclass Credits: 3
- JMP 3800 - Audio Post-Production Credits: 3

- JMP 3980 - Internship: Journalism and Media Production Credits: 3
- JMP 4485 - Motion Graphics II Credits: 3

## Senior Experience: 3 credits

Students must take a Senior Experience course to meet university guidelines for degree completion.

- JMP 4790 - Senior Seminar Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Department Core	12 credits
Major Required Courses	24 credits
Major Electives	6 credits
Senior Experience Course	3 credits
Unrestricted Electives	39-42 credits
<b>Total for the Video Production Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Department of Music

Location: Arts Building, Room 287

Phone: 303-615-1010

E-Mail: [music@msudenver.edu](mailto:music@msudenver.edu)

Website: [Music Department Website](#)

## Music Education, B.M.E.

[Department of Music](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)



## About the Program

The Bachelor of Music Education degree prepares students for careers teaching music in K-12 schools and satisfies the requirements for K-12 licensure in the State of Colorado. Students must apply for and be granted admission to the music education program prior to any enrollment in music education methods courses, supervised field experiences, and student teaching. Further information may be obtained in the *Department of Music Student Handbook*. Students seeking this degree must satisfy all applicable requirements of the Department of Music and the School of Education teacher education program. To become licensed, recipients of the Bachelor of Music Education degree must satisfy all applicable requirements of the teacher education and licensure programs in the School of Education. This degree program is approved by the Colorado State Department of Education and has full accreditation by the National Association of Schools of Music.

## Student Outcomes

- Describe knowledge of content, methodologies, philosophies, materials, technologies, and curriculum development in music education.
- Teach music at various levels to different age groups in a variety of classroom and ensemble settings.
- Demonstrate a functional knowledge of voice, wind, string, percussion, and modern instruments.
- Assess individuals and groups of students and plan educational programs to meet assessed needs.
- Evaluate techniques and apply them in assessing both the musical progress of students and the objectives and procedures of the curriculum.
- Accept, amend, or reject methods and materials based on personal assessment of specific teaching situations.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 123 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1610 - Integrated Mathematics I. Using mathematics, students take a concept-oriented approach to exploring critical problems, deriving and justifying multiple solutions, and analyzing and communicating these responses.
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
  - **Strongly Recommended:** EDS 3150 - Critical Sociocultural Lenses for Teachers. This is a required course for the Bachelor of Music Education Degree. Students are introduced to the roles teachers as decision makers play in meeting educational needs of learners from diverse backgrounds.
  - **Recommended:** PSY 1800 - Developmental Educational Psychology. Students are introduced to developmental psychology that supports learning.
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Core Requirements: 32 credits

The following courses are required for all music majors:

- MUS 0020 - Recital Attendance Credits: 0 (two semesters)\*

- MUS 1110 - Music Theory I Credits: 3
- MUS 1120 - Music Theory Lab I Credits: 1
- MUS 1130 - Music Theory II Credits: 3
- MUS 1140 - Music Theory Lab II Credits: 1
- MUS 161B - Class Piano I Credits: 1 \*\*
- MUS 162B - Class Piano II Credits: 1 \*\*
- MUS 1710 - Private Instruction I Credits: 2 (primary performance area)
- MUS 1720 - Private Instruction II Credits: 2 (primary performance area)
- MUS 2110 - Music Theory III Credits: 3
- MUS 2120 - Music Theory Lab III Credits: 1
- MUS 2130 - Music Theory IV Credits: 3
- MUS 2140 - Music Theory Lab IV Credits: 1
- MUS 3050 - Musics of the World Credits: 3
- MUS 3210 - Western Music History I Credits: 3
- MUS 3220 - Western Music History II Credits: 3

Select one credit hour from the following options:

- MUS 3818 - Mariachi Ensemble Credits: 1
- MUS 3834 - Gamelan Ensemble Credits: 1
- MUS 3835 - African Drum and Dance Ensemble Credits: 1

*Students must enroll in MUS 3818: Mariachi Ensemble, MUS 3834: Gamelan Ensemble, or MUS 3835: African Drum and Dance Ensemble to meet this requirement.*

*\*Students must enroll during each semester of individual instruction and complete the requirement with a "Satisfactory" grade to be eligible to continue to enroll in individual instruction.*

*\*\*Students whose primary instrument is piano must substitute MUS 261B and 262B, Class Piano III and IV, for MUS 161B and 162B, Class Piano I and II, in the core requirements listed above. These students will not be required to take any additional piano courses.*

## Specific Degree Requirements: 40 credits

- MUS 0020 - Recital Attendance Credits: 0 (four additional semesters)\*
- MUS 2340 - Foundations of Music Education Credits: 2
- MUS 261B - Class Piano III Credits: 1
- MUS 262B - Class Piano IV Credits: 1
- MUS 2710 - Private Instruction III Credits: 2 (Primary Performance Area)
- MUS 2720 - Private Instruction IV Credits: 2 (Primary Performance Area)
- MUS 3250 - Basic Vocal Pedagogy and Diction Credits: 2
- MUS 3350 - Teaching General Music Credits: 2 \*\*
- MUS 3351 - Supervised Field Experience in General Music Credits: 1 \*\*
- MUS 3360 - Instruments in General Music Credits: 1

- MUS 3390 - The Inclusive Music Classroom Credits: 2
- MUS 3510 - Basic Conducting Credits: 2
- MUS 3540 - Advanced Conducting Credits: 2
- MUS 3710 - Private Instruction V Credits: 2 (Primary Performance Area)
- MUS 3720 - Private Instruction VI Credits: 2 (Primary Performance Area)
- MUS 4360 - Teaching Secondary Music I Credits: 2 \*\*\*
- MUS 4361 - Supervised Field Experience in Secondary Music I Credits: 1 \*\*\*
- MUS 4370 - Teaching Secondary Music II Credits: 2 \*\*\*\*
- MUS 4371 - Supervised Field Experience in Secondary Music II Credits: 1 \*\*\*\*
- MUS 4440 - Contemporary Music Education Practices Credits: 1
- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners Credits: 3
- EDS 3150 - Critical Sociocultural Lenses for Teachers Credits: 3
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools Credits: 3

## Notes:

*\*Students must enroll during each semester of individual instruction, and complete the requirement with a "Satisfactory" grade in order to be eligible to continue to enroll in individual instruction.*

*\*\*MUS 3350, MUS 3351, and CLD 3510 must be taken concurrently.*

*\*\*\*MUS 4360 and MUS 4361 must be taken concurrently.*

*\*\*\*\*MUS 4370 and MUS 4371 must be taken concurrently.*

## Take 4 of the following courses: 4 credits

- MUS 162A - Class Voice II Credits: 1
- MUS 2660 - Electronic Music Composition Credits: 1
- MUS 3410 - String Techniques and Pedagogy Credits: 1
- MUS 3420 - Guitar Techniques and Pedagogy Credits: 1
- MUS 3430 - Woodwind Techniques and Pedagogy Credits: 1
- MUS 3450 - Brass Techniques and Pedagogy Credits: 1
- MUS 3460 - Percussion Techniques and Pedagogy Credits: 1
- MUS 3640 - Improvisation Credits: 1

## Ensembles: 8 credits

*Students must enroll in the major ensemble according to their primary performance area during each semester of private instruction and must complete the requirement with a grade of "C-"*

or better to remain eligible to continue to enroll in private instruction.

## Ensembles: Primary Instrument in Jazz

Select six hours from the following options:

- MUS 3828 - Jazz Ensemble Credits: 1
  - MUS 3829 - Jazz Combo Credits: 1
- MUS 3828: Jazz Ensemble and MUS 3829: Jazz Chamber Music requires an audition.*

## Ensembles: Primary Instrument in Woodwinds, Brass, or Percussion

Select six hours from the following:

- MUS 3824 - Symphonic Band Credits: 1
  - MUS 3825 - Wind Ensemble Credits: 1
- MUS 3825: Wind Ensemble requires an audition.*

## Ensembles: Primary Instrument in Piano, Organ, or Classical Guitar

Select six hours from the following:

- MUS 3820 - Chorale Credits: 1
  - MUS 3821 - University Treble Choir Credits: 1
  - MUS 3822 - University Basso Choir Credits: 1
  - MUS 3823 - Auraria Choir Credits: 1
  - MUS 3830 - Guitar Ensemble Credits: 1
  - MUS 3832 - Collaborative Piano Credits: 1
- MUS 3820: Chorale, MUS 3830: Guitar Ensemble, and MUS 3832 Collaborative Piano require an audition. MUS 3821: University Treble Choir and MUS 3822: University Basso Choir require choral experience.*

Ensembles are assigned by the Coordinator of Music Education

## Ensembles: Primary Instrument in Strings

Choose six hours from the following:

- MUS 3817 - String Sinfonietta Credits: 1
  - MUS 3827 - Symphony Orchestra Credits: 1
- MUS 3827: Symphony Orchestra requires an audition.*

## Ensembles: Primary Instrument in Voice

Choose six hours from the following:

- MUS 3820 - Chorale Credits: 1
- MUS 3821 - University Treble Choir Credits: 1
- MUS 3822 - University Basso Choir Credits: 1

*MUS 3820: Choral requires an audition. MUS 3821: University Treble Choir and MUS 3822: University Basso Choir requires choral experience.*

## Take 2 of the following ensembles:

- MUS 3817 - String Sinfonietta Credits: 1
- MUS 3823 - Auraria Choir Credits: 1
- MUS 3826 - Secondary Instrument Band Credits: 1

## Senior Experience: 12 credits

- MUS 4971 - Student Teaching and Seminar: Elementary (K-6) Credits: 6
- MUS 4972 - Student Teaching and Seminar: Secondary (7-12) Credits: 6

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Core Requirements	32 credits
Specific Degree Requirements	40 credits
4 selected courses	4 credits
Ensembles	8 credits
Senior Experience	12 credits
Total for the Music Education Major, B.M.E.	123 credits

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

**Up to 6 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.**

## Music Major, B.A.

[Department of Music](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

## About the Program

The Bachelor of Arts degree with concentrations in Music offers vigorous study of music alongside a strong liberal arts education, equipping students with versatile skills that are highly valued in the broad spectrum of music-related careers.

## Student Outcomes

- Be able to hear, identify, and work conceptually with the elements of music: rhythm, melody, harmony, and structure, and to be able to sight read music with fluency.
- Understand compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces
- Have experienced a wide selection of musical styles, traditions, and compositions from a variety of sources through study, participation, and exposure through live performances.
- Have the technical and artistic ability to perform in areas appropriate to the student's needs and interests, and to work independently and creatively.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)

- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Core Requirements: 32 credits

The following courses are required for all music majors:

- MUS 0020 - Recital Attendance Credits: 0 \*
- MUS 1110 - Music Theory I Credits: 3
- MUS 1120 - Music Theory Lab I Credits: 1
- MUS 1130 - Music Theory II Credits: 3
- MUS 1140 - Music Theory Lab II Credits: 1
- MUS 161B - Class Piano I Credits: 1 \*\*
- MUS 162B - Class Piano II Credits: 1 \*\*
- MUS 1710 - Private Instruction I Credits: 2 (primary performance area)
- MUS 1720 - Private Instruction II Credits: 2 (primary performance area)
- MUS 2110 - Music Theory III Credits: 3
- MUS 2120 - Music Theory Lab III Credits: 1
- MUS 2130 - Music Theory IV Credits: 3
- MUS 2140 - Music Theory Lab IV Credits: 1
- MUS 3050 - Musics of the World Credits: 3
- MUS 3210 - Western Music History I Credits: 3
- MUS 3220 - Western Music History II Credits: 3

Select one credit hour from the following options:

- MUS 3818 - Mariachi Ensemble Credits: 1
- MUS 3834 - Gamelan Ensemble Credits: 1
- MUS 3835 - African Drum and Dance Ensemble Credits: 1

*\*Students must enroll during each semester of individual instruction, and complete the requirement with a "Satisfactory" grade in order to be eligible to continue to enroll in individual instruction.*

*\*\*Students whose primary instrument is piano must substitute MUS 261B and MUS 262B, Class Piano III and IV, for MUS 161B and MUS 162B, Class Piano I and II, in the core requirements listed above.*

## Specific Degree Requirements: 11 credits

- MUS 0020 - Recital Attendance Credits: 0 (two additional semesters)\*
- MUS 1210 - Introduction to Musical Styles and Research Credits: 2
- MUS 1650 - Basic Music Technology Credits: 1
- MUS 2710 - Private Instruction III Credits: 2 (Primary Performance Area)
- MUS 2720 - Private Instruction IV Credits: 2
- Upper-division elective in Music Theory, History, Literature or Pedagogy (3 hours)
- MUS 4020 - Senior Seminar in Music Credits: 1 (Primary Performance Area)

*\*Students must enroll during each semester of individual instruction, and complete the requirement with a "Satisfactory" grade in order to be eligible to continue to enroll in individual instruction.*

## Ensembles: 6 credits

*Students enrolled in private lessons must enroll in the appropriate major ensemble during each semester of individual instruction.*

Choose five hours from the following:

- MUS 3828 - Jazz Ensemble **Credits: 1**
- MUS 3829 - Jazz Combo **Credits: 1**  
*For students whose primary instrument is a jazz instrument, the major ensemble is MUS 3828: Jazz Ensemble or MUS 3829: Jazz Chamber Ensemble, as assigned by the Director of Jazz Studies.*
- MUS 3820 - Chorale **Credits: 1**
- MUS 3821 - University Treble Choir **Credits: 1**
- MUS 3822 - University Basso Choir **Credits: 1**  
*For students whose primary instrument is voice, the major ensemble is choir (MUS 3820: Chorale, MUS 3821: University Treble Choir, or MUS 3822: University Basso Choir) as assigned by the Director of Choral Activities.*
- MUS 3824 - Symphonic Band **Credits: 1**
- MUS 3825 - Wind Ensemble **Credits: 1**  
*For students whose primary instrument is woodwinds, brass, or percussion, the major ensemble is band (MUS 3825: Wind Ensemble or MUS 3824: Symphonic Band) as assigned by the Director of Band Activities.*
- MUS 3817 - String Sinfonietta **Credits: 1**
- MUS 3827 - Symphony Orchestra **Credits: 1**  
*For students whose primary instrument is strings, the major ensemble is orchestra (MUS 3817: String Sinfonietta*

*or MUS 3827: Symphony Orchestra), as assigned by the Director of Orchestral Activities.*

- MUS 3830 - Guitar Ensemble **Credits: 1**  
*For students whose primary instrument is guitar, the major ensemble is MUS 3830: Guitar Ensemble.*

One hour:

- MUS 3819 - Chamber Music **Credits: 1**

## Ensembles: Primary instrument in Piano and Organ: 6 credits

Choose five hours from the following:

- MUS 3817 - String Sinfonietta Credits: 1
- MUS 3820 - Chorale Credits: 1
- MUS 3821 - University Treble Choir Credits: 1
- MUS 3822 - University Basso Choir Credits: 1
- MUS 3824 - Symphonic Band Credits: 1
- MUS 3825 - Wind Ensemble Credits: 1
- MUS 3827 - Symphony Orchestra Credits: 1  
*For students whose primary instrument is piano or organ, the major ensemble is choir (MUS 3820: Chorale (audition), MUS 3821: University Treble Choir (choral experience) or MUS 3822: University Basso Choir (choral experience), band (MUS 3825: Wind Ensemble (audition) or MUS 3824: Symphonic Band) or orchestra (MUS 3817: String Sinfonietta or MUS 3827: Symphony Orchestra), as assigned by the Director of Choral Activities, the Director of Band Activities, or the Director of Orchestral Activities.*

One hour:

- MUS 3819 - Chamber Music Credits: 1

## Music Theory Concentration

The BA in Music Theory allows students to pursue the Bachelor of Arts with a concentration in music theory. This allows students to pursue a degree that focuses on the analysis and formal structure of music.

### Student Outcomes

- Be able to hear, identify, and work conceptually with the elements of music: rhythm, melody, harmony, and structure, and to be able to sight read music with fluency.
- Understand compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces.
- Have experienced a wide selection of musical styles, traditions, and compositions from a variety of sources through study, participation, and exposure through live performances.

- Have the technical and artistic ability to perform in areas appropriate to the student's needs and interests, and to work independently and creatively.

## Specific Concentration Requirements: 28 credits

- MUS 0020 - Recital Attendance Credits: 0
- MUS 1210 - Introduction to Musical Styles and Research Credits: 2
- MUS 1650 - Basic Music Technology Credits: 1
- MUS 2150 - Jazz Theory Credits: 3
- MUS 261B - Class Piano III Credits: 1
- MUS 262B - Class Piano IV Credits: 1
- MUS 2710 - Private Instruction III Credits: 2
- MUS 2720 - Private Instruction IV Credits: 2
- MUS 3100 - Counterpoint Credits: 3
- MUS 3510 - Basic Conducting Credits: 2
- MUS 3640 - Improvisation Credits: 1
- MUS 3650 - Basic Techniques of Composition Credits: 2
- MUS 4020 - Senior Seminar in Music Credits: 1
- MUS 4110 - Analysis of Music Credits: 2
- MUS 4800 - Seminar in Music Repertoire Credits: 2
- PHY 2620 - Sound and Music Credits: 3

## Additional Required Courses: 4 credits

Select four credits from the following classes:

- MUS 2660 - Electronic Music Composition Credits: 1
- MUS 3000 - Musics of America Credits: 3
- MUS 3020 - History of Jazz Credits: 3
- MUS 3150 - Arranging and Orchestration Credits: 2
- MUS 3160 - Jazz Composition and Arranging Credits: 1
- MUS 3410 - String Techniques and Pedagogy Credits: 1
- MUS 3430 - Woodwind Techniques and Pedagogy Credits: 1
- MUS 3450 - Brass Techniques and Pedagogy Credits: 1
- MUS 3460 - Percussion Techniques and Pedagogy Credits: 1
- MUS 3540 - Advanced Conducting Credits: 2

## Additional Ensemble Hours: 2 credits

Choose two credits from the following:

- MUS 3816 - Early Music Ensemble Credits: 1
- MUS 3817 - String Sinfonietta Credits: 1
- MUS 3818 - Mariachi Ensemble Credits: 1
- MUS 3819 - Chamber Music Credits: 1
- MUS 3820 - Chorale Credits: 1

- MUS 3821 - University Treble Choir Credits: 1
- MUS 3822 - University Basso Choir Credits: 1
- MUS 3824 - Symphonic Band Credits: 1
- MUS 3825 - Wind Ensemble Credits: 1
- MUS 3826 - Secondary Instrument Band Credits: 1
- MUS 3827 - Symphony Orchestra Credits: 1
- MUS 3828 - Jazz Ensemble Credits: 1
- MUS 3829 - Jazz Combo Credits: 1
- MUS 3830 - Guitar Ensemble Credits: 1
- MUS 3831 - Percussion Chamber Ensemble Credits: 1
- MUS 3832 - Collaborative Piano Credits: 1
- MUS 3833 - Opera Credits: 1
- MUS 3834 - Gamelan Ensemble Credits: 1
- MUS 3835 - African Drum and Dance Ensemble Credits: 1

## Songwriting and Music Production Concentration

The Music Major, B.A. with a concentration in Songwriting and Music Production allows students to enhance their Bachelor of Arts degree with additional courses in songwriting and music production. Students have numerous options to choose from a large range of courses in Music, Media Production, English, and related disciplines. This degree gives students a diverse and interdisciplinary experience that focuses on developing skills in writing songs and producing commercial music.

### Student Outcomes

- Be able to hear, identify, and work conceptually with the elements of music: rhythm, melody, harmony, and structure, and to be able to sight read music with fluency.
- Understand compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces.
- Have experienced a wide selection of musical styles, traditions, and compositions from a variety of sources through study, participation, and exposure through live performances.
- Have the technical and artistic ability to perform in areas appropriate to the student's needs and interests, and to work independently and creatively.
- Understand the interdisciplinary aspects of songwriting.
- Utilize various technological tools and concepts used in the production of commercial music.

## Specific Concentration Requirements: 33 credits

Required Courses: 6 credit hours

- MUS 1060 - Basic Music Production **Credits: 2**
- MUS 3070 - Songwriting **Credits: 2**
- MUS 3650 - Basic Techniques of Composition **Credits: 2**

Choose 9 credit hours from the following:

- MUS 2450 - Jazz Improvisation I **Credits: 1**
- MUS 2660 - Electronic Music Composition **Credits: 1**
- MUS 3100 - Counterpoint **Credits: 3**
- MUS 3150 - Arranging and Orchestration **Credits: 2**
- MUS 3160 - Jazz Composition and Arranging **Credits: 1**
- MUS 3660 - Scoring for Film and Television **Credits: 3**
- MUS 3711 - Private Instruction V (Composition) **Credits: 3**

- MUS 4110 - Analysis of Music **Credits: 2**

Choose 9 credit hours from the following:

- ENG 2000 - Introduction to Textual Studies **Credits: 3**
- ENG 2500 - Introduction to Creative Writing **Credits: 3**
- ENG 3140 - Literary Genre: Poetry **Credits: 4** *ENG 2000 prerequisite*
- ENG 3521 - Poetry Writing Workshop **Credits: 4** *ENG 2500 prerequisite or permission*
- ENG 3535 - Essentials of Grant Writing **Credits: 4**
- ENG 4115 - Hip-Hop and Literature **Credits: 4** *ENG 2000 prerequisite*
- MUS 1050 - History of Rock and Roll **Credits: 3**
- MUS 3015 - Global Pop **Credits: 3**
- MUS 3020 - History of Jazz **Credits: 3**
- MUS 3030 - Traditional American Improvised Styles **Credits: 3**
- MUS 3099 - The Beatles: Music and Culture **Credits: 3**
- MUS 4010 - From Blues to Hip Hop: African American Musical Heritage **Credits: 3**

Choose 9 credit hours from the following:

- JMP 1450 - Media Literacy **Credits: 3**
- JMP 2400 - Video Editing I **Credits: 3**
- JMP 2420 - Video Production I **Credits: 3**
- JMP 2430 - Introduction to Media Production **Credits: 3**
- JMP 2450 - Basic Media Production and Leadership **Credits: 3**
- JMP 2800 - Introduction to Audio Production **Credits: 3**
- JMP 3470 - Writing for Interactive Media **Credits: 3**
- JMP 3590 - Streaming Media Technologies **Credits: 3** *JMP 2430 prerequisite*
- MKT 3000 - Principles of Marketing **Credits: 3**
- BUS 1850 - Introduction to Business **Credits: 3**

## Additional Ensemble Hours: 2 credits

Choose 2 credit hours from the following:

- MUS 3816 - Early Music Ensemble Credits: 1
- MUS 3817 - String Sinfonietta Credits: 1
- MUS 3818 - Mariachi Ensemble Credits: 1
- MUS 3819 - Chamber Music Credits: 1
- MUS 3820 - Chorale Credits: 1
- MUS 3821 - University Treble Choir Credits: 1
- MUS 3822 - University Basso Choir Credits: 1

- MUS 3824 - Symphonic Band Credits: 1
- MUS 3825 - Wind Ensemble Credits: 1
- MUS 3826 - Secondary Instrument Band Credits: 1
- MUS 3827 - Symphony Orchestra Credits: 1
- MUS 3828 - Jazz Ensemble Credits: 1
- MUS 3829 - Jazz Combo Credits: 1
- MUS 3830 - Guitar Ensemble Credits: 1
- MUS 3831 - Percussion Chamber Ensemble Credits: 1
- MUS 3832 - Collaborative Piano Credits: 1
- MUS 3833 - Opera Credits: 1
- MUS 3834 - Gamelan Ensemble Credits: 1
- MUS 3835 - African Drum and Dance Ensemble Credits: 1

## Musicology and Ethnomusicology Concentration

The BA in Musicology and Ethnomusicology allows students to pursue the Bachelor of Arts concentration with courses focused on musicology and ethnomusicology. The interdisciplinary nature of this degree enables students to choose courses across a variety of departments including Music, Anthropology, African and African Studies, Chicano/Chicana Studies, English, Gender Studies, Sociology, History, Religion, and Theatre. This allows students to pursue a degree that focuses on academic study in exploring a variety of ways people and cultures express music.

### Student Outcomes

- Be able to hear, identify, and work conceptually with the elements of music: rhythm, melody, harmony, and structure, and to be able to sight read music with fluency.
- Understand compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces.
- Have experienced a wide selection of musical styles, traditions, and compositions from a variety of sources through study, participation, and exposure through live performances.
- Have the technical and artistic ability to perform in areas appropriate to the student's needs and interests, and to work independently and creatively.
- Explore music in relation to its historical, cultural, and social context.

## Specific Concentration Requirements: 30 credits

Required Courses: 6 credits

- MUS 1040 - Music, Race, and Power **Credits: 3**
- ANT 1310 - Introduction to Cultural Anthropology **Credits: 3**

Choose 12 credit hours from the following:

- MUS 1050 - History of Rock and Roll **Credits: 3**

- MUS 3000 - Musics of America **Credits: 3**
  - MUS 3015 - Global Pop **Credits: 3**
  - MUS 3020 - History of Jazz **Credits: 3**
  - MUS 3816 - Early Music Ensemble **Credits: 1**
  - MUS 3818 - Mariachi Ensemble **Credits: 1**
  - MUS 3834 - Gamelan Ensemble **Credits: 1**
  - MUS 3835 - African Drum and Dance Ensemble **Credits: 1**
  - MUS 3895 - Hip-Hop Culture and Rap Music **Credits: 3**
  - MUS 4000 - Musics of Latin America **Credits: 3**
  - MUS 4010 - From Blues to Hip Hop: African American Musical Heritage **Credits: 3**
- Choose 12 credit hours from the following:
- AAS 1010 - Introduction to Africana Studies **Credits: 3**
  - ANT 1300 - Asia in Global Perspective **Credits: 3**  
*Prerequisite of ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021*
  - ANT 1400 - Introduction to Folklore **Credits: 3**  
*Prerequisite of ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021*
  - ANT 2330 - Cross-Cultural Communication **Credits: 3**
  - ANT 2350 - African Peoples and Cultures **Credits: 3**
  - ANT 2360 - Living Culture and Language of the Mexican and Chicano **Credits: 3** *Prerequisite of CHS 1000 or CHS 1020*
  - ANT 3320 - Anthropology of Japan **Credits: 3**  
*Prerequisite of ANT 1310*
  - ANT 3379 - Middle Eastern Cultures **Credits: 3**  
*Prerequisite of ENG 1020 or ENG 1310 or PSC 1020*
  - ANT 3391 - Approaching Culture: Past and Present **Credits: 3** *Prerequisite of ANT 1310*
  - CHS 1000 - Introduction to Chicana/o Studies **Credits: 3**
  - CHS 1030 - Introduction to Social Justice and Decoloniality **Credits: 3**
  - CHS 2020 - Chicano Poetry and Drama **Credits: 3**  
*Prerequisite of CHS 2010 or permission*
  - CHS 3880 - Exploring Folklore **Credits: 3** *Prerequisite of ANT 1310 or CHS 1000*
  - ENG 1150 - Introduction to Folklore **Credits: 3**  
*Prerequisite of ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021*
  - ENG 2000 - Introduction to Textual Studies **Credits: 3**
  - GWS 1001 - Introduction to Gender, Women, and Sexualities Studies **Credits: 3**
  - GWS 2400 - Women's Folklore and Folklife **Credits: 3**  
*Prerequisite of ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021*
  - HIS 1030 - World History to 1500 **Credits: 3**
  - HIS 1040 - World History since 1500 **Credits: 3**
  - HIS 1150 - Race and Social Justice in U.S. History **Credits: 3**
  - HIS 1250 - China and East Asia **Credits: 3**
  - HIS 1270 - India and South Asia **Credits: 3**

- HIS 1300 - Introduction to Latin American History **Credits: 3**
- HIS 1940 - Survey of African History **Credits: 3**
- HIS 2090 - The Black Lives Matter Movement and the Origins of Modern Black Protest **Credits: 3**
- RLG 1040 - Asian Religions **Credits: 3**
- RLG 1050 - Judaism, Christianity, Islam **Credits: 3**
- RLG 3410 - South and East Asian Philosophies and Religions: Variable Topics **Credits: 3** *Prerequisite of RLG 1040*
- RLG 3610 - Religious Studies: Variable Topics **Credits: 3** *Prerequisite of RLG 1040 or 1050*
- SOC 1010 - People, Power, and Progress **Credits: 3**
- THE 3213 - Staging Cultures: Theatre, Drama, and Multiculturalism **Credits: 3**

### Additional Ensemble Hours: 2 credits

- MUS 3816 - Early Music Ensemble Credits: 1
- MUS 3817 - String Sinfonietta Credits: 1
- MUS 3818 - Mariachi Ensemble Credits: 1
- MUS 3819 - Chamber Music Credits: 1
- MUS 3820 - Chorale Credits: 1
- MUS 3821 - University Treble Choir Credits: 1
- MUS 3822 - University Basso Choir Credits: 1
- MUS 3824 - Symphonic Band Credits: 1
- MUS 3825 - Wind Ensemble Credits: 1
- MUS 3826 - Secondary Instrument Band Credits: 1
- MUS 3827 - Symphony Orchestra Credits: 1
- MUS 3828 - Jazz Ensemble Credits: 1
- MUS 3829 - Jazz Combo Credits: 1
- MUS 3830 - Guitar Ensemble Credits: 1
- MUS 3831 - Percussion Chamber Ensemble Credits: 1
- MUS 3832 - Collaborative Piano Credits: 1
- MUS 3833 - Opera Credits: 1
- MUS 3834 - Gamelan Ensemble Credits: 1
- MUS 3835 - African Drum and Dance Ensemble Credits: 1

### Senior Experience: 3 credits

- MUS 4950 - Senior Project Credits: 3

### Summary of Requirements: Music Major, B.A.

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Core Requirements	32 credits



Specific Degree Requirements	11 credits
Ensembles or Ensembles: Primary Instrument in Piano and Organ	6 credits
Senior Experience	3 credits
Minor and Unrestricted Electives	32-41 credits
<b>Total for the Music Major, B.A.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Summary of Requirements: Music Major, B.A.: Music Theory Concentration

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Core Requirements	32 credits
Ensembles or Ensembles: Primary Instrument in Piano and Organ	6 credits
Specific Degree Requirements	28 credits
Additional Required Courses	4 credits
Additional Ensemble Hours	2 credits
Senior Experience	3 credits
Unrestricted Electives	9-21 credits
<b>Total for the Music Major, B.A.: Music Theory Concentration</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Summary of Requirements: Music Major, B.A.: Songwriting and Music Production Concentration

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Core Requirements	32 credits
Specific Degree Requirements	33 credits
Ensembles	6 credits
Additional Required Courses	11 credits
Additional Ensemble Hours	2 credits
Senior Experience	3 credits
Unrestricted Electives	0-6 credits
<b>Total for the Music Major, B.A.: Songwriting and Music Production Concentration</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Summary of Requirements: Music Major, B.A.: Musicology and Ethnomusicology Concentration

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Core Requirements	32 credits
Specific Degree Requirements	30 credits
Ensembles	6 credits
Additional Required Courses	11 credits
Additional Ensemble Hours	2 credits
Senior Experience	3 credits

Unrestricted Electives	0-18 credits
<b>Total for the Music Major, B.A.: Musicology and Ethnomusicology Concentration</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Music Major, B.M.

[Department of Music](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

### About the Program

The Bachelor of Music degree prepares students for further graduate studies or for careers as performers, composers, or private studio teachers. Concentrations are available in performance and composition. To be admitted to this program, students must demonstrate the capability of developing a high level of musicianship. For admission to the performance concentration, students must pass the music performance audition upon completion of MUS 1720 - Private Instruction II. For admission to the composition concentration, students must pass a review of their composition portfolio upon completion of MUS 3650 - Basic Techniques of Composition.

### General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

### Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

### General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
  - **Strongly Recommended for the Voice Concentration:** FRE 1010 - Elementary French I, GER 1010 - Elementary German I, or ITA 1010 - Elementary Italian I. These courses serve as prerequisites to degree requirements.
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

### Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.
  - **Recommended for the Jazz and American Improvised Music Performance Concentration:** MUS 3020 - History of Jazz which is a requirement for this concentration.

### Core Requirements: 32 credits

The following courses are required for all music majors:

- MUS 0020 - Recital Attendance Credits: 0 \*
- MUS 1110 - Music Theory I Credits: 3
- MUS 1120 - Music Theory Lab I Credits: 1
- MUS 1130 - Music Theory II Credits: 3
- MUS 1140 - Music Theory Lab II Credits: 1
- MUS 161B - Class Piano I Credits: 1 \*\*
- MUS 162B - Class Piano II Credits: 1 \*\*
- MUS 1710 - Private Instruction I Credits: 2 (primary performance area)
- MUS 1720 - Private Instruction II Credits: 2 (primary performance area)

- MUS 2110 - Music Theory III Credits: 3
- MUS 2120 - Music Theory Lab III Credits: 1
- MUS 2130 - Music Theory IV Credits: 3
- MUS 2140 - Music Theory Lab IV Credits: 1
- MUS 3050 - Musics of the World Credits: 3
- MUS 3210 - Western Music History I Credits: 3
- MUS 3220 - Western Music History II Credits: 3

Select one credit hour from the following options:

- MUS 3818 - Mariachi Ensemble Credits: 1
- MUS 3834 - Gamelan Ensemble Credits: 1
- MUS 3835 - African Drum and Dance Ensemble Credits: 1

*\*Students must enroll during each semester of individual instruction, and complete the requirement with a "Satisfactory" grade in order to be eligible to continue to enroll in individual instruction.*

*\*\*Students whose primary instrument is piano must substitute MUS 261B and MUS 262B, Class Piano III and IV, for MUS 161B and MUS 162B, Class Piano I and II, in the core requirements listed above.*

- MUS 0020 - Recital Attendance Credits: 0 (six additional semesters)\*
- MUS 1210 - Introduction to Musical Styles and Research Credits: 2
- MUS 1650 - Basic Music Technology Credits: 1
- MUS 2730 - Performance III Credits: 3 (Primary Performance Area)
- MUS 2740 - Performance IV Credits: 3 (Primary Performance Area)
- MUS 3150 - Arranging and Orchestration Credits: 2
- MUS 3510 - Basic Conducting Credits: 2
- MUS 3640 - Improvisation Credits: 1
- MUS 3730 - Performance V Credits: 3 (Primary Performance Area)
- MUS 3740 - Performance VI Credits: 3 (Primary Performance Area)
- MUS 4020 - Senior Seminar in Music Credits: 1
- MUS 4730 - Performance VII (Primary Performance Area) Credits: 3
- MUS 4800 - Seminar in Music Repertoire Credits: 2
- Upper-division elective in Music Theory, History, Literature or Pedagogy Credits: 3

## Woodwinds, Brass, Strings, and Percussion Performance Concentrations

For admission to the performance concentration, students must pass the music performance audition upon completion of MUS 1720 - Private Instruction II.

### Student Outcomes

- Be able to hear, identify, and work conceptually with the elements of music: rhythm, melody, harmony, and structure, and to be able to sight read music with fluency.
- Understand compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces
- Have experienced a wide selection of musical styles, traditions, and compositions from a variety of sources through study, participation, and exposure through live performances.
- Have the technical and artistic ability to perform in areas appropriate to the student's needs and interests, and to work independently and creatively.
- The ability to perform a cross-section of musical styles from the complete repertory of the particular performance medium including music of their own time.

### Specific Concentration Requirements: 29 credits

*\*Students must enroll during each semester of individual instruction, and complete the requirement with a "Satisfactory" grade in order to be eligible to continue to enroll in individual instruction.*

### Select one of the following courses: 1 credit

- MUS 3410 - String Techniques and Pedagogy Credits: 1
- MUS 3430 - Woodwind Techniques and Pedagogy Credits: 1
- MUS 3450 - Brass Techniques and Pedagogy Credits: 1
- MUS 3460 - Percussion Techniques and Pedagogy Credits: 1

### Ensemble Requirements: 12 credits

*Students must complete 12 credits of ensembles.*

### Woodwind, Brass, and Percussion Concentration

Six hours:

- MUS 3824 - Symphonic Band Credits: 1
  - MUS 3825 - Wind Ensemble Credits: 1
- MUS 3825: Wind Ensemble requires an audition. Students must complete the requirement with a grade of "C-" or better in order to be eligible to continue to enroll in individual instruction.*

Two hours:

- MUS 3827 - Symphony Orchestra Credits: 1  
*Students must complete the requirement with a grade of "C- " or better in order to be eligible to continue to enroll in individual instruction.*  
Note: B.M in Music performance with saxophone as the principle instrument may take two semester of either MUS 3827 - Symphony Orchestra, or MUS 3828 - Jazz Ensemble.

Four hours:

- MUS 3819 - Chamber Music Credits: 1

## Strings Concentration

Eight hours:

- MUS 3817 - String Sinfonietta Credits: 1
- MUS 3827 - Symphony Orchestra Credits: 1  
*MUS 3827: Symphony Orchestra requires an audition. Students must complete the requirement with a grade of "C- " or better in order to be eligible to continue to enroll in individual instruction.*

Four hours:

- MUS 3819 - Chamber Music Credits: 1

## Collaborative Pianist Requirement: Woodwind, Brass, and String Concentration: 1 credit

- MUS 4100 - Recital Preparation with the Collaborative Pianist Credits: 1

## Senior Experience: 3 credits

- MUS 4740 - Senior Recital Performance Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Core Requirements	32 credits
Specific Concentration Requirements	29 credits
Selected Pedagogy Course	1 credit

Ensemble Requirements	12 credits
Collaborative Pianist Requirement: Woodwind, Brass, and Strings	1 credit
Senior Experience	3 credits
Unrestricted Electives	6-12 credits
<b>Total for the Music Major, B.M., Woodwinds, Brass, Strings, and Percussion Performance Concentrations</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Piano and Guitar Performance Concentration

For admission to the performance concentration, students must pass the music performance audition upon completion of MUS 1720 - Private Instruction II.

## Student Outcomes

- Be able to hear, identify, and work conceptually with the elements of music: rhythm, melody, harmony, and structure, and to be able to sight read music with fluency.
- Understand compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces
- Have experienced a wide selection of musical styles, traditions, and compositions from a variety of sources through study, participation, and exposure through live performances.
- Have the technical and artistic ability to perform in areas appropriate to the student's needs and interests, and to work independently and creatively.
- The ability to perform a cross-section of musical styles from the complete repertory of the particular performance medium including music of their own time.

## Specific Degree Requirements: 24 credits

- MUS 0020 - Recital Attendance Credits: 0 (Six additional semesters)\*
- MUS 1210 - Introduction to Musical Styles and Research Credits: 2
- MUS 1650 - Basic Music Technology Credits: 1

- MUS 2730 - Performance III Credits: 3 (Primary performance area)
- MUS 2740 - Performance IV Credits: 3 (Primary performance area)
- MUS 3510 - Basic Conducting Credits: 2
- MUS 3640 - Improvisation Credits: 1
- MUS 3730 - Performance V Credits: 3 (Primary performance area)
- MUS 3740 - Performance VI Credits: 3 (Primary performance area)
- MUS 4020 - Senior Seminar in Music Credits: 1
- MUS 4730 - Performance VII (Primary Performance Area) Credits: 3
- MUS 4800 - Seminar in Music Repertoire Credits: 2

*\*Students must enroll during each semester of individual instruction, and complete the requirement with a "Satisfactory" grade in order to be eligible to continue to enroll in individual instruction.*

## Additional Concentration Requirements (Specific Instrument Concentration): 9 credits

### Piano Concentration

- MUS 3100 - Counterpoint Credits: 3
- MUS 4410 - Piano Pedagogy Credits: 3
- Upper-division elective in Music Theory, History, Literature or Pedagogy Credits: 3

### Guitar Concentration

- MUS 3100 - Counterpoint Credits: 3
- MUS 3150 - Arranging and Orchestration Credits: 2
- MUS 4430 - Guitar Pedagogy and Literature Credits: 3

Select one of the following courses: 1 credit

- MUS 3410 - String Techniques and Pedagogy Credits: 1
- MUS 3430 - Woodwind Techniques and Pedagogy Credits: 1
- MUS 3450 - Brass Techniques and Pedagogy Credits: 1
- MUS 3460 - Percussion Techniques and Pedagogy Credits: 1

## Ensemble Requirements: 12 credits

### Piano Concentration

Six hours:

- MUS 3832 - Collaborative Piano Credits: 1

*Students must complete the requirement with a grade of "C- " or better in order to be eligible to continue to enroll in individual instruction.*

Four hours:

- MUS 3819 - Chamber Music Credits: 1

Two hours:

- MUS 3817 - String Sinfonietta Credits: 1
- MUS 3820 - Chorale Credits: 1
- MUS 3821 - University Treble Choir Credits: 1
- MUS 3822 - University Basso Choir Credits: 1
- MUS 3823 - Auraria Choir Credits: 1
- MUS 3824 - Symphonic Band Credits: 1
- MUS 3825 - Wind Ensemble Credits: 1
- MUS 3826 - Secondary Instrument Band Credits: 1
- MUS 3827 - Symphony Orchestra Credits: 1

## Guitar Concentration

Eight hours:

- MUS 3830 - Guitar Ensemble Credits: 1

*Students must complete the requirement with a grade of "C- " or better in order to be eligible to continue to enroll in individual instruction.*

Two hours:

- MUS 3819 - Chamber Music Credits: 1

Two hours:

- MUS 3820 - Chorale Credits: 1
- MUS 3821 - University Treble Choir Credits: 1
- MUS 3822 - University Basso Choir Credits: 1
- MUS 3823 - Auraria Choir Credits: 1
- MUS 3824 - Symphonic Band Credits: 1
- MUS 3825 - Wind Ensemble Credits: 1
- MUS 3827 - Symphony Orchestra Credits: 1
- MUS 3828 - Jazz Ensemble Credits: 1

## Senior Experience: 3 credits

- MUS 4740 - Senior Recital Performance Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Core Requirements	32 credits
Specific Degree Requirements	24 credits

Additional Concentration Requirements	9 credits
Ensemble Requirements	12 credits
Senior Experience	3 credits
Unrestricted Electives	4-13 credits
<b>Total for the Music Major, B.M., Piano and Guitar Performance Concentration</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Voice Performance Concentration

For admission to the performance concentration, students must pass the music performance audition upon completion of MUS 1720 - Private Instruction II.

### *Student Outcomes*

- Be able to hear, identify, and work conceptually with the elements of music: rhythm, melody, harmony, and structure, and to be able to sight read music with fluency.
- Understand compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces.
- Have experienced a wide selection of musical styles, traditions, and compositions from a variety of sources through study, participation, and exposure through live performances.
- Have the technical and artistic ability to perform in areas appropriate to the student's needs and interests, and to work independently and creatively.
- The ability to perform a cross-section of musical styles from the complete repertory of the particular performance medium including music of their own time.

## Specific Concentration Requirements: 25 credits

- MUS 0020 - Recital Attendance Credits: 0 (six additional semesters)\*
- MUS 1210 - Introduction to Musical Styles and Research Credits: 2
- MUS 1650 - Basic Music Technology Credits: 1
- MUS 2730 - Performance III Credits: 3 (Primary Performance Area)

- MUS 2740 - Performance IV Credits: 3 (Primary Performance Area)
- MUS 3510 - Basic Conducting Credits: 2
- MUS 3640 - Improvisation Credits: 1
- MUS 3730 - Performance V Credits: 3 (Primary Performance Area)
- MUS 3740 - Performance VI Credits: 3 (Primary Performance Area)
- MUS 4020 - Senior Seminar in Music Credits: 1
- MUS 4100 - Recital Preparation with the Collaborative Pianist Credits: 1
- MUS 4730 - Performance VII (Primary Performance Area) Credits: 3 (Primary Performance Area)
- MUS 4800 - Seminar in Music Repertoire Credits: 2

## Additional Concentration Requirements: 12 credits

### Voice Performance: 7 credits

- MUS 2400 - Vocal Diction I Credits: 2
- MUS 3400 - Vocal Diction II Credits: 2
- MUS 4520 - Vocal Pedagogy and Literature Credits: 3

### Select one of the following: 5 credits

- FRE 1020 - Elementary French II Credits: 5
- GER 1020 - Elementary German II Credits: 5
- ITA 1020 - Elementary Italian II Credits: 5

## Ensemble Requirements: 12 credits

Eight hours:

- MUS 3820 - Chorale Credits: 1
  - MUS 3821 - University Treble Choir Credits: 1
  - MUS 3822 - University Basso Choir Credits: 1
- MUS 3820: Chorale requires an audition. Students must complete the requirement with a grade of "C-" or better in order to be eligible to continue to enroll in individual instruction.*

Three hours:

- MUS 3819 - Chamber Music Credits: 1
  - MUS 3833 - Opera Credits: 1
- Opera requires an audition.*

### One Hour:

- MUS 3816 - Early Music Ensemble Credits: 1
- MUS 3819 - Chamber Music Credits: 1
- MUS 3833 - Opera Credits: 1

## Senior Experience: 3 credits

- MUS 4740 - Senior Recital Performance Credits: 3

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Core Requirements	32 credits
Specific Concentration Requirements	25 credits
Additional Concentration Requirements	12 credits
Ensemble Requirements	12 credits
Senior Experience	3 credits
Unrestricted Electives	0-9 credits
<b>Total for the Music Major, B.M., Voice Performance Concentration</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Jazz and American Improvised Music Performance Concentration

For admission to the performance concentration, students must pass the music performance audition upon completion of MUS 1720 - Private Instruction II.

## Student Outcomes

- Be able to hear, identify, and work conceptually with the elements of music: rhythm, melody, harmony, and structure, and to be able to sight read music with fluency.
- Understand compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces
- Have experienced a wide selection of musical styles, traditions, and compositions from a variety of sources

through study, participation, and exposure through live performances.

- Have the technical and artistic ability to perform in areas appropriate to the student's needs and interests, and to work independently and creatively.
- The ability to perform a cross-section of musical styles from the complete repertory of the particular performance medium including music of their own time.

## Specific Concentration Requirements: 36 credits

- MUS 0020 - Recital Attendance Credits: 0 (six additional semesters)\*
- MUS 1060 - Basic Music Production Credits: 2
- MUS 1210 - Introduction to Musical Styles and Research Credits: 2
- MUS 2030 - Jazz and American Improvised Music Musicianship Credits: 1
- MUS 2150 - Jazz Theory Credits: 3
- MUS 2450 - Jazz Improvisation I Credits: 1
- MUS 2730 - Performance III Credits: 3
- MUS 2740 - Performance IV Credits: 3
- MUS 3020 - History of Jazz Credits: 3 \*\*
- MUS 3030 - Traditional American Improvised Styles Credits: 3
- MUS 3070 - Songwriting Credits: 2
- MUS 3160 - Jazz Composition and Arranging Credits: 1
- MUS 3730 - Performance V Credits: 3
- MUS 3740 - Performance VI Credits: 3
- MUS 4020 - Senior Seminar in Music Credits: 1
- MUS 4350 - Jazz Pedagogy Credits: 2
- MUS 4730 - Performance VII (Primary Performance Area) Credits: 3

*\*Students must enroll during each semester of individual instruction and complete the requirement with a "Satisfactory" grade in order to be eligible to continue to enroll in individual instruction.*

*\*\*Fulfills ESSJ requirement.*

## Secondary Performance Area\*\*\*: 2 credits

Select two credits from one of the following areas:

- MUS 161K - Class Guitar I Credits: 1 (Secondary Performance Area)
- MUS 162K - Class Guitar II Credits: 1 (Secondary Performance Area)
- MUS 1710 - Private Instruction I Credits: 2 (Secondary Performance Area) \*\*\*\*

\*\*\*Students must enroll during each semester of private instruction.

\*\*\*\*Students in the Jazz and American Improvised Music Performance concentration may fulfill this requirement through classical study on the same instrument.

## Ensemble Requirements: 12 credits

Ten hours:

- MUS 3828 - Jazz Ensemble Credits: 1
- MUS 3829 - Jazz Combo Credits: 1  
*MUS 3828: Jazz Ensemble and MUS 3829: Jazz Combo require an audition. Students must complete the requirement with a grade of "C-" or better to be eligible to continue to enroll in individual instruction*

Two hours:

- MUS 3816 - Early Music Ensemble Credits: 1
- MUS 3819 - Chamber Music Credits: 1
- MUS 3830 - Guitar Ensemble Credits: 1
- MUS 3831 - Percussion Chamber Ensemble Credits: 1  
*MUS 3830: Guitar Ensemble and MUS 3831: Percussion Ensemble require an audition.*

## Senior Experience: 3 credits

- MUS 4740 - Senior Recital Performance Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Core Requirements	32 credits
Specific Concentration Requirements	36 credits
Secondary Performance Area	2 credits
Ensemble Requirements	12 credits
Senior Experience	3 credits
Unrestricted Electives	0-8 credits

<b>Total for the Music Major, B.M., Jazz and American Improvised Music Performance Concentration</b>	<b>120 credits</b>
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**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Composition Concentration

For admission to the composition concentration, students must pass a review of their composition portfolio upon completion of MUS 3650 - Basic Techniques of Composition.

## Student Outcomes

- Be able to hear, identify, and work conceptually with the elements of music: rhythm, melody, harmony, and structure, and to be able to sight read music with fluency.
- Understand compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces
- Have experienced a wide selection of musical styles, traditions, and compositions from a variety of sources through study, participation, and exposure through live performances.
- Have the technical and artistic ability to perform in areas appropriate to the student's needs and interests, and to work independently and creatively.
- Use of basic concepts, tools, techniques, and procedures to develop a composition from concept to finished product.

## Specific Concentration Requirements: 36 credits

- MUS 0020 - Recital Attendance Credits: 0 (six additional semesters)\*
- MUS 1210 - Introduction to Musical Styles and Research Credits: 2
- MUS 1650 - Basic Music Technology Credits: 1
- MUS 2660 - Electronic Music Composition Credits: 1
- MUS 2710 - Private Instruction III Credits: 2 (Primary Performance Area)
- MUS 2720 - Private Instruction IV Credits: 2 (Primary Performance Area)
- MUS 3100 - Counterpoint Credits: 3
- MUS 3150 - Arranging and Orchestration Credits: 2
- MUS 3510 - Basic Conducting Credits: 2
- MUS 3640 - Improvisation Credits: 1
- MUS 3650 - Basic Techniques of Composition Credits: 2
- MUS 3711 - Private Instruction V (Composition) Credits: 3



- MUS 3741 - Private Instruction VI (Composition) Credits: 3
- MUS 4020 - Senior Seminar in Music Credits: 1
- MUS 4731 - Private Instruction VII (Composition) Credits: 3
- MUS 4741 Performance VIII (Composition) Credits: 3
- MUS 4110 - Analysis of Music Credits: 2

*\*Students must enroll during each semester of individual instruction, and complete the requirement with a "Satisfactory" grade in order to be eligible to continue to enroll in individual instruction.*

Choose three credit hours from the following:

- MUS 161A - Class Voice I Credits: 1
- MUS 162A - Class Voice II Credits: 1
- MUS 161K - Class Guitar I Credits: 1
- MUS 162K - Class Guitar II Credits: 1
- MUS 261B - Class Piano III Credits: 1
- MUS 262B - Class Piano IV Credits: 1
- MUS 3410 - String Techniques and Pedagogy Credits: 1
- MUS 3430 - Woodwind Techniques and Pedagogy Credits: 1
- MUS 3450 - Brass Techniques and Pedagogy Credits: 1
- MUS 3460 - Percussion Techniques and Pedagogy Credits: 1

## Ensembles: 8 credits

Students choose a major ensemble that corresponds to their primary instrument.

Five hours:

- MUS 3817 - String Sinfonietta Credits: 1
  - MUS 3820 - Chorale Credits: 1
  - MUS 3821 - University Treble Choir Credits: 1
  - MUS 3822 - University Basso Choir Credits: 1
  - MUS 3824 - Symphonic Band Credits: 1
  - MUS 3825 - Wind Ensemble Credits: 1
  - MUS 3827 - Symphony Orchestra Credits: 1
  - MUS 3828 - Jazz Ensemble Credits: 1
  - MUS 3829 - Jazz Combo Credits: 1
- MUS: 3820 Chorale, MUS 3825: Wind Ensemble, MUS 3827: Symphony Orchestra, and MUS 3828: Jazz Ensemble require an audition. Students must complete the requirement with a grade of "C-" or better to be eligible to continue to enroll in individual instruction.*

## Three Hours:

- MUS 3817 - String Sinfonietta Credits: 1
- MUS 3818 - Mariachi Ensemble Credits: 1
- MUS 3819 - Chamber Music Credits: 1
- MUS 3820 - Chorale Credits: 1

*MUS: 3820 Chorale requires an audition.*

- MUS 3821 - University Treble Choir Credits: 1
- MUS 3822 - University Basso Choir Credits: 1
- MUS 3823 - Auraria Choir Credits: 1
- MUS 3824 - Symphonic Band Credits: 1
- MUS 3825 - Wind Ensemble Credits: 1  
MUS 3825: Wind Ensemble requires an audition
- MUS 3826 - Secondary Instrument Band Credits: 1
- MUS 3827 - Symphony Orchestra Credits: 1  
MUS 3827: Symphony Orchestra requires an audition.
- MUS 3828 - Jazz Ensemble Credits: 1  
MUS 3828: Jazz Ensemble requires an audition.
- MUS 3829 - Jazz Combo Credits: 1
- MUS 3834 - Gamelan Ensemble Credits: 1
- MUS 3835 - African Drum and Dance Ensemble Credits: 1

## Senior Experience: 3 credits

- MUS 4960 - Senior Composition Project Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Core Requirements	32 credits
Specific Concentration Requirements	36 credits
Ensemble Requirements	8 credits
Senior Experience	3 credits
Unrestricted Electives	6-11 credits
<b>Total for the Music Major, B.M., Composition Concentration</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Multiple Woodwinds Concentration

For admission to the multiple woodwinds performance concentration, students must pass the music performance audition upon completion of MUS 1710 - Private Instruction I on a total of three different instruments (flute, oboe, clarinet, bassoon, or saxophone).

## Student Outcomes

- Be able to hear, identify, and work conceptually with the elements of music: rhythm, melody, harmony, and structure, and to be able to sight read music with fluency.
- Understand compositional processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural forces.
- Have experienced a wide selection of musical styles, traditions, and compositions from a variety of sources through study, participation, and exposure through live performances.
- Have the technical and artistic ability to perform in areas appropriate to the student's needs and interests, and to work independently and creatively.
- The ability to perform a cross-section of musical styles from the complete repertory of the particular performance medium including music of their own time.
- The ability to perform a cross-section of musical styles on at least three instruments from the complete repertory of performance mediums including music of their own time.

## Specific Concentration Requirements: 37 credits

- MUS 1210 - Introduction to Musical Styles and Research Credits: 2
- MUS 1650 - Basic Music Technology Credits: 1
- MUS 2730 - Performance III Credits: 3  
*Students will take MUS 2730: Performance III on their primary instrument (flute, clarinet, saxophone, oboe, or bassoon) and two additional woodwind instruments (flute, clarinet, saxophone, oboe, or bassoon). (9 credit hours total.)*
- MUS 2740 - Performance IV Credits: 3  
*Students will take MUS 2740: Performance IV on their primary instrument (flute, clarinet, saxophone, oboe, or bassoon) and two additional woodwind instruments (flute, clarinet, saxophone, oboe, or bassoon). (9 credit hours total.)*
- MUS 3150 - Arranging and Orchestration Credits: 2
- MUS 3430 - Woodwind Techniques and Pedagogy Credits: 1
- MUS 3510 - Basic Conducting Credits: 2
- MUS 3730 - Performance V Credits: 3
- MUS 3740 - Performance VI Credits: 3
- MUS 4730 - Performance VII (Primary Performance Area) Credits: 3
- MUS 4800 - Seminar in Music Repertoire Credits: 2

## Ensembles: 12 credits

Students enrolled in private lessons must enroll in the appropriate major ensemble during each semester of private instruction.

Choose six credit hours from the following:

- MUS 3824 - Symphonic Band Credits: 1
- MUS 3825 - Wind Ensemble Credits: 1

Four credit hours:

- MUS 3819 - Chamber Music Credits: 1

Two credit hours:

- MUS 3827 - Symphony Orchestra Credits: 1

## Senior Experience: 3 credits

- MUS 4740 - Senior Recital Performance Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Core Requirements	32 credits
Specific Concentration Requirements	37 credits
Ensemble Requirements	12 credits
Senior Experience	3 credits
Unrestricted Electives	3 credits
<b>Total for the Music Major, B.M., Multiple Woodwinds Concentration</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Music Minor

Required Courses	21
Ensembles	2
<i>Total hours required</i>	<i>23</i>

A grade of "C-" or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required.

## Required Courses

- MUS 0020 - Recital Attendance Credits: 0 (two semesters)\*
- MUS 1110 - Music Theory I Credits: 3
- MUS 1120 - Music Theory Lab I Credits: 1
- MUS 1130 - Music Theory II Credits: 3
- MUS 1140 - Music Theory Lab II Credits: 1
- MUS 161B - Class Piano I Credits: 1 \*\*
- MUS 162B - Class Piano II Credits: 1 \*\*
- MUS 1710 - Private Instruction I Credits: 2 (Primary Performance Area)
- MUS 1720 - Private Instruction II Credits: 2 (Primary Performance Area)
- MUS 3050 - Musics of the World Credits: 3
- Upper-Division Electives in Music Theory, History, Literature, or Pedagogy Credits: 4

**Subtotal: 21 credits**

### Note:

*\*Students must enroll during each semester of individual instruction, and complete the requirement with a "Satisfactory" grade in order to be eligible to continue to enroll in individual instruction.*

*\*\*Students whose primary instrument is piano must substitute MUS 261B and MUS 262B, Class Piano III and IV, for MUS 161B and MUS 162B, Class Piano I and II, in the core requirements listed above.*

## Ensembles

Select two credit hours from the following\*:

- MUS 3828 - Jazz Ensemble **Credits: 1**
- MUS 3829 - Jazz Combo **Credits: 1**  
*For students whose primary instrument is jazz guitar, jazz bass, jazz drum set, or jazz piano, the major ensemble is MUS 3828: Jazz Ensemble or MUS 3829: Jazz Chamber Music, as assigned by the Director of Jazz Studies.*
- MUS 3820 - Chorale **Credits: 1**
- MUS 3821 - University Treble Choir **Credits: 1**
- MUS 3822 - University Basso Choir **Credits: 1**  
*For students whose primary instrument is voice, the major ensemble is choir (MUS 3820: Chorale, MUS 3822: Men's Choir, or MUS 3821: Women's Choir) as assigned by the Director of Choral Activities.*
- MUS 3824 - Symphonic Band **Credits: 1**
- MUS 3825 - Wind Ensemble **Credits: 1**  
*For students whose primary instrument is woodwinds, brass, or percussion, the major ensemble is band (MUS 3825: Wind Ensemble or MUS 3824: Symphonic Band) as assigned by the Director of Band Activities.*

- MUS 3817 - String Sinfonietta **Credits: 1**
- MUS 3827 - Symphony Orchestra **Credits: 1**  
*For students whose primary instrument is strings, the major ensemble is orchestra (MUS 3817: String Sinfonietta or MUS 3827: Symphony Orchestra), as assigned by the Director of Orchestral Activities.*
- MUS 3832 - Collaborative Piano **Credits: 1**  
*For students whose primary instrument is piano or organ, the major ensemble is MUS: 3828 Collaborative Piano.*
- MUS 3830 - Guitar Ensemble **Credits: 1**  
*For students whose primary instrument is guitar, the major ensemble is MUS 3830: Guitar Ensemble.*

**Subtotal: 2 credits**

### Notes:

*\*This course may be repeated for credit. Students are encouraged to enroll in a variety of ensembles outside of their major area of study. Students enrolled in private lessons must enroll in the appropriate major ensemble during each semester of individual instruction and must complete the requirement with a grade of "C-" or better in order to remain eligible to continue to enroll in individual instruction.*

## Department of Philosophy

Location: Central Classroom Building, Room 303

Phone: 303-615-0900

E-Mail:

Website: [Philosophy Department Website](#)

### Philosophy Major, B.A.

[Department of Philosophy](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

### About the Program

The major in Philosophy emphasizes and reinforces general skills, both critical and creative, that will serve as a basis for further studies, in a field such as law or public policy, or professional careers, including management and government. The departmental publication *Philosophy at MSU Denver* contains further particulars, including information about the course distribution areas referenced below. Undergraduates preparing for graduate study in philosophy

should plan their academic program in close consultation with a department advisor.

## Student Outcomes

Upon completion of this program, students will be able to:

*Thesis:* Demonstrate the ability to state a thesis and create (in writing or orally) an argument for a philosophical position.

*Interpretation:* Recognize and explain a philosophical issue or problem and identify possible solutions.

*Logic/Language:* Recognize the structures of linguistic units by which they can become parts of formal arguments; demonstrate their validity or invalidity; and recognize different theories about both the formal and informal features of language by which language can be "about" the world.

*History:* Name and relate major positions, issues and figures and inscribe them within the historical continuity of disciplinary conversation.

*Analysis:* Analyze philosophical texts in order to break the argument, idea, or problem into its basic parts.

*Critique:* Assess strengths and weaknesses of philosophical argument; and consider/compare objections and counterarguments.

*Research:* Demonstrate the ability to locate relevant philosophical sources (especially "secondary literature") when information is needed; evaluate the authenticity and reliability of resources applied to a specific purpose; apply this research in a sustained philosophical argument.

*Synthesis:* Synthesize relevant philosophical views; and formulate sustained and considered philosophical arguments, including evaluating objections and counterarguments.

*Diverse Perspectives:* Recognize the contributions to disciplinary conversations from either authors outside the standard "Western Philosophical Tradition" or from people of color, women, or other minorities in the field.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Core Courses: 9 credits

### Area One: Logic: 3 credits

- PHI 2440 - Symbolic Logic Credits: 3

### Area Two: History: 6 credits

- PHI 3000 - Ancient Greek and Roman Philosophy Credits: 3
- PHI 3020 - Early Modern Philosophy: Europe and the Americas Credits: 3

## Additional Distribution Requirements: 18 credits

### Area Three: Knowledge and Reality: 6 credits

Choose two of the following courses:

- PHI 3040 - Algorithms, Rationality, and Beliefs Credits: 3
- PHI 3120 - Philosophy of Language Credits: 3
- PHI 3320 - Metaphysics Credits: 3
- PHI 3330 - Epistemology Credits: 3
- PHI 3400 - Philosophy of Science Credits: 3
- PHI 3510 - Phenomenology Credits: 3
- PHI 3530 - Philosophy of Mind Credits: 3
- PHI 3550 - Existentialism Credits: 3

## Area Four: Value: 6 credits

Choose two of the following courses:

- PHI 3150 - Social and Political Philosophy Credits: 3
- PHI 3350 - Ethical Theories Credits: 3
- PHI 3360 - Business Ethics Credits: 3
- PHI 3370 - Computers, Ethics, and Society Credits: 3
- PHI 3380 - Science and Human Values: Variable Topics Credits: 3
- PHI 3390 - Aesthetics Credits: 3
- PHI 3430 - Philosophy of Law Credits: 3
- PHI 3450 - Human Nature and Conduct: Variable Topics Credits: 3
- PHI 3460 - Environmental Ethics Credits: 3
- PHI 3570 - Hermeneutics Credits: 3
- PHI 3700 - Philosophy and the Arts: Variable Topics Credits: 3

## Area Five: Diverse Perspectives: 3 credits

Choose one of the following courses:

- PHI 3010 - History of Medieval Philosophy: Islamic, Jewish, and Christian Voices Credits: 3
- PHI 3170 - Early Modern Women Philosophers Credits: 3
- PHI 3180 - Feminist Philosophy Credits: 3
- PHI 3340 - Philosophy of Race Credits: 3
- RLG 3410 - South and East Asian Philosophies and Religions: Variable Topics Credits: 3
- Other courses will satisfy this requirement depending on their content in a particular iteration.

## Area Six: Further Historical Movements, Figures, and Periods: 3 credits

Choose one of the following courses:

- PHI 3010 - History of Medieval Philosophy: Islamic, Jewish, and Christian Voices Credits: 3
- PHI 3050 - Special Topics in the History of Philosophy: Variable Topics Credits: 3
- PHI 3170 - Early Modern Women Philosophers Credits: 3

- PHI 3480 - Histories of Desire: Variable Topics Credits: 3
- PHI 3810 - Major Philosophers: Variable Topics Credits: 3
- RLG 3410 - South and East Asian Philosophies and Religions: Variable Topics Credits: 3
- RLG 3610 - Religious Studies: Variable Topics Credits: 3

## Philosophy Electives: 6 credits

Select two additional philosophy electives (of which one may be lower division).

## Senior Experience: 3 credits

- PHI 4100 - Senior Seminar Credits: 3

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Required Courses	9 credits
Additional Requirements	18 credits
Philosophy Electives	6 credits
Senior Experience	3 credits
Unrestricted Electives	48-60 credits
<b>Total for the Philosophy Major, B.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Philosophy Minor*

The minor in Philosophy gives students the skills to analyze complex issues, communicate clearly and accurately, and think logically. It helps prepare students for a variety of careers, especially in law, public policy, nonprofits, writing, etc.

This minor is a very flexible program designed to enhance a number of possible majors, including those that focus on writing, historical knowledge, and/or textual interpretation, including Anthropology, English, History, Political Science, Psychology, Sociology, or Gender Studies. Given that it hones critical thinking skills, also compliments majors that do not focus on writing and/or textual interpretation, such as majors in STEM or professional degrees.

With the minor in Philosophy, students will also meet General Studies requirements for Arts and Humanities and Oral Communication.

A letter grade of "C-" or better is necessary in each of the required core courses.

This program can be taken online, hybrid, or in person.

## Required Core Courses

- PHI 1010 - The Big Questions: An Introduction to Philosophy **Credits: 3**
- PHI 1030 - Thinking about Ethics: Morality and the Good Life **Credits: 3**
- or
- PHI 1060 - Ethics in Medicine and Science **Credits: 3**
- or
- PHI 1080 - Philosophy of Protest **Credits: 3**
- PHI 1110 - Language, Logic & Persuasion **Credits: 3**
- PHI 3000 - Ancient Greek and Roman Philosophy **Credits: 3**
- or
- PHI 3020 - Early Modern Philosophy: Europe and the Americas **Credits: 3**

**Subtotal: 12 credits**

## Additional Philosophy Upper-division Electives

Upper-division electives should be chosen in consultation with the department.

**Subtotal: 9 credits**

Total for Minor: 21 credits

## *Religious Studies Minor*

In the Religious Studies minor, students examine different religious ways of life, across historical periods and cultures, and explore the ethical, sociocultural, and philosophical questions that religious teachings and practices raise.

Students develop their understanding of the effects of religious traditions and religious thought on our world, promoting the goals of cultural diversity and global awareness. The cultural examination and openness that students develop is advantageous for careers in international business, teaching, diplomacy, religious institutions, law, medicine, public policy or social work, among others.

A letter grade of "C-" or better is necessary in each of the required core courses.

This program can be taken online, hybrid, or in person.

## Required Core Courses

- RLG 1040 - Asian Religions Credits: 3 \*
- RLG 1050 - Judaism, Christianity, Islam Credits: 3 \*
- RLG 1090 - Religion, Justice, and Liberation Movements Credits: 3 \*
- PHI 2040 - Philosophy of Religion Credits: 3 \*

**Subtotal: 12 credits**

## Additional Interdisciplinary Electives

Two of the following:

- ANT 3386 - Religious Narratives and Culture Credits: 3 \*
- ANT 3640 - Holy Land Archaeology Credits: 3 \*
- CHS 2600 - Chicana/o and Latina/o Religious Cultures Credits: 3 \*
- ENG 3430 - Classical Mythology Credits: 4 \*
- ENG 3440 - Myth and Literature Credits: 4 \*
- GWS 3910 - Women's Spirituality Credits: 3 \*
- HIS 1032 - Islam in History: From the Prophet to the Present Credits: 3 \*
- HIS 3120 - Medieval Europe and its Neighbors Credits: 3 \*
- HIS 3170 - Early Christianity to 500 C.E. Credits: 3 \*
- HIS 3683 - American Religious History Credits: 3 \*
- PHI 3010 - History of Medieval Philosophy: Islamic, Jewish, and Christian Voices Credits: 3 \*
- SOC 3910 - Sociology of Religion Credits: 3 \*

**Subtotal: 6 credits**

## Additional Religious Studies Upper-division Electives

Take one of the following for 3 credit hours:

- RLG 3410 - South and East Asian Philosophies and Religions: Variable Topics Credits: 3 \*
- RLG 3610 - Religious Studies: Variable Topics Credits: 3 \*

**Subtotal: 3 credits**

**Total for Minor: 21 credits**

## Note

\* Course has additional prerequisites.

## Department of Physics

Location: Plaza Building, Room 262

Phone: 303-615-1110

E-Mail: [physicsadmin@msudenver.edu](mailto:physicsadmin@msudenver.edu)

Website: [Physics Department Website](#)

### Physics Major, B.A.

[Department of Physics](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

### About the Program

The Department of Physics at the Metropolitan State University of Denver offers programs leading to a Bachelor of Science in Physics, a Bachelor of Arts in Physics, and a minor in physics. We also offer a Bachelor of Arts in Physics with Science Licensure. We offer introductory courses designed for both STEM majors as well as for the enrichment of non-science majors, including introductory physics, astronomy, and cosmology. We prepare our physics majors for graduate study in a wide range of disciplines including physics, astronomy, engineering, and science education, and for successful employment in technologically oriented industries. Our faculty are outstanding classroom teachers, bringing rigorous coursework, laboratory experience, advising and mentoring to our students. They maintain professional currency and engage in scholarly activities through involvement in undergraduate research, personalized professional development programs, and projects associated with teaching and learning. We seek to increase the science literacy of the Denver community through science outreach and an increasingly strong role in the education of future teachers.

### Student Outcomes

- develop mathematical skills that facilitate their understanding of the fundamental principles of physics and enable problem solving.
- apply advanced mathematical techniques (understanding vectors in multiple coordinate systems, solving differential equations, and basic computational skills).
- use standard laboratory equipment to collect data and perform quantitative evaluations of the experimental outcome.

- communicate the process and outcomes of scientific experiments using scientifically sound reports including posters, papers, and oral presentations.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Ancillary Courses: 12 credits

- MTH 1410 - Calculus I Credits: 4
- MTH 2410 - Calculus II Credits: 4
- MTH 2420 - Calculus III Credits: 4

## Required Courses: 25 credits

- PHY 2311 - General Physics I Credits: 4
- PHY 2321 - General Physics I Laboratory Credits: 1
- PHY 2331 - General Physics II Credits: 4
- PHY 2341 - General Physics II Laboratory Credits: 1
- PHY 2821 - Sophomore Physics Laboratory Credits: 1
- PHY 3111 - Modern Physics I Credits: 4
- PHY 3121 - Modern Physics II Credits: 3
- PHY 3231 - Vibrations, Waves, and Mathematical Methods Credits: 4
- PHY 3711 - Junior Physics Laboratory Credits: 2
- PHY 4921 - Physics Senior Seminar Credits: 1

## Electives: 8 credits

A minimum of 8 additional semester hours of upper-division physics courses, two (2) hours of which must be from either PHY 4611 or PHY 4711.

- PHY 3082 - Energy and Environment Credits: 3
- PHY 3311 - Analytical Mechanics Credits: 4
- PHY 3341 - Electricity and Magnetism I Credits: 4
- PHY 3411 - Thermal Physics Credits: 3
- PHY 3811 - Quantum Physics I Credits: 4
- PHY 4040 - Planetary Physics Credits: 3
- PHY 4050 - Astrophysics Credits: 3
- PHY 4330 - Electricity and Magnetism II Credits: 3
- PHY 4510 - Optics Credits: 3
- PHY 4650 - Solid State Physics Credits: 3
- PHY 4810 - Quantum Physics II Credits: 3
- PHY 4820 - Subatomic Physics Credits: 3
- PHY 4950 - General Relativity Credits: 3

## Senior Experience: 3 credits

Students select a total of 3 credits for Senior Experience from the following:

- PHY 4611 - Computational Physics Credits: 3
- PHY 4711 - Senior Physics Laboratory Credits: 2
- PHY 4921 - Physics Senior Seminar Credits: 1

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Ancillary Courses	12 credits
Required Courses	25 credits
Major Electives	8 credits
Senior Experience	counted elsewhere in major
Unrestricted Electives	39-51 credits
<b>Total for the Physics Major, B.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Physics Major, B.A. with Secondary Science Teacher Licensure Concentration*

[Department of Physics](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

### About the Program

The Department of Physics at the Metropolitan State University of Denver offers programs leading to a Bachelor of Science in Physics, a Bachelor of Arts in Physics, and a minor in physics. We also offer a Bachelor of Arts in Physics with Secondary Science Teacher Licensure. We offer introductory courses designed for both STEM majors as well as for the enrichment of non-science majors, including introductory physics, astronomy, and cosmology. We prepare our physics majors for graduate study in a wide range of disciplines including physics, astronomy, engineering, and science education, and for successful employment in technologically oriented industries. Our faculty are outstanding classroom teachers, bringing rigorous coursework, laboratory experience, advising and mentoring to our students. They maintain professional currency and engage in scholarly activities through involvement in undergraduate research, personalized professional development programs, and projects associated with teaching and learning. We seek to increase the science literacy of the Denver community through science outreach and an increasingly strong role in the education of future teachers.

Degree seeking candidates who wish to obtain Colorado teacher licensure for Secondary Science Education with a major in Physics must earn a Bachelor of Arts (BA) degree. Included in the requirements for the Physics major with a concentration in Secondary



Science teaching is a core curriculum designed to ensure that the Physics education program meets the Colorado Science Licensure Standards and addresses the objectives of the General Science content area examination. The core curriculum adds a firm foundation in Biology, Chemistry, Earth and Space Science, and Mathematics. The Colorado Academic Standards are strongly emphasized within the curriculum. The core curriculum is supported by the depth of the major in Physics.

## Student Outcomes

### Secondary Education

- Students in Secondary/K-12 Education teacher licensure programs will demonstrate awareness of multiculturalism, diversity, equity, and inclusion.
- Students in Secondary/K-12 Education teacher licensure program will gain readiness and eligibility for student teaching
- Teacher candidates will successfully complete student teaching

### Physics Major B.A.

- Develop mathematical skills that facilitate their understanding of the fundamental principles of physics and enable problem solving.
- Apply advanced mathematical techniques (understanding vectors in multiple coordinate systems, solving differential equations, and basic computational skills).
- Use standard laboratory equipment to collect data and perform quantitative evaluations of the experimental outcome.
- Communicate the process and outcomes of scientific experiments using scientifically sound reports including posters, papers, and oral presentations.
- Demonstrate content and pedagogical expertise in teaching science.
- Plan and deliver effective instructions in science to the diverse body of students.
- Demonstrate knowledge of language acquisition and culturally linguistically diverse learners.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 123 semester hours are required for graduation.

- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- A minimum GPA of 2.75 in the Physics Major and Additional Content Courses for Secondary Science Licensure is needed to apply for student teaching.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
  - **Recommended:** MTH 1410 - Calculus I (Note: this course also meets the Mathematics requirements for Additional Content Courses for Secondary Science Licensure. Depending on the course selected, this category may exceed 3 credits.)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
  - **Recommended:** this category of General Studies can also be met by courses required in Additional Content Courses for Secondary Science Licensure. Depending on the course selected, this category may exceed 6 credits.
- Social and Behavioral Sciences (6 credits)
  - **Recommended:** EDS 3130 - Foundations of Educational Psychology and Philosophy
  - **Recommended:** EDS 3150 - Critical Sociocultural Lenses for Teachers

Note: these courses also meets the requirements in Foundation and Methods courses for Secondary Education. Depending on the course selected, this category may exceed 6 credits.
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

- Students can fulfill this requirement with EDS 3150 - Critical Sociocultural Lenses for Teachers.

## Physics Major Core Courses: 32 credits

- MTH 2420 - Calculus III Credits: 4
- PHY 2311 - General Physics I Credits: 4
- PHY 2321 - General Physics I Laboratory Credits: 1
- PHY 2331 - General Physics II Credits: 4
- PHY 2341 - General Physics II Laboratory Credits: 1
- PHY 3231 - Vibrations, Waves, and Mathematical Methods Credits: 4
- PHY 3111 - Modern Physics I Credits: 4
- PHY 2821 - Sophomore Physics Laboratory Credits: 1
- PHY 3121 - Modern Physics II Credits: 3
- PHY 3711 - Junior Physics Laboratory Credits: 2
- PHY 4921 - Physics Senior Seminar Credits: 1
- SCI 3950 - Teaching Science in Secondary Schools Credits: 3

## Additional Courses for Secondary Science Licensure: 33 credits

All students must complete courses in the following disciplines to prepare to teach Secondary Science. Ten or more credits in this category can also satisfy General Studies requirements for Quantitative Literacy and Natural and Physical Sciences.

### Biology Requirements (8 credits):

- BIO 1080 - General Biology I Credits: 3
- BIO 1081 - General Biology II Credits: 3
- BIO 1090 - General Biology Laboratory I Credits: 1
- BIO 1091 - General Biology Laboratory II Credits: 1

### Chemistry Requirements (10 credits):

- CHE 1800 - General Chemistry I Credits: 4
- CHE 1801 - General Chemistry I Laboratory Credits: 1
- CHE 1810 - General Chemistry II Credits: 4
- CHE 1811 - General Chemistry II Laboratory Credits: 1

### Earth Space Science Requirements (7 credits):

- GEL 1010 - Physical Geology Credits: 4

Select one of the following courses:

- MTR 1400 - Weather and Climate Credits: 3
- OR
- GEG 1100 - Introduction to Physical Geography Credits: 3

### Mathematics Requirements (8 credits):

- MTH 1410 - Calculus I Credits: 4
- MTH 2410 - Calculus II Credits: 4

## Foundation and Methods Courses for Secondary Education: 28 credits

All the courses in the this area are required for Secondary Science Licensure. Some course pairs must be taken together; please see an advisor in the School of Education for more detail on recommended sequence.

- EDS 3130 - Foundations of Educational Psychology and Philosophy Credits: 4 \*
- EDS 3140 - First Field Experience in Secondary Education Credits: 1 \*  
[EDS 3130 and EDS 3140 must be taken concurrently.]
- EDS 3150 - Critical Sociocultural Lenses for Teachers Credits: 3 \*
- EDT 3010 - Integrating Educational Technology into Teaching Credits: 3
- SED 3600 - Exceptional Learners in the Classroom Credits: 3
- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools Credits: 3 \*\*
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools Credits: 1 \*\*  
[EDS 3210 and EDS 3240 must be taken concurrently.]
- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners Credits: 3
- CLD 3910 - Assessment of English Language Learners Credits: 3
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools Credits: 3 \*\*
- SCI 3960 - Field Experience in Teaching Science in Secondary Schools Credits: 1  
[SCI 3950 (listed in the major) and SCI 3960 must be taken concurrently]
- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 Credits: 6,12 \*\*

*\* Requires at least provisional admission to the School of Education*

*\*\*Requires formal admission to the School of Education*

## Senior Experience: 12 credits

- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 Credits: 6,12

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Physics Major Core Courses	32 credits
Additional Courses for Secondary Science Licensure	33 credits
Foundation and Methods Courses for Secondary Education	28 credits
Senior Experience	12 credits
<b>Total for the Physics Major, B.A. with Secondary Science Teacher Licensure Concentration</b>	<b>123 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

Up to 15 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.

## Physics Major, B.S.

[Department of Physics](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

## About the Program

The Department of Physics at the Metropolitan State University of Denver offers programs leading to a Bachelor of Science in Physics, a Bachelor of Arts in Physics, and a minor in physics. We also offer a Bachelor of Arts in Physics with Science Licensure. We offer introductory courses designed for both STEM majors as well as for the enrichment of non-science majors, including introductory physics, astronomy, and cosmology. We prepare our physics majors for graduate study in a wide range of disciplines including physics, astronomy, engineering, and science education, and for successful employment in technologically oriented industries. Our faculty are outstanding classroom teachers, bringing rigorous coursework, laboratory experience, advising and mentoring to our students. They maintain professional currency and engage in scholarly activities through involvement in undergraduate research, personalized professional development programs, and projects associated with teaching and learning. We seek to increase the science literacy of the

Denver community through science outreach and an increasingly strong role in the education of future teachers.

## Student Outcomes

- develop mathematical skills that facilitate their understanding of the fundamental principles of physics and enable problem solving.
- apply advanced mathematical techniques (understanding vectors in multiple coordinate systems, solving differential equations, and basic computational skills).
- use standard laboratory equipment to collect data and perform quantitative evaluations of the experimental outcome.
- communicate the process and outcomes of scientific experiments using scientifically sound reports including posters, papers, and oral presentations.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Ancillary Courses: 16 credits

- MTH 1410 - Calculus I Credits: 4
- MTH 2410 - Calculus II Credits: 4
- MTH 2420 - Calculus III Credits: 4
- MTH 3420 - Differential Equations Credits: 4

## Required Courses: 42 credits

- PHY 2311 - General Physics I Credits: 4
- PHY 2321 - General Physics I Laboratory Credits: 1
- PHY 2331 - General Physics II Credits: 4
- PHY 2341 - General Physics II Laboratory Credits: 1
- PHY 2821 - Sophomore Physics Laboratory Credits: 1
- PHY 3111 - Modern Physics I Credits: 4
- PHY 3121 - Modern Physics II Credits: 3
- PHY 3231 - Vibrations, Waves, and Mathematical Methods Credits: 4
- PHY 3341 - Electricity and Magnetism I Credits: 4
- PHY 3311 - Analytical Mechanics Credits: 4
- PHY 3411 - Thermal Physics Credits: 3
- PHY 3711 - Junior Physics Laboratory Credits: 2
- PHY 3811 - Quantum Physics I Credits: 4
- PHY 4711 - Senior Physics Laboratory Credits: 2
- PHY 4921 - Physics Senior Seminar Credits: 1

Select one of the following tracks: 5-6 credits

### Applied Physics Track:

- PHY 4510 - Optics Credits: 3
- PHY 4650 - Solid State Physics Credits: 3

Astrophysics Track: Two of the following electives:

- AST 3141 - Astronomical Techniques I Credits: 3
- PHY 4040 - Planetary Physics Credits: 3
- PHY 4050 - Astrophysics Credits: 3
- PHY 4950 - General Relativity Credits: 3

### Fundamentals of Physics Track:

Any five credits of upper-division electives are allowed, with the exception of PHY 3620 and AST 3040. If all three of PHY 4650, PHY 4810, and PHY 4820 are taken (for 9 cr), then Modern Physics II (PHY 3011, 3 cr) is *not* required as these classes cover the same material but with a higher level of rigor.

- AST 3141 - Astronomical Techniques I Credits: 3
- PHY 4040 - Planetary Physics Credits: 3
- PHY 4050 - Astrophysics Credits: 3
- PHY 4330 - Electricity and Magnetism II Credits: 3
- PHY 4510 - Optics Credits: 3
- PHY 4650 - Solid State Physics Credits: 3
- PHY 4810 - Quantum Physics II Credits: 3
- PHY 4820 - Subatomic Physics Credits: 3
- PHY 4950 - General Relativity Credits: 3

### Senior Experience: 3 credits

- PHY 4611 - Computational Physics Credits: 3

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Ancillary Courses	16 credits
Required Courses	42 credits
Selected Track	5-6 credits
Senior Experience	3 credits
Unrestricted Electives	17-30 credits
<b>Total for the Physics Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree.**

Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

**Subtotal: 5 credits**

## Physics Minor

A grade of "C-" or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required. Also note that per university policy at least three 3000 or 4000 level credits are required for a minor.

### Required Courses:

Physics utilizes practical math to make predictions about the natural world. A minor in physics cements the experimental expertise that scientists require and provides a strong basis for understanding how science is applied in society.

A grade of "C-" or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required.

- PHY 2311 - General Physics I **Credits: 4**
- PHY 2321 - General Physics I Laboratory **Credits: 1**
- PHY 2331 - General Physics II **Credits: 4**
- PHY 2341 - General Physics II Laboratory **Credits: 1**
- PHY 3111 - Modern Physics I **Credits: 4**

**Subtotal: 14 credits**

### Electives

A minimum of 5 additional semester hours, including at least 3 upper division (3000+ level) credits, must be selected from the following list:

- AST 3141 - Astronomical Techniques I **Credits: 3**
- PHY 3231 - Vibrations, Waves, and Mathematical Methods **Credits: 4**
- PHY 3111 - Modern Physics I **Credits: 4**
- PHY 2821 - Sophomore Physics Laboratory **Credits: 1**
- PHY 3311 - Analytical Mechanics **Credits: 4**
- PHY 3411 - Thermal Physics **Credits: 3**
- PHY 3711 - Junior Physics Laboratory **Credits: 2**
- PHY 3811 - Quantum Physics I **Credits: 4**
- PHY 3341 - Electricity and Magnetism I **Credits: 4**
- PHY 4330 - Electricity and Magnetism II **Credits: 3**
- PHY 4510 - Optics **Credits: 3**
- PHY 4050 - Astrophysics **Credits: 3**
- PHY 4040 - Planetary Physics **Credits: 3**
- PHY 4611 - Computational Physics **Credits: 3**
- PHY 4650 - Solid State Physics **Credits: 3**
- PHY 4711 - Senior Physics Laboratory **Credits: 2**
- PHY 4810 - Quantum Physics II **Credits: 3**
- PHY 4820 - Subatomic Physics **Credits: 3**
- PHY 4950 - General Relativity **Credits: 3**

Total: 19

### Required Ancillary Courses for a Minor:

- MTH 1410 - Calculus I **Credits: 4**
- MTH 2410 - Calculus II **Credits: 4**

**Subtotal: 8 credits**

Total Ancillary Courses: 8

### Note:

*A one-year sequence of PHY 2010 - PHY 2020 - PHY 2030 - PHY 2040 may be substituted for the PHY 2311 - PHY 2331 - PHY 2321 - PHY 2341 requirements with the consent of the Physics Department.*

## Department of Political Science

Location: King Center, Room 498

Phone: 313-615-1123

E-Mail: [politicalscience@msudenver.edu](mailto:politicalscience@msudenver.edu)

Website: [Political Science Department Website](#)

### Prelaw

The Department of Political Science offers prelaw advising to all students at the University regardless of a student's major field of study. If you are thinking of applying to law school or would like more information on the LSAT or law school admission standards, please contact a Prelaw Advisor:

- [Dr. Jeremy Castle](#)

Please review the [Prelaw Webpage](#) for more information.

### Leadership Studies Minor

Leadership is a subject of vital importance. It is a topic that cuts across time and place, as well as traditional disciplinary boundaries. As such, leadership is extremely relevant in a broad range of contexts from local and global politics to business, ethics, and education. This minor offers students a conceptual understanding of leadership studies that, when combined with co-

curricula and experiential components, provides them with an increased awareness of their role in a world of multi-layered change.

## Required Courses:

- LDR 1010 - Leadership and Social Change **Credits:** 3
  - LDR 3010 - Perspectives on Leadership **Credits:** 3
- Subtotal: 6

## Electives: (12 credit hours)

### I. Leadership Process and Organization

(2 to 9 credit hours)

- HSP 2020 - Small Group Dynamics: Theory and Experience **Credits:** 4 \*
- MGT 3000 - Organizational Management **Credits:** 3
- COMM 3340 - Leadership Communication **Credits:** 3 \*
- HSP 3220 - Conflict Resolution and Decision Making **Credits:** 3
- PSY 3450 - Organizational Psychology **Credits:** 3 \*
- MGT 4530 - Organizational Behavior **Credits:** 3 \*

\* Courses marked with an asterisk have prerequisites beyond completing General Studies requirements and do not have the "or permission of instructor" option.

### II. Leaders in Context

(3 to 9 credit hours)

- PHI 1030 - Thinking about Ethics: Morality and the Good Life **Credits:** 3
  - PSC 3170 - Leadership Studies **Credits:** 3
  - GWS 3170 - Social Justice, Self, and Citizenship: A Service Learning Course **Credits:** 3 \*
- HIS 3675 - The American Presidency **Credits:** 3  
-or-  
• PSC 3130 - The American Presidency **Credits:** 3
- SOC 3750 - Social Change **Credits:** 3 \*
  - PSC 3800 - On Leaders and Leadership **Credits:** 3

\* Courses marked with an asterisk have prerequisites beyond completing General Studies requirements and do not have the "or permission of instructor" option.

### III. Leadership in Multicultural Perspective

(0 to 3 credits)

- AAS 2000 - Social Movements and the Black Experience **Credits:** 3
- ANT 2330 - Cross-Cultural Communication **Credits:** 3
- CHS 3100 - Social Justice and Activism in the Chicana/o Community **Credits:** 3
- NAS 3200 - Native American Politics **Credits:** 3

Subtotal: 12 credit hours

## Internship/Service Learning (3 credit hours)

This 3-credit requirement can be fulfilled by either an internship or a service-learning experience offered through any department of the student's choosing. The internship or service-learning activity must follow the guidelines established by the participating department and must be approved by the director of the Leadership Studies program, as well.

Students who are in an ROTC program may count up to six hours of leadership-oriented courses in Military Science toward the Leadership Studies minor with approval of program coordinator.

Total for Minor: 21 credit hours

This includes participation in leadership projects and workshops.

## *Legal Studies Minor*

The rule of law is a concept vital to any understanding of the world in which we live. The Legal Studies Minor is thus intended to meet the needs of all students who have an interest in the subject, regardless of their major, as well as serving the interests of students who have plans to attend law school after graduation. In that regard, the minor offers a variety of perspectives on the laws that help illuminate the principles, practices, and policies associated with the subject to the benefit of all students in general, as well as future practitioners.

## Core Courses

Students must complete the following courses:

- CJC 2050 - American Judicial System **Credits:** 3
- PSC 3150 - Law and Society **Credits:** 3

## Legal and Constitutional Thought

Students must take a minimum of 6 semester hours from the courses below:

- CJC 3110 - Constitutional Issues in Criminal Procedure and Evidence **Credits:** 3
- PHI 3430 - Philosophy of Law **Credits:** 3

- PSC 3120 - Constitutional Law I: Powers of Government **Credits:** 3
- PSC 3180 - Constitutional Law II: Civil Liberties and Civil Rights **Credits:** 3

## Elective Courses

Students must take a minimum of 3 semester hours from the elective courses below:

- CHS 3200 - Chicanos and the Law **Credits:** 3
- CJC 2100 - Criminal Law **Credits:** 3
- JMP 3780 - Communication Law **Credits:** 3
- MGT 2210 - Legal Environment of Business I **Credits:** 3
- MGT 3220 - Legal Environment of Business II **Credits:** 3
- MGT 3230 - International Business Law **Credits:** 3
- NAS 3110 - Federal Indian Law **Credits:** 3
- PSC 3190 - Trial Advocacy Lab **Credits:** 3
- PSC 3320 - International Law **Credits:** 3
- SOC 3550 - Sociology of Law **Credits:** 3
- GWS 3310 - Women and the Law **Credits:** 3

**Total for Minor: 18 credits**

*Note: A legal-oriented internship within any department with the approval of that department and minor can be used in the elective category.*

## Native American Studies Minor

Offered by the Political Science Department, this minor is intended for those students interested in studying Native Americans with specific focus in history, culture, politics and current issues of indigenous peoples within the United States. The minor provides an opportunity for students to bring a unique multidisciplinary perspective to their already chosen area of interest. A grade of "C-" or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required.

### Required Courses:

- NAS 1000 - Introduction to Native American Studies **Credits:** 3
- NAS 3200 - Native American Politics **Credits:** 3

**Subtotal: 6**

### Choose three of the following courses:

- ANT 3310 - Ethnography of North American Indians **Credits:** 3
- ANT 3610 - Colorado Archaeology **Credits:** 3
- ENG 2240 - Introduction to Native American Literature **Credits:** 4
- HIS 3490 - Native American History **Credits:** 3

- NAS 3300 - Indigenous Geographies of North America **Credits:** 3

**Subtotal: 9**

### Choose two of the following courses:

- ANT 3340 - Native Americans in Historical Perspective **Credits:** 3
- ANT 3660 - Archaeology of the Americas **Credits:** 3
- ARTH 3405 - Native American Art **Credits:** 3

**Subtotal: 6**

**Total for minor: 21**

### Note:

In addition to the courses listed, there may be other classes offered under the variable topic, omnibus or internship heading that are appropriate for this minor. Such classes may be substituted for courses listed above in any of the categories by the faculty member coordinating the minor within the Political Science Department. The same is true for classes transferred from other institutions.

## Political Science Major, B.A.

[Department of Political Science](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [Online](#), [In-Person](#), [Hybrid](#)

### About the Program

The Bachelor of Arts in Political Science degree program exposes students to the study of political science and provides opportunities for students to tailor their degree program with upper-division electives. The program curriculum focuses on policy and issues associated with state, national, and international politics.

Courses emphasize the development of critical thinking and research skills essential for a wide variety of career paths, including public service, public administration, public policy, campaigns and elections, international affairs, the Foreign Service, public advocacy at all levels, secondary social studies teacher licensure, and graduate and professional studies.

### Student Outcomes

Upon completion of a B.A. in Political Science, students should be equipped to:



- Apply political science knowledge and skills to actual problem solving and community service, deploying citizenship skills, ethical values, and an appreciation of human diversity to engage in community life as active citizens.
- Understand and critically analyze political institutions in both the U.S. and around the world, including leading political values and ideas, governing institutions, policymaking processes, and political behavior in both historical and contemporary contexts.
- Articulate knowledge of classical and modern political thought and use alternative moral and ethical frameworks for interpreting and evaluating contemporary political discourses.
- Use political science research and analysis to construct logical arguments and formulate reasoned conclusions.
- Produce effective and persuasive written communications appropriate for a range of professional contexts, including policy analysis, public service, graduate and law school.
- Conduct quantitative and qualitative social science research, including the ability to collect, analyze and interpret data as appropriate for a variety of professional and academic contexts.
- Present material orally as appropriate for academic, professional, and community audiences.
- Understand the career options available to political science graduates in the public and private sector as well as the value of the degree as entry into a range of graduate programs and legal education.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)

- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*)

*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.
- PSC 1030 - Multicultural Politics for Non-Majors fulfills both a lower division elective as well as the ESSJ Graduation Requirement.

## Required Courses: 18 credits

- PSC 1010 - American National Government **Credits: 3**
  - PSC 1020 - Comparative Politics **Credits: 3**
  - PSC 2230 - Introduction to International Relations **Credits: 3**
  - PSC 2500 - The Search for Knowledge in Political Science **Credits: 3**
  - PSC 3050 - Political Theory **Credits: 3**
  - PSC 3500 - Conducting Quantitative Political Analysis **Credits: 3**
- Subtotal: 18

## Electives: 24 credits

A minimum of 24 additional semester hours of political science must be completed. At least 18 of these 24 hours must be upper-division courses (3000- and 4000-level).

Students are encouraged to develop a path within the political science major based on their professional and personal interests. These paths include, but are not limited to, American Politics, Comparative and International Politics, Public Affairs, and Legal Studies. Upon declaring a political science major, students should meet with an advisor to plan their coursework for timely graduation.

Any course designated with a PSC prefix and not required for the degree program may count toward the elective course requirement. Students are encouraged to meet with an advisor to plan their coursework.

Students are strongly encouraged to participate in internships as part of their coursework and may count up to six credit hours of internship in their elective courses for the degree.



## Senior Experience: 3 credits

This is the capstone course for Political Science majors. Students must have senior status to take this course.

- PSC 4020 - Democracy **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Courses	18 credits
Major Electives	24 credits
Senior Experience	3 credits
Unrestricted Electives	39-48 credits
<b>Total for the Political Science Major, B.A.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree.

Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## *Political Science Major, B.A. with Secondary Social Studies Teacher Licensure Concentration*

[Department of Political  
Science](#)

[College of Letters, Arts and  
Sciences](#)

Available Program Format(s): [In-  
Person](#)

## About the Program

The Political Science Major with a Concentration in Secondary Social Studies Licensure is designed for those students who plan to teach Social Studies in Colorado. The program includes a Political Science Major, a Social Studies focus, and Secondary Education courses required by the Colorado Department of Education for licensure. Degree seeking students who wish to obtain Colorado Licensure for Secondary Social Studies with a major in Political Science must earn a Bachelor of Arts (B.A.) degree. In addition to course requirements in the major, all Social Studies licensure candidates must complete a core curriculum that provides a foundation in History, Geography, Economics, and Behavioral Science and addresses the objectives of the content area examination.

The core curriculum is supported by courses in the major. The Political Science major will take courses in political theory, political analysis, and coursework in American or international/comparative political systems.

## Student Outcomes

- Link theory and practice and apply political science knowledge and skills to actual problem-solving and community service; acquire citizenship skills, ethical values, and understand and appreciate human diversity; and engage in community life as active citizens.
- Demonstrate substantive knowledge of institutions, processes, behaviors and values that shape politics within or among States.
- Understand the history of classical and modern political thought, the fundamental values and ethical issues contested in politics over time, and alternative moral and ethical frameworks for interpreting contemporary political discourses.
- Understand political science research and analytical skills, including critical thinking, logical argumentation, and how to collect, analyze and interpret evidence and data to formulate reasoned conclusions.
- Effectively deliver professional written communications.
- Understand and interpret qualitative and quantitative evidence and data, and formulate and communicate reasoned conclusions from these methods.
- Effectively engage in oral communications and presentations in professional fields related to politics, public policy and the law.
- Understand career options available with an undergraduate degree in political science; its utility in the public and private sectors; and its value as entry into a range of graduate programs and law schools.
- Demonstrate mastery of pedagogical strategies in Social Studies for secondary school teaching.
- Connect Literacy and Math-Utilize literacy, including Culturally and Linguistically Diverse (CLD), strategies as well as mathematics when teaching Social Studies.
- Create Inclusive Teaching Environment-Create a safe, inclusive and respectful learning environment that facilitates Social Studies learning for diverse populations, including CLD students.
- Plan and deliver effective instruction in History, Civics, and Geography.
- Demonstrate professionalism as a teacher candidate through ethical conduct, reflection, and leadership.
- Demonstrate knowledge of first and second language acquisition and teaching strategies for CLD students.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 124 semester hours are required for graduation.
- All courses required for teacher licensure must be passed with a grade of C- or higher. Students should note that programs differ in the minimum grade required.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- **Recommended:** MTH 1610 - Integrated Mathematics I (required in the Foundations and Strategies section of the program)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- **Recommended:** HIS 1040 - World History since 1500
- Natural and Physical Sciences (6 credits)
- **Recommended:** GEG 1100 - Introduction to Physical Geography
- Social and Behavioral Sciences (6 credits)
- **Recommended:** Two of the following- ANT 2330 - Cross-Cultural Communication; ECO 2010 - Principles of Macroeconomics; ECO 2020 - Principles of Microeconomics; GEG 1000 - World Regional Geography
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Political Science Major Core: 18 credits

The Political Science Major Core includes eighteen credits.

- PSC 1010 - American National Government **Credits:** 3
- PSC 1020 - Comparative Politics **Credits:** 3
- PSC 2230 - Introduction to International Relations **Credits:** 3

- PSC 3500 - Conducting Quantitative Political Analysis **Credits:** 3  
or
- PSY 2310 - Statistics for the Social and Behavioral Sciences **Credits:** 3
- PSC 3050 - Political Theory **Credits:** 3
- HIS 4010 - Methods of Teaching Social Science: Secondary School **Credits:** 3

## Political Science Major Electives: 18 credits

A minimum of 18 additional semester hours of political science must be completed for the Major. These 18 credit hours must be upper-division courses (3000- and 4000-level) and must be approved by the department. Generally, students may apply only 12 hours of credit in non-classroom courses toward the major as approved electives.

## Additional Content Courses for Secondary Social Studies Licensure: 27 credits

All students must complete nine Social Science courses for this concentration. Note that twelve course credits below can also satisfy General Studies requirements in these categories: Historical (3 credits); Natural and Physical Sciences (3 credits); Social and Behavioral Sciences (6 credits).

- HIS 1030 - World History to 1500 **Credits:** 3
- HIS 1040 - World History since 1500 **Credits:** 3
- HIS 1210 - American History to 1865 **Credits:** 3
- HIS 1220 - American History since 1865 **Credits:** 3
- ANT 2330 - Cross-Cultural Communication **Credits:** 3
- ECO 2010 - Principles of Macroeconomics **Credits:** 3
- ECO 2020 - Principles of Microeconomics **Credits:** 3
- GEG 1000 - World Regional Geography **Credits:** 3
- GEG 1100 - Introduction to Physical Geography **Credits:** 3

## Foundation and Methods for Secondary Education: 31 credits

The Secondary Education Licensure Program prepares candidates to teach Social Studies in grades 6-12. With the courses and field experiences below, candidates satisfy the Colorado Department of Education Teacher Quality Standards for licensure in Secondary Education. Many of the courses in this section of the degree program require admission to the MSU Denver School of Education. Please see a School of Education advisor or the MSU Denver School of Education website for details.

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits:** 3
- CLD 3910 - Assessment of English Language Learners **Credits:** 3
- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits:** 4
- EDS 3140 - First Field Experience in Secondary Education **Credits:** 1

- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits:** 3
- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools **Credits:** 3
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools **Credits:** 1
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits:** 3
- EDT 3010 - Integrating Educational Technology into Teaching **Credits:** 3
- HIS 4020 - Field Experience in Teaching Social Studies in Secondary Schools **Credits:** 1 (60-hour field experience, taken concurrently with HIS 4010 Methods of Teaching Social Science)
- MTH 1610 - Integrated Mathematics I **Credits:** 3 (Satisfies a General Studies requirement)
- SED 3600 - Exceptional Learners in the Classroom **Credits:** 3

## Senior Experience: 12 credits

Student Teaching offers an essential conclusion to this degree program. Typically, students should register for 12 credits of EDS 4290 in their final semester. Students who register for only 6 credits of EDS 4290 should also register for 6 credits of CLD 4590 Culturally and Linguistically Diverse: ESL Student Teaching and Seminar.

- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 **Credits:** 6,12

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Political Science Major Core	18 credits
Political Science Major Electives	18 credits
Additional Content Courses for Secondary Social Studies Licensure	27 credits
Foundation and Methods for Secondary Education	31 credits
Senior Experience	12 credits
<b>Total for the Political Science Major, B.A. with Secondary Social Studies Teacher Licensure Concentration</b>	<b>124 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

**Up to 15 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.**

## *Political Science Minor*

A grade of "C-" or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required.

## Required Courses:

- PSC 1010 - American National Government **Credits:** 3
- PSC 1020 - Comparative Politics **Credits:** 3
- PSC 3050 - Political Theory **Credits:** 3

**Subtotal: 9**

## Electives:

A minimum of 12 additional semester hours are required in political science courses. At least 9 of these 12 hours must be in upper-division courses (3000- and 4000-level) and must be approved by the department. Generally, students may apply only 6 hours of credit in nonclassroom courses toward the major as approved electives.

**Subtotal: 12**

**Total: 21**

## *Public Affairs and Administration Minor*

The Public Affairs and Administration Minor offered by the Department of Political Science at MSU Denver is designed to meet the needs for an undergraduate curriculum which develops the skills necessary for a career in public affairs. By recognizing the intersection between public management and policy, the demand for analytic skill sets and a knowledge base that can meet the flexible and evolving nature of public service, the minor offers students a range of courses that link theory and practice in the development and implementation of public policy in a wide range of public affairs contexts.

The courses are intended for students who plan a career in public policy and service in local, state or federal governments, policy oriented non-governmental organizations, or those already employed in these sectors. This minor also provides a solid foundation for

graduate studies in public affairs, public administration and public policy.

A grade of "C-" or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required.

## Required Courses

Basic courses required for all public administration minors:

- PSC 1010 - American National Government **Credits:** 3
- PSC 3020 - Introduction to Public Administration **Credits:** 3
- PSC 3250 - Policy Analysis and Program Evaluation **Credits:** 3 \*

**Subtotal: 9 credits**

## Elective Courses

Select three of the following courses:

- PSC 3000 - American State and Local Government **Credits:** 3
- PSC 3090 - Current Topics in Political Science: Variable Topics **Credits:** 3
- PSC 3130 - The American Presidency **Credits:** 3
- PSC 3140 - The American Congress and Legislative Process **Credits:** 3
- ACC 3200 - Governmental Accounting **Credits:** 3 \*\*
- PSC 3220 - Public Policy **Credits:** 3
- PSC 3230 - Environmental Politics **Credits:** 3
- PSC 3330 - International Organizations **Credits:** 3
- MGT 3530 - Human Resources Management **Credits:** 3 \*\*
- PSC 3980 - Internship in Political Science **Credits:** 1-15

**Subtotal: 9 credits**

**Total: 18 credits**

## Notes

*\*This course prerequisite of MTH 1210 may be used for General Studies.*

*\*\*ACC 3510 is a prerequisite for this course.*

*\*\*MGT 3000 is a prerequisite for this course.*

## Department of Psychological Sciences

Location: Plaza Building, Suite 220

Phone: 303-615-0699

E-Mail: [psy@msudenver.edu](mailto:psy@msudenver.edu)

Website: [Psychological Sciences Department Website](#)

## Human Development and Family Studies Major, B.A.

[Department of  
Psychological Sciences](#)  
[College of Letters, Arts and  
Sciences](#)

Available Program Format(s): [Online](#),  
[In-Person](#), [Hybrid](#)

## About the Program

The major in Human Development and Family Studies provides students with in-depth knowledge about theory, research, and application in human development across the lifespan, with particular emphasis on the family as a developmental context. Through coursework and applied assignments, students make connections between theory, research, and practice. The major emphasizes developmentally appropriate and best practices in working with children, adolescents, adults, and their families to enhance positive developmental outcomes in a variety of career settings, including hospitals, counseling, child-care, schools and other social institutions.

## Student Outcomes

- Explain human development across the lifespan in contexts such as families, hospitals, counseling, child care, schools, and other social institutions.
- Examine and apply principles of cognitive development and learning in a variety of contexts.
- Examine and apply principles of social development in a variety of contexts to best support the development of individuals, couples and families.
- Explain and identify biological influences on development across the lifespan.
- Identify, critique, and apply developmental research methodologies to solve real world problems.
- Evaluate cultural and individual differences and their impact on development.
- Identify and apply transferable workforce readiness skills to a variety of careers.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)

- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "D-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- HDFS majors must have a GPA of 2.00 in their major and an overall GPA of 2.00 to graduate.
- All students must complete a minimum of 15 semester hours of upper-division in the HDFS major.
- In meeting the requirements for the HDFS major, transfer students must take a minimum of 15 semester hours of HDFS major coursework at MSU Denver, of which at least 9 must be upper-division credits.
- The Department of Psychological Sciences does not accept correspondence study courses toward the total number of semester hours required for a major or minor.
- Transfer students must have completed both semesters of a two-semester introductory psychology course for equivalence to exist. Three semester hours will count toward the major or minor; three semester hours will count as general electives (i.e., PSY8888) to graduate. If a student has taken only one semester of a two-semester introductory course and takes PSY 1001 at MSU Denver, the transfer introductory credits will not count toward the degree.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Two Psychology courses may be used to fulfill the ESSJ Requirement. These are:
  - PSY 3030 - Multicultural Psychology
  - PSY 3700 - Psychology of Group Prejudice

## Core Courses: 18 Credits

Students must take all of the following core classes:

- PSY 1001 - Introductory Psychology **Credits: 3**
- PSY 2210 - Psychology of Human Development **Credits: 3**
- PSY 2310 - Statistics for the Social and Behavioral Sciences **Credits: 3**
- PSY 3010 - Research Methods in Psychological Science **Credits: 3**
- PSY 3340 - Cognitive Development and Learning **Credits: 3**
- PSY 3350 - Psychology of Social Development **Credits: 3**

## Developmental Specialization Courses (Choose two): 6 credits

- PSY 3240 - Infancy **Credits: 3**
- PSY 3250 - Child Psychology **Credits: 3**
- PSY 3260 - Psychology of Adolescence **Credits: 3**
- PSY 3270 - Adulthood and Aging **Credits: 3**

## Applied Developmental Courses (Choose three): 9 credits

- PSY 1800 - Developmental Educational Psychology **Credits: 3**
- PSY 2240 - Parenting Across the Lifespan **Credits: 3**
- PSY 2270 - Death, Dying, and Grieving **Credits: 3**
- PSY 3460 - Psychology of Play **Credits: 3**
- PSY 3580 - Development in the Family Context **Credits: 3**

## Interdisciplinary Applications (Choose two): 6 credits

- PSY 2001 - Careers and Professional Development in Psychology **Credits: 3**
- PSY 3030 - Multicultural Psychology **Credits: 3**
- PSY 3700 - Psychology of Group Prejudice **Credits: 3**
- \*PSY 3030 and PSY 3700 meet the ESSJ Requirement
- PSY 3050 - Psychology of Gender **Credits: 3**
- PSY 3370 - Undergraduate Research Assistant **Credits: 3**
- PSY 3390 - Undergraduate Teaching Assistant Training **Credits: 3**
- PSY 3400 - Child Psychopathology **Credits: 3**
- PSY 3490 - Child Life Theory and Practice **Credits: 3**

- PSY 3980 - Internship in Psychology **Credits:** 1-3
- PSY 4100 - Clinical/Counseling Psychology: Treatment, Practice, and Skills **Credits:** 3
- PSY 4450 - Advanced Psychological Data Science **Credits:** 3
- PSY 4970 - Psychology of the Scholarship of Teaching and Learning **Credits:** 3
- AAS 3550 - The Black Family **Credits:** 3
- COMM 3210 - Family Communication **Credits:** 3
- CHS 3210 - The Chicano Family **Credits:** 3
- HSP 2040 - Family Systems **Credits:** 4
- NUT 3050 - Concepts of Lifecycle Nutrition **Credits:** 3
- SOC 3410 - The Family and Society **Credits:** 3
- SWK 1010 - Introduction to Social Work **Credits:** 3
- SWK 3010 - Social Work Practice with Children and Youth **Credits:** 3
- SWK 3030 - Social Work with Older People **Credits:** 3
- SWK 4430 - Partnering with Families for Change **Credits:** 3
- SWK 3150 - Social Work and Child Maltreatment **Credits:** 3

### Senior Experience (Choose one): 3 credits

- PSY 4650 - Advanced Internship in Psychology **Credits:** 3
- PSY 4700 - Senior Experience in Human Development and Family Studies **Credits:** 3

### Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Core Courses	18 credits
Developmental Specialization Courses	6 credits
Applied Developmental Courses	9 credits
Interdisciplinary Applications	6 credits
Senior Experience	3 credits
Unrestricted Electives	42-51 credits
<b>Total for the Human Development and Family Studies Major, B.A.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## ***Human Development and Family Studies Minor***

The minor in Human Development and Family Studies is designed for students who are interested in a career working with children, adolescents or adults, and emphasizes the family as an important developmental context. Students learn about developmentally appropriate practices in working with these populations which employers may value in a variety of career settings, including hospitals, counseling, child care, schools and other social institutions.

### Core Courses: 9 Credits

- PSY 1001 - Introductory Psychology **Credits:** 3
- PSY 2210 - Psychology of Human Development **Credits:** 3
- PSY 3340 - Cognitive Development and Learning **Credits:** 3
- OR
- PSY 3350 - Psychology of Social Development **Credits:** 3

Subtotal: 9

### Developmental Specialization (pick one)

- PSY 3240 - Infancy **Credits:** 3
- PSY 3250 - Child Psychology **Credits:** 3
- PSY 3260 - Psychology of Adolescence **Credits:** 3
- PSY 3270 - Adulthood and Aging **Credits:** 3

Subtotal: 3

### Applied Developmental Courses (pick one)

- PSY 1800 - Developmental Educational Psychology **Credits:** 3
- PSY 2240 - Parenting Across the Lifespan **Credits:** 3
- PSY 2270 - Death, Dying, and Grieving **Credits:** 3
- PSY 3460 - Psychology of Play **Credits:** 3
- PSY 3580 - Development in the Family Context **Credits:** 3

Subtotal: 3

### Interdisciplinary Applications (pick one)

- AAS 3550 - The Black Family **Credits:** 3
- COMM 3210 - Family Communication **Credits:** 3
- CHS 3210 - The Chicano Family **Credits:** 3
- HSP 2040 - Family Systems **Credits:** 4
- NUT 3050 - Concepts of Lifecycle Nutrition **Credits:** 3
- PSY 2001 - Careers and Professional Development in Psychology **Credits:** 3
- PSY 3030 - Multicultural Psychology **Credits:** 3

- PSY 3050 - Psychology of Gender **Credits:** 3
- PSY 3370 - Undergraduate Research Assistant **Credits:** 3
- PSY 3390 - Undergraduate Teaching Assistant Training **Credits:** 3
- PSY 3400 - Child Psychopathology **Credits:** 3
- PSY 3490 - Child Life Theory and Practice **Credits:** 3
- PSY 3700 - Psychology of Group Prejudice **Credits:** 3
- PSY 3980 - Internship in Psychology **Credits:** 1-3
- PSY 4100 - Clinical/Counseling Psychology: Treatment, Practice, and Skills **Credits:** 3
- PSY 4450 - Advanced Psychological Data Science **Credits:** 3
- PSY 4970 - Psychology of the Scholarship of Teaching and Learning **Credits:** 3
- SOC 3410 - The Family and Society **Credits:** 3
- SWK 1010 - Introduction to Social Work **Credits:** 3
- SWK 3010 - Social Work Practice with Children and Youth **Credits:** 3
- SWK 3030 - Social Work with Older People **Credits:** 3
- SWK 4430 - Partnering with Families for Change **Credits:** 3
- SWK 3150 - Social Work and Child Maltreatment **Credits:** 3

Subtotal: 3

## Advising Notes

- At least 3 courses (9 semester hours) in the minor must be upper division, and 6 of those hours must be taken at MSU Denver.
- A grade of "D-" or better does count toward the bachelor's degree. However, students in the HDFS minor program must have a GPA of 2.00 in their minor as well as an overall GPA of 2.00 to graduate. Students should note that programs differ in the minimum grade required.
- Transfer students must have completed both semesters of a two-semester introductory psychology course for equivalence to exist. Three semester hours will count toward the major or minor; three semester hours will count as general electives (i.e., PSY 8888) to graduate. If a student has taken only one semester of a two-semester introductory course and takes PSY 1001 at MSU Denver, the transfer introductory credits will not count toward the degree.

Total Hours Required for the Minor: 18

## *Psychology Major, B.S.*

[Department of Psychological Sciences](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [Online](#), [In-Person](#), [Hybrid](#)

## About the Program

The major in Psychology is designed to help prepare students who are pursuing a career that involves working with people and/or

understanding people's thoughts, feelings, and behavior. The major provides students with a foundation in the science of behavior and mental processes, and the application of psychological principles to real-world problems. The coursework in the major exposes students to the major methods and subspecialties within the field of psychology, offering a broad foundational base. Students are also offered opportunities for applied experiences in the completion of the major, to allow specialized and practical training in the discipline. The major prepares students for post-graduate study or entry into the workplace upon graduation.

## Student Outcomes

- Demonstrate knowledge of major historical trends, basic principles, current issues, and emerging developments in psychology, and demonstrate the ability to apply knowledge to address simple problems and effect behavior change.
- Demonstrate the ability to communicate knowledge of the field of psychology, both orally and in writing, using a scientific approach. Written work shall include a research study or other psychological project using APA guidelines; oral presentations shall demonstrate effective communication skills that optimize information exchange.
- Apply psychological knowledge, skills, and values to work effectively and ethically with others in personal and professional settings at local, national, and/or global levels.
- Apply critical and skeptical inquiry, critical and scientific reasoning, and creative and integrative thinking to solve problems related to behavior.
- Demonstrate information literacy in the field of psychology.
- Demonstrate an ability to apply the fundamentals of research methodology, research ethics, and statistical analysis to the interpretation and evaluation of research.
- Recognize, understand, and respect the complexity of human diversity, and embrace the richness of experience and knowledge that sociocultural differences contribute to the human experience.
- Apply skills gained during schooling-like self-reflection, work ethic, time management, project management, and teamwork-to develop meaningful goals for life after graduation.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "D-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.



- Psychology majors must have a GPA of 2.00 in their major and an overall GPA of 2.00 to graduate.
- A total of 42 hours is required for the Psychology major.
- All students must complete a minimum of 15 semester hours of upper-division PSY coursework for the psychology major.
- In meeting the requirements for the psychology major, transfer students must take a minimum of 15 semester hours of psychology coursework at MSU Denver, of which at least 9 must be upper-division credits.
- Transfer students must have completed both semesters of a two-semester introductory psychology course for equivalence to exist. Three semester hours will count toward the major or minor; three semester hours will count as general electives (i.e., PSY8888) to graduate. If a student has taken only one semester of a two-semester introductory course and takes PSY 1001 at MSU Denver, the transfer introductory credits will not count toward the degree.
- Senior experience courses in the Department of Psychological Sciences require psychology majors to complete an exam used by the department for program assessment prior to receiving a grade in the course. Should a student elect to take multiple senior experience courses, or to repeat the same senior experience course, the assessment exam need only be completed in the 1st course.
- The Department of Psychological Sciences does not accept correspondence study courses toward the total number of semester hours required for a major or minor. However, correspondence study credit can count toward the degree.
- Students considering advanced degrees should be aware that, in addition to course work in the areas listed above, graduate programs often have specific undergraduate course prerequisites. Required or recommended courses, depending on the graduate program, include Theories of Personality, Abnormal Psychology, Psychology of Learning, Child Psychology, Behavioral Neuroscience, Organizational Psychology, Sensation and Perception, Internship in Psychology, Teaching of Psychology, and Advanced Statistics. Therefore, students should consult with a Department of Psychological Sciences advisor to choose appropriate psychology electives.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Recommended: A Biology course in partial fulfillment of the Natural and Physical Sciences requirement. Options to consider include:
  - BIO 1000 - Human Biology for Non-Majors
  - BIO 1030 - General Biology for Non-Majors

- BIO 1080 - General Biology I / BIO 1090 - General Biology Laboratory I
- BIO 1081 - General Biology II / BIO 1091 - General Biology Laboratory II
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Two Psychology courses may be used to fulfill the ESSJ Requirement. These are:
  - PSY 3030 - Multicultural Psychology
  - PSY 3700 - Psychology of Group Prejudice

## Psychology Core: 13 credits

- PSY 1001 - Introductory Psychology **Credits:** 3
- PSY 2001 - Careers and Professional Development in Psychology **Credits:** 3
- PSY 2310 - Statistics for the Social and Behavioral Sciences **Credits:** 3
- PSY 3010 - Research Methods in Psychological Science **Credits:** 3
- PSY 3011 - Laboratory for Research Methods in Psychological Science **Credits:** 1

## Content Areas: 12 credits

In addition, students must take one course in each of the following areas.

### Social

- PSY 2410 - Social Psychology **Credits:** 3
- PSY 3030 - Multicultural Psychology **Credits:** 3
- PSY 3050 - Psychology of Gender **Credits:** 3
- PSY 3700 - Psychology of Group Prejudice **Credits:** 3

### Cognitive and Biological

- PSY 2120 - Brain and Behavior **Credits:** 3
- PSY 4520 - Sensation and Perception **Credits:** 3



- PSY 4540 - Behavioral Neuroscience **Credits:** 3
- PSY 4570 - Cognitive Psychology **Credits:** 3

## Clinical/Counseling

- PSY 2150 - Positive Psychology **Credits:** 3
- PSY 3000 - Theories of Personality **Credits:** 3
- PSY 3620 - Psychological Disorders: Perspectives, Symptoms, and Treatment **Credits:** 3
- PSY 4100 - Clinical/Counseling Psychology: Treatment, Practice, and Skills **Credits:** 3

## Developmental

- PSY 2210 - Psychology of Human Development **Credits:** 3
- PSY 3250 - Child Psychology **Credits:** 3
- PSY 3260 - Psychology of Adolescence **Credits:** 3
- PSY 3270 - Adulthood and Aging **Credits:** 3

## Psychology Electives: 15 credits

A minimum of 15 additional semester hours in psychology courses selected in consultation with and approved by a Department of Psychological Sciences advisor.

- No more than 9 of these hours may be PSY 2950 courses, and,
- no more than 6 of these hours may be PSY 4980 - Independent Study, and,
- no more than 6 hours may be in PSY 3970 - Practicum and,
- no more than 6 hours may be in PSY 3980 - Internship in Psychology and/or PSY 4650 - Advanced Internship in Psychology, combined.

## Senior Experience: 3 credits

- PSY 4320 - Advanced Psychological Research Methods **Credits:** 3  
or
- PSY 4330 - Psychology in the "Real World": Thinking Like a Psychologist **Credits:** 3  
or
- PSY 4510 - History and Systems of Psychology **Credits:** 3  
or
- PSY 4650 - Advanced Internship in Psychology **Credits:** 3

## Clinical and Counseling Concentration (optional)

The Clinical and Counseling Concentration in the Psychology Major is designed to better meet the needs of students who plan on a career and/or graduate school in the mental health field. The curriculum combines the foundational courses from the psychology major with the core courses from the clinical and counseling area.

Coursework examines the personal and interpersonal functioning of individuals, therapeutic skills, assessment/diagnosis, treatment and intervention. In addition to coursework, students are required to complete an internship at an approved facility as their senior experience.

The goals of the Clinical & Counseling Concentration in the Psychology Major are to:

- Prepare students for successful job placement and/or graduate admissions in clinical and counseling psychology
- Educate students on the basic principles, major theories, significant research findings, current issues, and emerging concepts in the field of mental health. This will include a focus on:
  - cognitive, behavioral, and emotional functioning of individuals
  - identification, assessment and understanding of personality, clinical disorders and other mental health problems
  - therapeutic skills
  - treatment and interventions
  - research methods
  - ethics
  - psychological well-being
  - working with diverse populations from a multicultural perspective
- Provide students with the opportunity to apply and build on their learning through an approved internship in the community
- Strengthen institutional linkages between MSU Denver and 1) local facilities that provide psychological services, and 2) clinical and counseling graduate schools.

## Psychology Core: 13 credits

- PSY 1001 - Introductory Psychology **Credits:** 3
- PSY 2001 - Careers and Professional Development in Psychology **Credits:** 3
- PSY 2310 - Statistics for the Social and Behavioral Sciences **Credits:** 3
- PSY 3010 - Research Methods in Psychological Science **Credits:** 3
- PSY 3011 - Laboratory for Research Methods in Psychological Science **Credits:** 1

## Clinical and Counseling Core: 12 credits

- PSY 2150 - Positive Psychology **Credits:** 3
- PSY 3000 - Theories of Personality **Credits:** 3
- PSY 3620 - Psychological Disorders: Perspectives, Symptoms, and Treatment **Credits:** 3
- PSY 4100 - Clinical/Counseling Psychology: Treatment, Practice, and Skills **Credits:** 3

## Content Areas: 9 credits

In addition, students must take one course in each of the following areas.

## Social

- PSY 2410 - Social Psychology **Credits:** 3
- PSY 3030 - Multicultural Psychology **Credits:** 3
- PSY 3050 - Psychology of Gender **Credits:** 3
- PSY 3700 - Psychology of Group Prejudice **Credits:** 3

## Cognitive and Biological

- PSY 2120 - Brain and Behavior **Credits:** 3
- PSY 4520 - Sensation and Perception **Credits:** 3
- PSY 4540 - Behavioral Neuroscience **Credits:** 3
- PSY 4570 - Cognitive Psychology **Credits:** 3

## Developmental

- PSY 2210 - Psychology of Human Development **Credits:** 3
- PSY 3250 - Child Psychology **Credits:** 3
- PSY 3260 - Psychology of Adolescence **Credits:** 3
- PSY 3270 - Adulthood and Aging **Credits:** 3

## Psychology Electives: 6 credits

Students must complete an additional 6 credits (i.e., 2 courses) of PSY-prefix courses, making a total of 43 hours in psychology.

- Any PSY course, with the exception of PSY8888, may be used toward meeting this requirement.
- No more than 3 hours in PSY 3980 Internship in Psychology may be used for the Clinical & Counseling Concentration.
- Psychology courses selected in consultation with and approved by a Department of Psychological Sciences advisor.

## Senior Experience: 3 credits

- PSY 4650 - Advanced Internship in Psychology **Credits:** 3

## Summary of Requirements

### Psychology Major, No Concentration

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Psychology Core	13 credits
Content Areas	12 credits
Psychology Electives	15 credits

Senior Experience	3 credits
Unrestricted Electives	41-50 credits
<b>Total for the Psychology Major, B.S.</b>	<b>120 credits</b>

### Psychology Major with Clinical and Counseling Concentration

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Psychology Core	13 credits
Clinical and Counseling Core	12 credits
Content Areas	9 credits
Psychology Electives	6 credits
Senior Experience	3 credits
Unrestricted Electives	41-50 credits
<b>Total for the Psychology Major, B.S., Clinical and Counseling Concentration</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Psychology Minor

The minor in Psychology is designed to help prepare students who are pursuing a career that involves working with people and/or understanding people's thoughts, feelings, and behavior. Students will gain a foundation in the science of behavior and mental processes and the application of psychological principles to real-world problems.

## Required Courses

- PSY 1001 - Introductory Psychology **Credits:** 3

## Subtotal: 3

In addition to this required course, students must take at least one course each from any two of the four Content Areas listed below.

## Content Areas

## Social

- PSY 2410 - Social Psychology **Credits:** 3
- PSY 3030 - Multicultural Psychology **Credits:** 3
- PSY 3050 - Psychology of Gender **Credits:** 3
- PSY 3700 - Psychology of Group Prejudice **Credits:** 3

## Cognitive and Biological

- PSY 2120 - Brain and Behavior **Credits:** 3
- PSY 4520 - Sensation and Perception **Credits:** 3
- PSY 4540 - Behavioral Neuroscience **Credits:** 3
- PSY 4570 - Cognitive Psychology **Credits:** 3

## Clinical/Counseling

- PSY 2150 - Positive Psychology **Credits:** 3
- PSY 3000 - Theories of Personality **Credits:** 3
- PSY 3620 - Psychological Disorders: Perspectives, Symptoms, and Treatment **Credits:** 3
- PSY 4100 - Clinical/Counseling Psychology: Treatment, Practice, and Skills **Credits:** 3

## Developmental

- PSY 2210 - Psychology of Human Development **Credits:** 3
- PSY 3250 - Child Psychology **Credits:** 3
- PSY 3260 - Psychology of Adolescence **Credits:** 3
- PSY 3270 - Adulthood and Aging **Credits:** 3

Subtotal: 6

## Elective Courses

A minimum of 15 additional semester hours in psychology courses selected in consultation with and approved by a Department of Psychological Sciences advisor. No more than 9 of these hours may be PSY 2950 courses, and no more than 6 of these hours may be PSY 4980 - Independent Study and no more than 6 hours may be in PSY 3970 - Practicum and no more than 6 hours may be in PSY 3980 - Internship in Psychology and/or PSY 4650 - Advanced Internship in Psychology, combined.

Subtotal: 15

Total Hours Required for the Minor: 23

## Note:

At least 3 courses (9 credit hours) in the minor must be upper division, and 6 of those hours must be taken at MSU Denver. A grade

of "D-" or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required. Psychology minors must have an overall GPA of 2.00 to graduate.

## Department of Sociology and Anthropology

Location: Central Classroom Building, Room 106

Phone: 303-615-1400

E-Mail: [knoxv@msudenver.edu](mailto:knoxv@msudenver.edu)

Website: [Sociology and Anthropology Department Website](#)

## *Anthropology Major, B.A.*

[Department of Sociology and Anthropology](#)

[College of Letters, Arts and Sciences](#)

Available Program

Format(s): [Online](#), [In-Person](#), [Hybrid](#)

## About the Program

Anthropology studies human biological and cultural diversity through time and space. It encompasses all of humanity as well as our closest primate relatives, from the earliest prehistoric ancestors to the varied societies inhabiting the world today. The Anthropology Program at MSU Denver is committed to enhancing student knowledge and appreciation of human beings as both a biological and a cultural species. Emphasizing a holistic approach, the Anthropology Program offers courses in each of the four traditional subfields of anthropology (cultural anthropology, biological anthropology, archaeology, and linguistic anthropology) and provides students with effective conceptual and methodological tools for observing and studying both ancient and modern humans.

## Student Outcomes

The MSU Denver Anthropology Program has the following student outcomes:

- **Understand fundamental concepts** - Describe fundamental concepts and approaches in anthropology.
- **Analyze human diversity** - Examine human diversity through time and space using anthropological theories, methods, and data.
- **Engage critically** - Implement anthropological skills, tools, and approaches toward professional, academic, and community engagement.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

The anthropology major requires a total of 36 semester hours, including the required core courses, practical courses, and electives listed below. The major also requires that students take an anthropology senior experience course. At least 12 upper-division semester hours in anthropology must be completed in residence at MSU Denver by students majoring in the field.

- A total of 120 semester hours are required for graduation.
- Anthropology majors must receive a grade of C- or better in every class for which the credits count toward the major. Students should note that programs differ in the minimum grade required.

**NOTE:** *All majors are required to see an anthropology advisor within two semesters of declaring anthropology as a major.*

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

**\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.**

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.
- **Recommended:** ANT 2330 - Cross-Cultural Communication

## Required Core Courses: 12 credits

Students are required to take the following four courses:

- ANT 1010 - Introduction to Biological Anthropology **Credits:** 3
- ANT 1310 - Introduction to Cultural Anthropology **Credits:** 3
- ANT 1650 - Ancient Civilizations **Credits:** 3
- ANT 2500 - Anthropology of Language **Credits:** 3

## Practical Courses: 6 credits

Students are required to take 6 credits of lab- or field-based courses in anthropology. Examples of courses currently offered by the department at this level include the following courses:

- ANT 2710 - Archaeological Field Research **Credits:** 3
- ANT 3000 - Quantitative Methods in Anthropology **Credits:** 3
- ANT 3330 - Japan: Culture, Communication, and Identity **Credits:** 3-6 (Study Abroad)
- ANT 3420 - Applied Anthropology **Credits:** 3
- ANT 3520 - Analyzing Talk and Interaction **Credits:** 3
- ANT 3790 - Human Osteology **Credits:** 3
- ANT 3800 - Forensic Anthropology **Credits:** 3
- ANT 3820 - Forensic Archaeology **Credits:** 3
- ANT 3860 - Paleopathology **Credits:** 3
- ANT 4610 - Archaeological Laboratory Methods **Credits:** 3
- ANT 4100 - Biological Anthropology Research Design **Credits:** 3 (Senior Experience)
- ANT 4251 - Advanced Ethnographic Field Experience **Credits:** 3 (Senior Experience)
- ANT 4710 - Advanced Archaeological Research **Credits:** 3 (Senior Experience)

## Elective Courses: 15 credits

Students are required to take 15 semester hours of elective courses in anthropology. Examples of courses currently offered by the department include, but are not limited to, the following:

- ANT 2330 - Cross-Cultural Communication **Credits:** 3 (ESSJ)
- ANT 2350 - African Peoples and Cultures **Credits:** 3
- ANT 2360 - Living Culture and Language of the Mexican and Chicano **Credits:** 3
- ANT 2400 - Women's Folklore and Folklife **Credits:** 3
- ANT 2640 - Archaeology **Credits:** 3
- ANT 2700 - Museum Studies **Credits:** 3

- ANT 3100 - Human Evolution **Credits: 3**
- ANT 3110 - Race and Human Variation **Credits: 3**
- ANT 3122 - The Neanderthal Enigma **Credits: 3**
- ANT 3170 - Primate Adaptation and Evolution **Credits: 3**
- ANT 3190 - Mammalian Paleontology **Credits: 3**
- ANT 3300 - Exploring World Cultures: Variable Topics **Credits: 3**
- ANT 3310 - Ethnography of North American Indians **Credits: 3**
- ANT 3320 - Anthropology of Japan **Credits: 3**
- ANT 3340 - Native Americans in Historical Perspective **Credits: 3**
- ANT 3361 - Gender and Disaster **Credits: 3**
- ANT 3365 - Structural Violence, Poverty and Human Rights **Credits: 3**
- ANT 3375 - Food and Culture **Credits: 3**
- ANT 3379 - Middle Eastern Cultures **Credits: 3**
- ANT 3380 - Exploring Folklore **Credits: 3**
- ANT 3386 - Religious Narratives and Culture **Credits: 3**
- ANT 3391 - Approaching Culture: Past and Present **Credits: 3**
- ANT 3395 - Transnational Genders and Sexualities **Credits: 3**
- ANT 3397 - Culture and Economy **Credits: 3**
- ANT 3480 - Cultural Diversity in Health and Illness **Credits: 3**
- ANT 3490 - Globalization and Culture **Credits: 3**
- ANT 3530 - Writing Systems and Scribal Traditions **Credits: 3**
- ANT 3540 - Women in the Developing World **Credits: 3**
- ANT 3600 - Archaeology of Eurasia and Africa **Credits: 3**
- ANT 3610 - Colorado Archaeology **Credits: 3**
- ANT 3630 - Archaeology of Ancient Egypt **Credits: 3**
- ANT 3640 - Holy Land Archaeology **Credits: 3**
- ANT 3650 - 100,000 Years of War **Credits: 3**
- ANT 3660 - Archaeology of the Americas **Credits: 3**
- ANT 3840 - Introduction to Bioarchaeology **Credits: 3**

## Senior Experience: 3 credits

Students are required to take one of the following anthropology senior experience courses. These courses may also count toward the practical course requirement if a student takes more than one.

- ANT 4100 - Biological Anthropology Research Design **Credits: 3**
- ANT 4251 - Advanced Ethnographic Field Experience **Credits: 3**
- ANT 4710 - Advanced Archaeological Research **Credits: 3**

## Additional Course Offerings

In addition to the courses listed above, new classes may be developed as part of the permanent catalog offerings, and other courses that are appropriate for the major may be offered under the variable topics, omnibus, or internship headings. Please see an advisor for more information.

## Summary of Requirements

General Studies Requirements	33 credits
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ESSJ Requirement	0-3 credits
Major Requirements	12 credits
Practical Courses	6 credits
Elective Courses	15 credits
Senior Experience	3 credits
Unrestricted Electives	48-69 credits
<b>Total for the Anthropology Major, B.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Anthropology Minor

### About the Program

Anthropology studies human biological and cultural diversity through time and space. It encompasses all of humanity as well as our closest primate relatives, from the earliest prehistoric ancestors to the varied societies inhabiting the world today. The Anthropology Program at MSU Denver is committed to enhancing student knowledge and appreciation of human beings as both a biological and a cultural species. Emphasizing a holistic approach, the Anthropology Program offers courses in each of the four traditional subfields of anthropology (cultural anthropology, biological anthropology, archaeology, and linguistic anthropology) and provides students with effective conceptual and methodological tools for observing and studying both ancient and modern humans. An anthropology minor provides an opportunity for students to bring a unique anthropological perspective to their major area of interest.

### Student Outcomes

The MSU Denver Anthropology Program has the following student outcomes:

- **Understand fundamental concepts** - Describe fundamental concepts and approaches in anthropology.
- **Analyze human diversity** - Examine human diversity through time and space using anthropological theories, methods, and data.
- **Engage critically** - Implement anthropological skills, tools, and approaches toward professional, academic, and community engagement.

## Anthropology Minor Requirements

The anthropology minor requires a total of 18 credits, as outlined below. Students must earn a grade of C- or better in all courses required for the minor. Students should note that programs differ in the minimum grade required.

## Required Courses: 6 credits

Students are required to take the following two courses.

- ANT 1010 - Introduction to Biological Anthropology **Credits: 3**
- ANT 1310 - Introduction to Cultural Anthropology **Credits: 3**

## Electives: 12 credits

Students are required to take 12 additional semester hours of elective courses in anthropology, numbered 1000-4999. At least 6 of these credits must consist of upper-division coursework. Examples of courses currently offered by the department include, but are not limited to, the following courses:

- ANT 1650 - Ancient Civilizations **Credits: 3**
- ANT 2330 - Cross-Cultural Communication **Credits: 3**
- ANT 2350 - African Peoples and Cultures **Credits: 3**
- ANT 2360 - Living Culture and Language of the Mexican and Chicano **Credits: 3**
- ANT 2400 - Women's Folklore and Folklife **Credits: 3**
- ANT 2500 - Anthropology of Language **Credits: 3**
- ANT 2640 - Archaeology **Credits: 3**
- ANT 2700 - Museum Studies **Credits: 3**
- ANT 2710 - Archaeological Field Research **Credits: 3**
- ANT 3000 - Quantitative Methods in Anthropology **Credits: 3**
- ANT 3100 - Human Evolution **Credits: 3**
- ANT 3110 - Race and Human Variation **Credits: 3**
- ANT 3122 - The Neanderthal Enigma **Credits: 3**
- ANT 3170 - Primate Adaptation and Evolution **Credits: 3**
- ANT 3190 - Mammalian Paleontology **Credits: 3**
- ANT 3300 - Exploring World Cultures: Variable Topics **Credits: 3**
- ANT 3310 - Ethnography of North American Indians **Credits: 3**
- ANT 3320 - Anthropology of Japan **Credits: 3**
- ANT 3330 - Japan: Culture, Communication, and Identity **Credits: 3-6**
- ANT 3340 - Native Americans in Historical Perspective **Credits: 3**
- ANT 3361 - Gender and Disaster **Credits: 3**
- ANT 3365 - Structural Violence, Poverty and Human Rights **Credits: 3**
- ANT 3375 - Food and Culture **Credits: 3**
- ANT 3379 - Middle Eastern Cultures **Credits: 3**
- ANT 3380 - Exploring Folklore **Credits: 3**
- ANT 3386 - Religious Narratives and Culture **Credits: 3**
- ANT 3391 - Approaching Culture: Past and Present **Credits: 3**
- ANT 3395 - Transnational Genders and Sexualities **Credits: 3**
- ANT 3397 - Culture and Economy **Credits: 3**
- ANT 3420 - Applied Anthropology **Credits: 3**
- ANT 3480 - Cultural Diversity in Health and Illness **Credits: 3**
- ANT 3490 - Globalization and Culture **Credits: 3**

- ANT 3520 - Analyzing Talk and Interaction **Credits: 3**
- ANT 3530 - Writing Systems and Scribal Traditions **Credits: 3**
- ANT 3540 - Women in the Developing World **Credits: 3**
- ANT 3600 - Archaeology of Eurasia and Africa **Credits: 3**
- ANT 3610 - Colorado Archaeology **Credits: 3**
- ANT 3630 - Archaeology of Ancient Egypt **Credits: 3**
- ANT 3640 - Holy Land Archaeology **Credits: 3**
- ANT 3650 - 100,000 Years of War **Credits: 3**
- ANT 3660 - Archaeology of the Americas **Credits: 3**
- ANT 3790 - Human Osteology **Credits: 3**
- ANT 3800 - Forensic Anthropology **Credits: 3**
- ANT 3820 - Forensic Archaeology **Credits: 3**
- ANT 3840 - Introduction to Bioarchaeology **Credits: 3**
- ANT 3860 - Paleopathology **Credits: 3**
- ANT 4100 - Biological Anthropology Research Design **Credits: 3**
- ANT 4251 - Advanced Ethnographic Field Experience **Credits: 3**
- ANT 4400 - Current Issues in Anthropology: Variable Topics **Credits: 1-6**
- ANT 4610 - Archaeological Laboratory Methods **Credits: 3**
- ANT 4710 - Advanced Archaeological Research **Credits: 3**

Total: 18 credit hours

## *Asian Studies Minor*

The Asian Studies minor offers students an opportunity to pursue interests in contemporary Asian societies, adding an important global focus to their major studies. Students are encouraged to apply a range of research methodologies with a focus on interdisciplinarity with course offerings from various disciplines in humanities and social sciences, including Anthropology, Sociology, History, Political science, Gender and Women's Studies, Linguistics, Literature, Music, Art, Geography, and Philosophy. During the process, students develop critical thinking abilities and problem-solving skills which prepare them to successfully join the workforce of Colorado and/or pursue an advanced degree.

A grade of "D-" or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required. Asian Studies minors must have an overall GPA of 2.00 to graduate.

## Core Requirements: 3 credits

- SOC 1300 - Asia in Global Perspective **Credits: 3**  
This course is crosslisted and may be taken as ANT 1300/GWS 1300/PSC 1300/HIS 1260/LANG 1260.

## Electives: 15 credits

Choose at least 15 credits from the following (at least 6 hours must be upper division).

- ANT 2330 - Cross-Cultural Communication **Credits: 3**

- ANT 3320 - Anthropology of Japan **Credits: 3**
- ANT 3330 - Japan: Culture, Communication, and Identity **Credits: 3-6**
- ARTH 3340 - Asian Art **Credits: 3**
- CHI 1010 - Elementary Chinese I **Credits: 5**
- CHI 1020 - Elementary Chinese II **Credits: 5**
- GEG 1000 - World Regional Geography **Credits: 3**
- GWS 3395 - Transnational Genders and Sexualities **Credits: 3**
- HIS 1250 - China and East Asia **Credits: 3**
- HIS 1270 - India and South Asia **Credits: 3**
- HIS 3700 - Modern China **Credits: 3**
- HIS 3740 - Modern Japan **Credits: 3**
- HIS 3750 - India and South Asia since 1500 **Credits: 3**
- ITP 3400 - Ayurveda **Credits: 3**
- ITP 3500 - Traditional Chinese Medicine **Credits: 3**
- ITP 3810 - Men Across Cultures **Credits: 3**
- JPS 1010 - Elementary Japanese I **Credits: 5**
- JPS 1020 - Elementary Japanese II **Credits: 5**
- JPS 2010 - Intermediate Japanese I **Credits: 5**
- JPS 2020 - Intermediate Japanese II **Credits: 5**
- JPS 2110 - Conversational Japanese I **Credits: 3**
- JPS 2120 - Kanji I **Credits: 3**
- JPS 3110 - Conversational Japanese II **Credits: 3**
- JPS 3120 - Kanji II **Credits: 3**
- JPS 3200 - Japanese through Media Culture **Credits: 3**
- JPS 3210 - Advanced Japanese: Major Topics **Credits: 3**
- MUS 3834 - Gamelan Ensemble **Credits: 1**
- PSC 1020 - Comparative Politics **Credits: 3**
- PSC 3640 - Regional Defense and Development: East Asia **Credits: 3**
- RLG 1040 - Asian Religions **Credits: 3**
- RLG 3410 - South and East Asian Philosophies and Religions: Variable Topics **Credits: 3**
- SOC 1080 - Love and Family in East Asia **Credits: 3**
- SOC 3200 - Asian American Experiences **Credits: 3**

Total for Minor: 18 credits

## ***Sociology Major, B.A.***

[Department of Sociology and Anthropology](#)

[College of Letters, Arts and Sciences](#)

Available Program  
Format(s): [In-Person](#)

### **About the Program**

Sociology studies all aspects of society, from individuals to large organizations. The Sociology major emphasizes understanding human behavior as situated in cultural values, norms, and social structures as well as various social, religious, political and economic institutions. Required courses provide practice in applying the

sociological theories and research methods sociologists use to analyze issues and address problems in the everyday social world. This focus enables sociology majors to apply these skills in a variety of work-related settings, or as a solid foundation for graduate school. Contact the Department of Sociology and Anthropology for additional information.

### **Student Outcomes**

- Demonstrate knowledge of sociological theories and concepts necessary to understand human social behavior.
- Understands the statistical skills necessary to analyze and understand complex statistical relationships.
- Demonstrate the skills necessary to define problems, conduct research and apply this knowledge to solve social and work place related issues.
- Demonstrate general knowledge of core sociological concepts and theories regarding diversity, the urban environment, and social change.

### **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

### **Program Requirements**

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- The student majoring in Sociology will take 15 required credits and 21 elective credits, for a total of 36 credits in the discipline. At least 12 upper-division semester hours in Sociology must be completed at MSU Denver by students majoring in Sociology.

### **General Studies Requirements: 33 credits**

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- **Recommended:** It is recommended that students fulfill this requirement with MTH 1210 - Introduction to Statistics.
- Arts and Humanities (6 credits)
- Historical (3 credits)

- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

### Required Courses: 15 credits

- SOC 1010 - People, Power, and Progress **Credits: 3**
- SOC 3320 - Sociological Theory: Past and Present **Credits: 3**
- SOC 3590 - Social Statistics **Credits: 3**  
*Note: MTH 1210 is a prerequisite for SOC 3590. MTH 1210 can be taken to fill the Quantitative Literacy requirement for General Studies.*
- SOC 3600 - Research in the Social Sciences **Credits: 3**
- Social Stratification Elective (one course selected from list below)

### Social Stratification Elective

Choose one course from the list below.

- SOC 3090 - Urban Sociology **Credits: 3**
- SOC 3220 - Prejudice and Discrimination **Credits: 3**
- SOC 3240 - Poverty and Inequality **Credits: 3**
- SOC 3430 - Gender and Society **Credits: 3**
- SOC 3710 - Politics and Power **Credits: 3**
- SOC 3810 - Population Issues: Life, Death and Migration **Credits: 3**
- SOC 4200 - Social Stratification **Credits: 3**

### Additional Electives: 21 credits

A minimum of 21 additional semester hours in sociology are required to complete the major. Students may choose as electives any additional courses offered in sociology. The department recommends that the student's choice of electives be made in consultation with a department advisor.

### Senior Experience: 3 credits

- SOC 4600 - Advanced Survey Research **Credits: 3**  
or
- SOC 4710 - Advanced Qualitative Methods **Credits: 3**

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Major Requirements	15 credits
Electives	21 credits
Senior Experience	3 credits
Unrestricted Electives	45-51 credits
<b>Total for the Sociology Major, B.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Sociology Minor

The Sociology minor requires a total of 18 hours, comprised of 6 hours of required courses and 12 hours of elective courses. The required courses are SOC 1010 and one course selected from the list of Social Stratification Electives. The minor requires a minimum grade of "C-" in all sociology courses, and at least 6 upper-division hours in sociology completed at MSU Denver. (Students should note that academic programs differ in the in the number of hours and minimum grade required.) The department recommends that students choose electives in consultation with a department advisor.

### Required Courses:

- SOC 1010 - People, Power, and Progress **Credits: 3**
- Social Stratification Elective (one course selected from list below)

### Social Stratification Elective

Choose one course from the list below

- SOC 3090 - Urban Sociology **Credits: 3**
- SOC 3220 - Prejudice and Discrimination **Credits: 3**
- SOC 3240 - Poverty and Inequality **Credits: 3**
- SOC 3430 - Gender and Society **Credits: 3**
- SOC 3710 - Politics and Power **Credits: 3**



- SOC 3810 - Population Issues: Life, Death and Migration **Credits:** 3
- SOC 4200 - Social Stratification **Credits:** 3

## Additional Electives: 12 credit hours

A minimum of 12 additional credit hours in sociology are required to complete the minor. Students may choose as electives any additional courses offered in sociology. The department recommends that the student's choice of electives be made in consultation with a department advisor.

Total Credit hours in Minor: 18

## Department of Theatre and Dance

Location: Arts Building, Room 269

Phone: 303-615-1414

E-Mail: [TheatreandDance@msudenver.edu](mailto:TheatreandDance@msudenver.edu)

Website: [Theatre and Dance Department Website](#)

### *Dance Major, B.A.*

[Department of Theatre and Dance](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

### About the Program

The MSU Denver Dance major is unique in its versatility and in its partnership with Cleo Parker Robinson Dance (CPRD). CPRD is recognized worldwide for their dynamic cross-cultural curriculum, community engagement, innovative choreography, and promotion of American dance heritage. In this exciting program, CPRD's mission of social transformation through dance and MSU Denver's academic rigor and focus on real-world experience converge.

The dance curriculum includes coursework in jazz, hip-hop, tap, African dance, belly dance, ballet, modern, Ballet Folklórico, dance history, community-based dance practices, somatics and anatomy, pedagogy, improvisation, choreography, contemporary dance and interdisciplinary performance, movement analysis, dance production, and arts entrepreneurship. The Dance Program allows students to combine their interest in dance with other fields, taking classes in non-profit management, teaching or arts administration, among others. The program utilizes service learning, field experience, and internship programs to enrich students' learning and to foster a

connection between MSU and its student body and the Denver community. We aim to prepare students for their future in dance and beyond, supporting their specific career and educational goals through concrete learning experiences and creative exploration.

### Student Outcomes

- Students will understand and communicate the ways in which diverse dance practices reflect and contribute to historical, religious, sociopolitical, economic, and cultural contexts, using scholarly research, criticism, and analysis.
- Students will evaluate various entrepreneurship opportunities in dance, develop an original sustainable dance-related business, and/or create an artistic dance production suitable for a variety of contexts.
- Students will attain an intermediate level of technical movement competency, or higher, in at least one dance form by performing movement patterns skillfully and by demonstrating a kinesthetic understanding of proper alignment and body mechanics.
- Students will develop versatile performance capabilities and exhibit artistic intent through mind-body awareness, and by using space, time and energy expressively.
- Students will integrate innovative creative ideas, collaborative approaches, compositional skills, and/or theatrical elements in the creation of choreography, including a fully realized choreographic performance work that expresses meaning according to artistic intent, and which is presented in a public context.
- Students will examine the potential of dance as a tool for social change as they design a community-based performance project that includes a thoughtful project model and narrative, effective facilitation strategies, and relevant creative activities.
- Students will comprehend and implement a variety of pedagogical skills and methodologies as they present purposeful creative and/or technical exercises, teach collaborative dance lessons, and design effective short and long-range instructional plans.

### General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

### Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Dance majors must participate in a dance production every semester, starting in their third semester. Past dance production experience will be considered for transfer students and for those declaring their dance major after their sophomore year.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Areas of Emphasis in Dance

Below are recommended areas of emphasis; however, we encourage all students to create a customized program that suits their specific career goals. Students will consult with a faculty advisor to create a degree plan that includes electives centered around the selected emphasis.

**Performance and/or Choreography:** Ideal for students seeking a career in performance and/or choreography, or artistic direction.

- Recommended courses in Dance, Theatre, and Music, among others

**Dance Pedagogy:** Ideal for students seeking to own, manage, or teach at a studio. Also ideal for students aiming to get a dance endorsement along with their teaching license. A secondary dance endorsement enables graduates to teach dance in the public school system if they attain primary licensure through another discipline.

- Recommended courses in Education, Dance, and Psychology, among others

**Dance Organization/Nonprofit:** Ideal for students seeking a career in dance administration, entrepreneurship, nonprofit management,

studio ownership, artist management, production/stagecraft, or grant writing/fundraising.

- Recommended courses in Human Services, Management, Entrepreneurship, Finance, Accounting, and Marketing, among others  
**Social Transformation through Dance:** Ideal for students seeking to integrate dance into the community and/or arts programs as well as those interested in being a dance historian, writer and/or critic.

- Recommended courses in Africana Studies, Chicana/o Studies, Psychology, Social Work, and Gender, Women, and Sexualities Studies, among others

## Core Dance Courses: 33 credits

- DANC 1210 - Improvisation and Choreography **Credits: 3**
- DANC 3420 - Skills and Methods of Teaching Improvisation and Choreography **Credits: 3**
- DANC 3440 - Dance Production **Credits: 3**
- DANC 3410 - Skills and Methods of Teaching Dance Technique **Credits: 3**
- DANC 3905 - Dance Repertory **Credits: 3**
- DANC 3910 - Dancing Histories in a Global Context **Credits: 3**
- DANC 3920 - Dance Entrepreneurship **Credits: 3**
- DANC 3930 - Choreography II **Credits: 3**
- DANC 3940 - Experiential Movement, Somatics and Injury Risk Reduction for Dance Artists **Credits: 3**
- DANC 4910 - Dance and Interdisciplinary Performance in the 20th Century and Beyond **Credits: 3**
- DANC 4920 - Community-Based Dance and Social Change **Credits: 3**

## Core Dance Technique Courses: 18 credits

Students choose from the below dance technique courses to attain 18 credits, according to level. At least 1 of these courses must be chosen from the following dance forms: African Dance, Ballet Folklórico, or Belly Dance.

- DANC 1020 - Ballet Folklórico **Credits: 2**
- DANC 1101 - Hip Hop I **Credits: 2**
- DANC 2201 - Hip Hop II **Credits: 2**
- DANC 1110 - Belly Dance I **Credits: 2**
- DANC 2210 - Belly Dance II **Credits: 2**
- DANC 1120 - African Dance and Drumming **Credits: 2**
- DANC 3835 - African Drum and Dance Ensemble **Credits: 1**
- DANC 1130 - Ballet Level I **Credits: 2**
- DANC 2230 - Ballet II **Credits: 2**
- DANC 3330 - Ballet III **Credits: 2**
- DANC 4430 - Ballet IV **Credits: 2**
- DANC 1160 - Jazz Level I **Credits: 2**
- DANC 2260 - Jazz II **Credits: 2**
- DANC 3360 - Jazz III **Credits: 2**
- DANC 4460 - Jazz IV **Credits: 2**
- DANC 1180 - Modern Dance I **Credits: 2**

- DANC 2280 - Modern Dance II **Credits: 2**
- DANC 3380 - Modern Dance III **Credits: 2**
- DANC 4480 - Modern Dance IV **Credits: 2**
- DANC 1240 - Tap Dance I **Credits: 2**
- DANC 2240 - Tap Dance II **Credits: 2**

## Dance Major Electives: 11 credits

In consultation with an advisor, the 11 dance major elective credits can be fulfilled through Field Experiences (up to 12 credits), Internships, additional technique courses, repetition of specific dance courses for credit, and/or through courses within other departments relevant to the student's area of emphasis.

- DANC 3040 - MSU Denver Dance Ensemble **Credits: 3**
- DANC 3391 - Cleo Parker Robinson International Summer Dance Institute I **Credits: 1**
- DANC 3392 - Cleo Parker Robinson International Summer Dance Institute II **Credits: 2**
- DANC 3750 - Study Abroad: Human Performance and Sport **Credits: 3**
- DANC 3980 - Internship for Dance **Credits: 3-9**
- DANC 3990 - Dance Field Experience **Credits: 1-3**
- DANC 4010 - Advanced/Professional Company Class **Credits: 2** (by audition)
- Courses through other departments relevant to area of emphasis
- Additional Technique courses
- Course Repetition (Technique courses, Dance Rep, and Dance Ensemble may be taken twice, Advanced/Professional Company may be taken by advanced dancers up to 5 times)

## Senior Experience

- DANC 4990 - Dance Senior Experience **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Dance Core Courses	33 credits
Dance Technique Courses	18 credits
Major Electives	11 credits
Senior Experience	3 credits
Unrestricted Electives	19-22 credits
<b>Total for the Dance Major, B.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Dance Minor

The Dance minor is to prepare students to be leaders in the dance profession and other realms through experiential learning, creative and scholarly research, community engagement, entrepreneurship, collaborative exchange, and diverse artistic experiences. The program aims to be inclusive and help all students develop the skills necessary to meet their individual career goals, to experience physical, mental, and emotional wellness, and to positively impact society through purposeful work and study in the dance field and beyond.

## Dance Minor Core Courses 9 credits

- DANC 1210 - Improvisation and Choreography **Credits: 3**
- DANC 3410 - Skills and Methods of Teaching Dance Technique **Credits: 3**  
or
- DANC 3420 - Skills and Methods of Teaching Improvisation and Choreography **Credits: 3**
- DANC 3440 - Dance Production **Credits: 3**

## Dance Minor Technique Courses 8 credits

Students choose from the dance technique courses listed below to attain 8 credits, according to level.

- DANC 3835 - African Drum and Dance Ensemble **Credits: 1**
- DANC 1120 - African Dance and Drumming **Credits: 2**
- DANC 1020 - Ballet Folklórico **Credits: 2**
- DANC 1130 - Ballet Level I **Credits: 2**
- DANC 2230 - Ballet II **Credits: 2**
- DANC 3330 - Ballet III **Credits: 2**
- DANC 4430 - Ballet IV **Credits: 2**
- DANC 1160 - Jazz Level I **Credits: 2**
- DANC 2260 - Jazz II **Credits: 2**
- DANC 3360 - Jazz III **Credits: 2**
- DANC 4460 - Jazz IV **Credits: 2**
- DANC 1180 - Modern Dance I **Credits: 2**
- DANC 2280 - Modern Dance II **Credits: 2**
- DANC 3380 - Modern Dance III **Credits: 2**
- DANC 4480 - Modern Dance IV **Credits: 2**
- DANC 1240 - Tap Dance I **Credits: 2**
- DANC 2240 - Tap Dance II **Credits: 2**
- DANC 1101 - Hip Hop I **Credits: 2**
- DANC 2201 - Hip Hop II **Credits: 2**
- DANC 1110 - Belly Dance I **Credits: 2**

- DANC 2210 - Belly Dance II **Credits: 2**

## Dance Minor Electives 6 credits

Students choose from the below courses to attain 6 credits of Dance Electives. No more than 3 of those credits can be completed by taking DANC 3980 or DANC 3990.

- DANC 3040 - MSU Denver Dance Ensemble **Credits: 3**
- DANC 3410 - Skills and Methods of Teaching Dance Technique **Credits: 3**
- DANC 3420 - Skills and Methods of Teaching Improvisation and Choreography **Credits: 3**
- DANC 3750 - Study Abroad: Human Performance and Sport **Credits: 3**
- DANC 3905 - Dance Repertory **Credits: 3**
- DANC 3910 - Dancing Histories in a Global Context **Credits: 3**
- DANC 3920 - Dance Entrepreneurship **Credits: 3**
- DANC 3930 - Choreography II **Credits: 3**
- DANC 3940 - Experiential Movement, Somatics and Injury Risk Reduction for Dance Artists **Credits: 3**
- DANC 3980 - Internship for Dance **Credits: 3-9**
- DANC 3990 - Dance Field Experience **Credits: 1-3**
- DANC 4910 - Dance and Interdisciplinary Performance in the 20th Century and Beyond **Credits: 3**
- DANC 4920 - Community-Based Dance and Social Change **Credits: 3**

## Total Dance Minor Credits 23

Through a combination of the above courses and requirements students must take a minimum of 23 credits towards their Dance Minor and meet the 6 credit upper division requirement.

## Additional Requirements

**Dance Minors are required to be involved in at least 2 MSU Denver Dance Program Performances.**

## Summary of Credits Required for Dance Minor

Dance Minor Core Courses	9 credits
Dance Minor Technique Courses	8 credits
Dance Minor Electives	6 credits
<b>Total for Dance Minor</b>	<b>23 credits</b>

Must have 6 credits of upper division classes	
Required to be involved in 2 MSU Denver Dance Program Performances	

## Theatre Major, B.A.

[Department of Theatre and Dance](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

## About the Program

Theatre is "Equipment for Living." That's the philosophy behind the MSU Denver Theatre program.

A Bachelor of Arts degree in Theatre not only prepares you to tell powerful, transformative stories, but it also imparts the ability to work in teams, communicate artfully, plan large projects and think analytically - skills employers crave.

As a Theatre major, you study the academic side of Theatre as well as receive opportunities to perform and work in campus productions, serve as a production dramaturge, become part of an MSU Denver touring company, intern at local theatres and participate in regional and national theatre competitions.

MSU Denver's Theatre program is accredited by the National Association of Schools of Theatre. The program not only prepares you for further graduate studies, but also provides the training necessary for careers in voice, film and theatre and other media. Many Theatre majors also translate their Theatre degrees into careers such as teaching, sales, law, business, communications and more.

## Student Outcomes

- Demonstrate a solid understanding of the business of theatre as it applies to one's chosen concentration, especially an understanding of how to secure and maintain employment.
- Demonstrate the ability to exercise the skills of one's chosen concentration with other theatre skill areas.
- Demonstrate the ability to think logically and critically.
- Demonstrate the ability to verbalize and/or write coherent and insightful criticism of dramatic literature and theatre production.
- Articulate the role of the arts, and theatre specifically, in diverse cultures represented in the city, state, and country.
- Work effectively and productively as a member of groups.
- Demonstrate the discipline, attitude, perseverance, and focus necessary for a career in the theatre.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Core Courses for all Theatre Majors: 37 credits

- THE 1240 - Stagecraft **Credits: 3**
- THE 2201 - Voice and Speech I **Credits: 3**
- THE 2215 - Self-Care in Theatre **Credits: 3**
- THE 2220 - Acting I **Credits: 3**
- THE 2248 - Wardrobe Technology for Everyone **Credits: 3**

- THE 2270 - Production Analysis **Credits: 3**
- THE 2280 - Theatre Career Development **Credits: 3**
- THE 3211 - World Theatre History I **Credits: 3**
- THE 3212 - World Theatre History II **Credits: 3**
- THE 3220 - Stage Movement **Credits: 3**
- THE 3222 - Devised Theatre **Credits: 3**
- THE 4230 - Stage Directing **Credits: 3**
- THE 4260 - Theatre: Practicum I **Credits: 1**

## Major Electives: 14 credits

All courses with a "THE" prefix, except those courses required for the major, including internships, may be selected in consultation with an approved Theatre advisor within the Department of Theatre and Dance.

## Senior Experience: 3 credits

- THE 4230 - Stage Directing **Credits: 3** (credits counted in major)

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Major Required Courses	37 credits
Major Electives	14 credits
Senior Experience	(counted in major)
Unrestricted Electives	33-36 credits
<b>Total for the Theatre Major, B.A.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## Theatre Major, B.F.A.

[Department of Theatre and Dance](#)  
[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

## About the Program

Theatre is "Equipment for Living." That's the philosophy behind the MSU Denver Theatre program.

MSU Denver's B.F.A. in Theatre degree is an intensive pre-professional program that offers two concentrations:

- Music Theatre
- Applied Theatre Technology and Design

Music Theatre provides rich opportunities for performing; Applied Theatre Technology and Design provides hands-on technical theatre experience. These experiences are provided both in class and onstage as well as through on-campus productions, internships at local theatres and with the University's own professional Kaiser Permanente Touring Company, which delivers health-oriented performances in local schools.

Taught by veteran teachers who are also theatre and design professionals, you receive the kind of mentoring you need to make your way as an actor, theatre technician or designer, as well as discover ways to use your Theatre training in other fields. As a Theatre major, you study the academic side of Theatre as well as receive opportunities to perform and work in campus productions, serve as a production dramaturge, become part of an MSU Denver touring company, intern at local theatres and participate in regional and national theatre competitions.

MSU Denver's Theatre program is accredited by the National Association of Schools of Theatre. The program not only prepares you for further graduate studies, but also provides the training necessary for careers in voice, film and theatre and other media. Many Theatre majors also translate their Theatre degrees into careers such as teaching, sales, law, business, communications and more.

## Student Outcomes

- Demonstrate a solid understanding of the business of theatre as it applies to one's chosen concentration, especially an understanding of how to secure and maintain employment.
- Demonstrate the ability to exercise the skills of one's chosen concentration with other theatre skill areas.
- Demonstrate the ability to think logically and critically.
- Demonstrate the ability to verbalize and/or write coherent and insightful criticism of dramatic literature and theatre production.
- Articulate the role of the arts, and theatre specifically, in diverse cultures represented in the city, state, and country.
- Work effectively and productively as a member of groups.
- Demonstrate the discipline, attitude, perseverance, and focus necessary for a career in the theatre.
- Demonstrate problem-solving skills in the application of one's theatre skills to both laboratory experiences and public-performance opportunities.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\*Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Required Core Courses: 37 credits

- THE 1240 - Stagecraft **Credits: 3**
- THE 2201 - Voice and Speech I **Credits: 3**
- THE 2215 - Self-Care in Theatre **Credits: 3**
- THE 2220 - Acting I **Credits: 3**
- THE 2248 - Wardrobe Technology for Everyone **Credits: 3**
- THE 2270 - Production Analysis **Credits: 3**
- THE 2280 - Theatre Career Development **Credits: 3**
- THE 3211 - World Theatre History I **Credits: 3**
- THE 3212 - World Theatre History II **Credits: 3**

- THE 3220 - Stage Movement **Credits: 3**
- THE 3222 - Devised Theatre **Credits: 3**
- THE 4230 - Stage Directing **Credits: 3**
- THE 4260 - Theatre: Practicum I **Credits: 3**

## Music Theatre Concentration: 40 credits

### Required Courses: 34 credits

- DANC 1130 - Ballet Level I **Credits: 2**
- DANC 1240 - Tap Dance I **Credits: 2**
- DANC 1101 - Hip Hop I **Credits: 2**
- OR
- DANC 1160 - Jazz Level I **Credits: 2**
- MUS 0020 - Recital Attendance **Credits: 0** (one semester)\*\*\*
- MUS 1110 - Music Theory I **Credits: 3**
- MUS 1120 - Music Theory Lab I **Credits: 1 \***
- MUS 161B - Class Piano I **Credits: 1**

Students Complete one of the following sets of courses for a total of 6 credits:

- MUS 1710 - Private Instruction I **Credits: 2**
- MUS 1720 - Private Instruction II **Credits: 2**
- Two (2) additional credits of private voice instruction selected from the following: MUS 1717 Musical theatre Voice I, MUS 1727 Musical Theatre Voice II, and MUS 2717 Musical Theatre Voice III.

OR

- MUS 161A - Class Voice I **Credits: 1**
- MUS 162A - Class Voice II **Credits: 1**
- Four (4) additional credits of dance courses selected from the following: DANC 1160 Jazz Level I, DANC 1180 Modern Dance I, DANC 2201 Hip Hop II, DANC 2240 Tap Dance II, DANC 2260 Jazz II, DANC 2280 Modern Dance II, DANC 3301 Hip Hop III, DANC 3360 Jazz III, and DANC 3905 Dance Repertory.

\*\*\*Choir or Chorale Choice++: 2 credits total of any combination of the following courses, to be taken concurrently with private voice or class voice:

- MUS 3820 - Chorale **Credits: 1**
- or
- MUS 3821 - University Treble Choir **Credits: 1**
- or
- MUS 3822 - University Basso Choir **Credits: 1**
- THE 0010 - BFA Music Theatre Coaching **Credits: 0 \*\*\*\*\***
- THE 2230 - Acting II **Credits: 3**
- THE 2299 - Broadway: The History of the American Musical **Credits: 3**

- THE 3201 - Voice and Speech II: Speech and Accents **Credits: 3**
- OR
- THE 3230 - Acting III: Styles of Acting **Credits: 3**

OR

- THE 3231 - Acting IV: Mask Characterization **Credits: 3**
- THE 3980 - Professional Internship: Theatre **Credits: 1-15 \*\*\*\*\***
- THE 4272 - BFA Project: Music Theatre **Credits: 2**

Note: Ensembles will be assigned based on auditions.

*\*Must be taken concurrently. \*\*Must be taken concurrently. \*\*\*Students must enroll during each semester of Private Voice instruction, and complete the requirements with a "Satisfactory" grade in order to be eligible to continue to enroll in Private Voice instruction. \*\*\*\*Must be taken each semester the student is enrolled in the Music Theatre BFA Program. ++MUS 3820: Chorale or MUS 3821: Women's Choir or MUS 3822 Men's Choir are each single-credit, repeatable courses. One of these courses must be taken as a corequisite with each semester of MUS 1717 Private Musical Theatre Voice I and MUS 1727 Private Musical Theatre Voice II. \*\*\*\*\*4 credits of Professional Internship are required for BFA concentrations. Additional internship credits beyond 4 may be applied to Theatre Electives as long as they are taken as a separate registration from the 4 required Professional Internship credits. \*\*\*\*\* Must be taken each semester the student is enrolled in the Music Theatre BFA and completed 4 times.*

## Concentration Elective Courses: 6 credits

All courses with a "THE" prefix, except those courses required for the major or concentration, may be selected in consultation with an approved theatre advisor within the Department of Theatre. This can include internship credits beyond the 4 credits required for the BFA core Music Theatre Concentration.

## Applied Theatre Technology and Design Concentration: 40 credits

### Required Courses: 29 credits

- THE 0011 - BFA Applied Technology Coaching **Credits: 0 \***
- THE 2241 - Costume Construction **Credits: 3**
- THE 2243 - Graphics for Theatre **Credits: 3**
- THE 2250 - Stage Management **Credits: 3**
- THE 3210 - Scene Painting **Credits: 3**
- THE 3271 - Stage Lighting Technology **Credits: 3**
- THE 3272 - Stage Sound Technology **Credits: 3**
- THE 3980 - Professional Internship: Theatre **Credits: 1-15 \*\***
- THE 4270 - Theatre: Practicum II **Credits: 2**
- THE 4275 - Theatre: Practicum III **Credits: 3**
- THE 4271 - BFA Project: Applied Technology **Credits: 2**

*\*Must be taken each semester the student is enrolled in the Applied Theatre Technology and Design BFA and completed 4 times.*

*\*\*4 credits of Professional Internship are required for BFA concentrations. Additional internship credits beyond 4 may be applied to Theatre Electives as long as they are taken as a separate registration from the 4 required Professional Internship credits.*

## Concentration Elective Courses: 11 credits

All courses with a "THE" prefix, except those courses required for the major or concentration, may be selected in consultation with an approved theatre advisor within the Department of Theatre. This can include internship credits beyond the 4 credits required for the BFA Applied Theatre Technology and Design concentration.

## Senior Experience: 3 credits

All students must complete this course for their senior experience:

- THE 4230 - Stage Directing **Credits: 3** (credits counted in major)

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Core Courses	37 credits
Concentration Selection (Music Theatre or Applied Theatre Technology and Design)	40 credits
Senior Experience	(counted in major)
Unrestricted Electives	7-10 credits
<b>Total for the Theatre Major, B.F.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Theatre Minor

Degrees offered by the Theatre Department prepare students to pursue a wide range of career options in theatre, entertainment industries, and other related fields. Each degree offers the flexibility for students to pursue a major or minor that best meets their educational, professional, and artistic goals.

Theatre Department Academic Programs

- Theatre Major, B.A.
- Theatre Major, B.F.A
- Theatre Minor

All students considering a major or minor in Theatre should consult with theatre faculty for advising.

The BFA in Theatre (with concentrations in Applied Theatre Technology and Design or Music Theatre) is a professional course of study that provides specialized training in each chosen discipline.

The Theatre Minor can be tailored to suit the goals of each student whether in performance or technical theatre.

**Both BFA in Theatre concentrations have additional application requirements as follows:**

- The BFA in Theatre (Applied Theatre Technology and Design concentration) requires an application and interview process. All transfer students must complete a minimum of four semesters (not including summer) once accepted into the program.
- The BFA in Theatre (Music Theatre concentration) requires an application, music audition, theatre audition, and interview process. All transfer students must complete a minimum of four semesters (not including summer) once accepted into the program.

**Departmental grade requirements:**

- A grade of "C-" or better is required in every course (including any cross-discipline courses) for each degree.
- Students must maintain a 2.0 GPA within each degree.
- The University the completion of 120 credits and requires an overall 2.0 GPA to graduate.
- Other departments may have differing grade requirements. For further information, contact the Theatre Department.

## Required Courses

The following courses are required for the minor:

- THE 1210 - Theatre Appreciation **Credits: 3**
- THE 1240 - Stagecraft **Credits: 3**
- THE 2220 - Acting I **Credits: 3**
- THE 2270 - Production Analysis **Credits: 3**
- THE 4230 - Stage Directing **Credits: 3**
- THE 4260 - Theatre: Practicum I **Credits: 1**

**Subtotal: 16 credits**

## Electives

All courses with a "THE" prefix, except those courses required for the minor, may be selected to fulfill minor elective requirements in consultation with an approved theatre advisor within the Department of Theatre. Must have 9 credits of Electives, 6 of which must be upper division.

**Subtotal: 9 credits**



Total for Theatre Minor: 25 credits

## Department of World Languages

Location: Plaza Building, Room 360

Phone: 303-615-1122

E-Mail:

Website: [World Languages Department Website](#)

### Level Placement

Students are placed in courses at levels appropriate to their ability as indicated by the BYU placement exam and in consultation with department advisors. Students may earn up to 16 credits through the College Level Exam Program (CLEP), which equates to the full beginner level sequence and part of the intermediate sequence within our minors and majors in world languages.

### *Bilingual Education Specialist Certificate - Agency/Non-profit*

The Bilingual Education Specialist Certificate. - Agency/Non-Profit is designed for advanced and Heritage speakers of Spanish wanting to further develop their cultural and linguistic background in order to effectively communicate with bilingual Spanish-English/English Spanish audiences. It will meet the needs of bilingual students who are, either pursuing a selected major or still in the process of selecting a major through the opportunity to fulfill a broad range of graduation requirements by earning General Studies, upper-division, and applied learning credit.

Students seeking to complete this Certificate must apply through any of the participating departments: Culturally and Linguistically Diverse Education Program (CLD) at the Teacher Education Department; the Department of World Languages (LANG); and the Department of Chicana/a Studies (CHS). A minimum grade for courses completed as part of the certificate will be a "C" or better. No more than 40% of the credits used to satisfy certificate requirements may be transfer credits from other institutions.

### Advising and Contact Information

School of Education: CLD Co-Coordinator\*

College of LAS, Department of World Languages: Chairperson\*\*

College of LAS, Department of Chicana/o Studies: Chairperson\*\*\*

\*Loretta Chavez (CLD) - [lhavez26@msudenver.edu](mailto:lhavez26@msudenver.edu)

\*Peter Vigil (CLD) - [pvigil7@msudenver.edu](mailto:pvigil7@msudenver.edu)

\*\*Maria Akrabova (LANG) - [makrabou@msudenver.edu](mailto:makrabou@msudenver.edu)

\*\*\*Ramon del Castillo (CHS) - [delcastr@msudenver.edu](mailto:delcastr@msudenver.edu)

### Required Courses

#### • Education and Language Electives (Choose One) Credits: 3

• EDS 1001 Advancing Social Justice and Educational Equity: Challenges and Strategies Credits: 3

• CHS 3300 Education of Chicano Children Credits: 3

• LING 3020 History of the English Language Credits: 4

#### • Language and Culture Credits: 9

• CHS 2000 Living Culture and Language of the Mexican and Chicano Credits: 3

• SPA 3110 Advanced Conversation Credits: 3

• SPA 3220 Folklore and Culture of the Mexican Southwest Credits: 3

#### • Multicultural Contexts Credits: 6

• CHS 3100 Social Justice and Activism in the Chicana/o Community Credits: 3

• CLD 3510 Perspectives in Education for Culturally and Linguistically Diverse Learners Credits: 3

**Total Credits: 18**

### *French Minor*

A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

### Required Courses:

- FRE 2010 - Intermediate French I Credits: 3
- FRE 2020 - Intermediate French II Credits: 3
- FRE 2110 - French Reading and Conversation Credits: 3
- FRE 3010 - French as a Global Language Credits: 3

- FRE 3110 - Survey of French Literature I Credits: 3  
or
- FRE 3120 - Survey of French Literature II Credits: 3

- FRE 3550 - French Historical Perspectives Credits: 3  
or
- FRE 3560 - Contemporary Socio-Cultural Issues Credits: 3  
French Electives\*

Total: 21

Note:

\*Must be a course at the 3000- or 4000-level.

### *German Minor*

For students minoring in German, the program provides a foundation in language, culture, literature, and writing. The German minor prepares students with a professional level of oral communication, often sought by international companies and organizations, as well as a thorough understanding of the culture of German-speaking countries. The minor in German is a very flexible program designed to complement various majors. It provides a basis for graduate level reading in many related academic areas.

Students who are considering the German minor in the Department of Modern Languages are expected to consult with faculty for advising. A letter grade of "C-" or better is necessary in each of the required courses.

## Required Courses

- GER 2010 - Intermediate German I **Credits: 3**
- GER 2020 - Intermediate German II **Credits: 3**
- GER 2110 - German Reading and Conversation **Credits: 3**
- GER 2120 - German Civilization **Credits: 3**

Subtotal: 12 credits

**Select one of the following literature/culture courses:**

- GER 3200 - German Culture and Civilization **Credits: 3**
- GER 3210 - Survey of German Literature I **Credits: 3**
- GER 3220 - Survey of German Literature II **Credits: 3**

Subtotal: 3 credits

**Select one of the following skills courses:**

- GER 3010 - Third-Year German Conversation **Credits: 3**
- GER 3150 - German Phonetics: Theory and Practice **Credits: 3**
- GER 3300 - Advanced German Grammar **Credits: 3**

Subtotal: 3 credits

**Select one other course from either category.**

Subtotal: 3 credits

**Total for Minor: 21 credits**

## *Italian Minor*

Students pursuing a minor in Italian gain both linguistic proficiency and cultural awareness through the study of Italian language, civilization, literature, art and film. The program is suited to complement a wide array of academic concentrations, including but not limited to language and literature, cultural studies, business and international relations, hospitality and food, music and opera, art and design.

A grade of "C-" or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required.

## Required Courses

- ITA 2010 - Intermediate Italian I **Credits: 3**
- ITA 2020 - Intermediate Italian II **Credits: 3**
- ITA 2110 - Italian Reading and Conversation **Credits: 3**
- ITA 3140 - Advanced Italian Grammar **Credits: 3**
- ITA 3250 - Readings in Italian Literature **Credits: 3**

**Subtotal: 15 credits**

## Elective Courses

Select two of the following courses on Italian culture:

- ITA 3010 - Italian Culture Through Film **Credits: 3**
- ITA 3110 - Advanced Conversation **Credits: 3**
- ITA 3310 - Contemporary Italy: Culture and Society **Credits: 3**

**Subtotal: 6 credits**

**Total for Minor: 21 credits**

## *Japanese Minor*

Students pursuing a minor in Japanese gain both linguistic proficiency and cultural awareness through the study of Japanese language, civilization, literature, art and film. The program is suited to complement a wide array of academic concentrations, including but not limited to language and literature, cultural studies, business and international relations, hospitality and food, music, theatre, art and design.

A grade of C-or better is required for each course in this program to count towards the minor. Students should note that programs differ in the minimum grade required.

## Required Courses

- JPS 2010 - Intermediate Japanese I **Credits: 5**
- JPS 2020 - Intermediate Japanese II **Credits: 5**
- JPS 2110 - Conversational Japanese I **Credits: 3**
- JPS 2120 - Kanji I **Credits: 3**

**Subtotal: 16 credit hours**

## Elective Courses (choose two)

- JPS 3110 - Conversational Japanese II **Credits: 3**
- JPS 3120 - Kanji II **Credits: 3**

- JPS 3200 - Japanese through Media Culture **Credits: 3**
- JPS 3210 - Advanced Japanese: Major Topics **Credits: 3**

**Subtotal: 6 credit hours**

**Total for the minor: 22 credit hours**

## ***Latin American Studies Minor***

The Latin American Studies minor at MSU - Denver is an interdisciplinary program that offers students the opportunity to study one of the most dynamic regions of the world. Encompassing Latin America and its diaspora, this program provides students with a wide selection of courses on the region's culture and history. Whether you are pursuing a career to work in local communities (education, social work, psychology) or internationally (business, law, tourism), developing a multicultural perspective through our Latin American Studies Program will globalize your degree. MSU-Denver offers a minor degree (21 credits) in Latin American Studies, with credits drawn from over a dozen cross-listed courses and several different internships. Minimum passing grade: "C".

### **Required Courses: 6 credits**

- HIS 1300 - Introduction to Latin American History **Credits: 3**
- SPA 1009 - Culturas Vivas: Exploring the Vibrant Diversity of Spanish-Speaking Cultures **Credits: 3**

### **Elective Courses: 15 credits**

Elective Courses are 3-credit hours each, unless specified otherwise. Select five courses totaling at least 15 credits.

Recommended: selection must represent three different prefixes.

- ANT 3300 - Exploring World Cultures: Variable Topics **Credits: 3**
- CHS 1000 - Introduction to Chicana/o Studies **Credits: 3**
- CHS 2010 - Survey of Chicana/o Literature **Credits: 3**
- CHS 2500 - Borderland Studies: Variable Topics **Credits: 3**
- CHS 3100 - Social Justice and Activism in the Chicana/o Community **Credits: 3**
- CHS 3460 - Chicana Feminisms **Credits: 3**
- CHS 3980 - Internship in Chicana and Chicano Studies **Credits: 1-15**
- GEG 3230 - Latin American Geographies **Credits: 3**
- HIS 3746 - History of Modern Mexico **Credits: 3**
- HIS 3747 - Latin American Revolutions **Credits: 3**
- HIS 3980 - Internship in History **Credits: 1-15**
- MUS 4000 - Musics of Latin America **Credits: 3**
- PSC 3630 - Latin American Politics **Credits: 3**
- SPA 1004 - Conversational Spanish for Medical Professions I **Credits: 3**
- SPA 1010 - Elementary Spanish I **Credits: 5**
- SPA 2010 - Intermediate Spanish I **Credits: 3**

- SPA 3210 - Spanish-American Culture and Civilization **Credits: 3**
- SPA 3220 - Folklore and Culture of the Mexican Southwest **Credits: 3**

**Total for Minor: 21 credits**

## ***Spanish Minor***

A grade of "C-" or better is required for each course in this program to count toward the minor. Students should note that programs differ in the minimum grade required. Consult with an advisor to plan your studies.

### **Intermediate Studies: 12 credits**

Selective four of the following foundational courses.

- SPA 2010 - Intermediate Spanish I **Credits: 3**
- SPA 2020 - Intermediate Spanish II **Credits: 3**
- SPA 2110 - Spanish Reading and Communication I **Credits: 3**
- SPA 2120 - Spanish Reading and Communication II **Credits: 3**
- Recommended for heritage speakers:
- SPA 2750 - Intensive Intermediate Spanish Grammar Review **Credits: 3**

### **Advanced Studies: 9 credits**

Select a course in each category.

#### **Language in Context**

- SPA 3110 - Advanced Conversation **Credits: 3**  
or
- SPA 3150 - Spanish Phonetics: Theory and Practice **Credits: 3**

#### **Reading and Analysis**

- SPA 3250 - Introduction to Literary Studies in Spanish **Credits: 3**  
or
- SPA 3910 - Create in Spanish **Credits: 3**

#### **Cultural Competence**

- SPA 3200 - Culture and Civilization of Spain **Credits: 3**  
or
- SPA 3210 - Spanish-American Culture and Civilization **Credits: 3**  
or
- SPA 3220 - Folklore and Culture of the Mexican Southwest **Credits: 3**  
or
- SPA 3600 - Culture through Film: Variable Topics **Credits: 3**

**Total: 21 credits**

## ***Spanish Translation Program Certificate***

Students must complete each course in this certificate program with a grade of "B" or better. The courses cannot be taken pass/fail.

## Courses:

- SPA 3140 - Advanced Composition **Credits: 3**
- SPA 4010 - Advanced Spanish Writing and Grammar I **Credits: 3**
- SPA 4015 - Introduction to Spanish Translation I **Credits: 3**
- SPA 4020 - Advanced Spanish Writing and Grammar II **Credits: 3**
- SPA 4025 - Introduction to Spanish Translation II **Credits: 3**

## *Translation Studies Certificate*

The Certificate in Translation Studies is designed to equip students with the theoretical knowledge, practical skills, and cultural competence required to excel in the field of language services. This interdisciplinary program is for students interested in languages, communication, and connections across cultures and who seek to develop expertise in assessing translation projects across a variety of domains, including the literary, legal, medical, technical, and commercial fields. Upon completion of the certificate, graduates will be equipped to pursue careers in multilingual environments, or further their studies in translation, interpreting, and related fields. The program is also an excellent complement to majors in international studies, languages, literature, business, human services, hospitality, and law. Prerequisite: one year of college-level world language or equivalent. Minimum passing grade: "C".

## Required Courses: 16 credits

Students must have completed the equivalent of Elementary II (CHI 1020/FRE 1020/GER 1020/ITA 1020/JPS 1020/SPA 1020) of a two-semester college-level language sequence.

- LANG 2400 - Fundamentals of Translation and Interpreting **Credits: 3**
- LING 2010 - Introduction to Linguistics **Credits: 4**
- LING 4016 - Introduction to Translation Studies **Credits: 4**

## Language, Culture, Communication Electives (choose two): 6-7 credits

### Electives Group 1

- ANT 2330 - Cross-Cultural Communication **Credits: 3**
- COMM 2200 - Introduction to Interpersonal Communication **Credits: 3**
- LANG 3050 - Cultural Crossroads: Heritage Languages and Cultures **Credits: 3**
- LING 3050 - Language and Society **Credits: 4**

## Language and Linguistics Electives (choose one): 4 credits

### Electives Group 2

- LING 3030 - Semantics **Credits: 4**
- LING 3075 - Latin **Credits: 4**
- LING 4060 - Modern Language Theory **Credits: 4**

## Practicum Electives (choose two): 6 credits

### Electives Group 3

- FRE 3650 - Introduction to French Translation **Credits: 3**
- FRE 4540 - Literature, Culture, and Translation **Credits: 3**
- LANG 3980 - Internship in Modern Languages **Credits: 1-15**
- SPA 4015 - Introduction to Spanish Translation I **Credits: 3**
- SPA 4025 - Introduction to Spanish Translation II **Credits: 3**

## Program Totals

- Required Courses - 16 cr. hrs.
- Elective courses - 16-17 cr. hrs.
- Total for the Certificate - 32-33 cr. hrs.**

## *World Languages Major, B.A. Option I*

[Department of World Languages](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

## About the Program

The Bachelor of Arts in World Languages degree may be completed by selecting either Option I or Option II. Option I is a single-language option in either French or Spanish. Option II is a dual-language option with primary language either French or Spanish, and a choice of secondary language (French, German, Italian, Japanese or Spanish). Students are advised into intermediate and advanced classes in each language on the basis of individual background and need. A grade of "C-" or better is required for each course in this program to count toward the Bachelor of Arts degree in World Languages. Students should note that programs differ in the minimum grade required.

World Languages, B.A. Option I requires a minimum of 42 hours in one of two following languages: French or Spanish. Students pursuing this option for the degree in World Languages need a minor.

For the language emphasized, either French or Spanish, students must complete a minimum of 42 semester hours of coursework at the 2000-level and above, including a three (3) credit hour Senior Experience after the core curriculum of lower-division language classes. No more than 12 hours may be taken at the 2000 level.

## Student Outcomes

By the end of their studies, students earning a B.A. in World Languages will have at least working fluency in their primary language and will be able to:

- Handle both routine and unfamiliar situations in both formal and informal settings.
- Adjust responses in the target language to respond to a unique circumstance or question.
- Make specific recommendations or suggestions and give detailed explanations and precise descriptions.
- Resolve problems or justify an opinion, argument, policy or procedure.
- Communicate with high enough accuracy to be understood by any speaker of the language.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- **Recommended:** CHI 1010 - Elementary Chinese I / FRE 1010 - Elementary French I / GER 1010 - Elementary German I / ITA 1010 - Elementary Italian I / JPS 1010 - Elementary Japanese I / SPA 1010 - Elementary Spanish I or ASL 1020 - American Sign Language II
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)

- **Recommended:** CHI 1020 - Elementary Chinese II / FRE 1020 - Elementary French II / GER 1020 - Elementary German II / ITA 1020 - Elementary Italian II / JPS 1020 - Elementary Japanese II / SPA 1020 - Elementary Spanish II
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)
- **Recommended:** CHI 1020 / FRE 1020 / GER 1020 / ITA 1020 / JPS 1020 / SPA 1020

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Option I: French Concentration

### Required lower division courses: 12 credits

- FRE 2010 - Intermediate French I **Credits:** 3
- FRE 2020 - Intermediate French II **Credits:** 3
- FRE 2110 - French Reading and Conversation **Credits:** 3
- FRE 3010 - French as a Global Language **Credits:** 3

### Advanced Language courses: 12 credits

#### Advanced Language at the 3000 level: 9 credits

- FRE 3150 - French Phonetics: Theory and Practice **Credits:** 3
- FRE 3310 - Advanced French Composition and Grammar **Credits:** 3
- FRE 3320 - Cinema in French for Advanced Conversation **Credits:** 3

#### Advanced Language at the 4000 level: 3 credits

- FRE 4540 - Literature, Culture, and Translation **Credits:** 3

### Culture and Literature courses: 18 credits

Culture courses: 6 credits (choose 2 out of 3 classes)

Choose 2 out of 3 classes

- FRE 3550 - French Historical Perspectives **Credits: 3**
- FRE 3560 - Contemporary Socio-Cultural Issues **Credits: 3**
- FRE 3600 - Special Topics in French Cultures **Credits: 3**

Required Literature courses: 6 credits

- FRE 3110 - Survey of French Literature I **Credits: 3**
- FRE 3120 - Survey of French Literature II **Credits: 3**

Choose any two courses: 6 credits

- FRE 4520 - Modern French Theater **Credits: 3**
- FRE 4530 - The French Novel **Credits: 3**
- FRE 4750 - Senior Seminar in French Studies **Credits: 3**

Senior Experience: 3 credits

Select one of the two listed courses. Note that the credits for Senior Experience requirement are counted in the major.

- FRE 4520 - Modern French Theater **Credits: 3**
- FRE 4530 - The French Novel **Credits: 3**  
Student Teaching will satisfy this requirement.

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
French Concentration Courses	42 credits
Senior Experience	counted in major
Unrestricted Electives	42-45 credits
<b>Total for the World Languages Major, B.A. Option I: French</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

Option I: Spanish Concentration:

Required lower division courses: 12 credits

- SPA 2010 - Intermediate Spanish I **Credits: 3**
- SPA 2020 - Intermediate Spanish II **Credits: 3**
- SPA 2110 - Spanish Reading and Communication I **Credits: 3**
- SPA 2120 - Spanish Reading and Communication II **Credits: 3**

Advanced Language courses: 12 credits

Advanced Language at the 3000 level: 6 credits

- SPA 3110 - Advanced Conversation **Credits: 3**
- SPA 3140 - Advanced Composition **Credits: 3**

Advanced Language at the 4000 level: 6 credits

- SPA 4010 - Advanced Spanish Writing and Grammar I **Credits: 3**
- SPA 4020 - Advanced Spanish Writing and Grammar II **Credits: 3**

Culture and Literature courses: 15 credits

Culture courses: 6 credits

Choose one of the following two courses:

- SPA 3050 - Cultural Crossroads: Heritage Languages and Cultures **Credits: 3**
- SPA 3200 - Culture and Civilization of Spain **Credits: 3**

Choose one course

*Note: SPA 3150 may be used as a substitute for SPA - 3050 and SPA - 3200.*

- SPA 3150 - Spanish Phonetics: Theory and Practice **Credits: 3**
- SPA 3210 - Spanish-American Culture and Civilization **Credits: 3**
- SPA 3220 - Folklore and Culture of the Mexican Southwest **Credits: 3**
- SPA 3600 - Culture through Film: Variable Topics **Credits: 3**

Literature: 9 credits

- SPA 3250 - Introduction to Literary Studies in Spanish **Credits: 3**

Choose any two courses:

- SPA 3400 - Survey of Spanish Literature I **Credits: 3**
- SPA 3410 - Survey of Spanish Literature II **Credits: 3**
- SPA 3510 - Survey of Latin American Literature **Credits: 3**
- SPA 4110 - Contemporary Spanish Literature **Credits: 3**
- SPA 4120 - Contemporary Latin-American Literature **Credits: 3**

## Senior Experience: 3 credits

Choose one course:

- SPA 4200 - Spanish-American Essay: 19th and 20th Centuries  
**Credits: 3**
- SPA 4310 - History of the Spanish Language **Credits: 3**  
Student Teaching will satisfy this requirement.

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Spanish Concentration Courses	39 credits
Senior Experience	3 credits
Unrestricted Electives	42-45 credits
Total for the World Languages Major, B.A. Option I: Spanish	120 credits

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## World Languages Major with K-12 Licensure

Please review the K-12 Foreign Language Licensure section of the Catalog for details on this teacher preparation program.

World Languages Major, B.A. with K-12 World Languages Teacher Licensure Concentration

### *World Languages Major, B.A. Option II*

[Department of World Languages](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

## About the Program

The Bachelor of Arts in World Languages degree may be completed by selecting either Option I or Option II. Option I is a single-

language option in either French or Spanish. Option II is a dual-language option with primary language either French or Spanish, and a choice of secondary language (French, German, Italian, Japanese or Spanish). Students are advised into intermediate and advanced classes in each language on the basis of individual background and need. A grade of "C-" or better is required for each course in this program to count toward the Bachelor of Arts degree in World Languages. Students should note that programs differ in the minimum grade required.

The World Languages Major Option II requires a minimum of 60 semester hours in a combination of two modern languages: a primary language (French or Spanish) and a secondary language (French, German, Italian, Japanese or Spanish).

For the primary language emphasized, either French or Spanish, students must complete a minimum of 42 semester hours of coursework at the 2000-level and above. No more than 12 semester hours may be taken at the 2000 level.

To complete the 60-semester-hour requirement, students must take at least 18 semester hours at the 2000-level or above in a second language.

## Student Outcomes

- **PRIMARY LANGUAGE.** By the end of their studies, students earning a B.A. in World Languages will have at least working fluency in their primary language and will be able to:
  - Handle both routine and unfamiliar situations in both formal and informal settings.
  - Adjust responses in the target language to respond to a unique circumstance or question.
  - Make specific recommendations or suggestions and give detailed explanations and precise descriptions.
  - Resolve problems or justify an opinion, argument, policy or procedure.
  - Communicate with high enough accuracy to be understood by any speaker of the language.
- **SECONDARY LANGUAGE.** By the end of their studies, students earning a B.A. in World Languages will have at least functional fluency in their secondary language and will be able to:
  - Function in the language when completing familiar routines and tasks in predictable situations.
  - Describe events, experiences, products, services or procedures.
  - Complete formulaic documents and transactions.
  - Provide scripted presentations and answer expected, frequently asked questions.
  - Communicate in a way that a sympathetic speaker of the language will have few difficulties understanding, despite occasional grammar errors or mispronunciation.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.



- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- **Recommended:** CHI 1010 - Elementary Chinese I / FRE 1010 - Elementary French I / GER 1010 - Elementary German I / ITA 1010 - Elementary Italian I / JPS 1010 - Elementary Japanese I / SPA 1010 - Elementary Spanish I or ASL 1020 - American Sign Language II
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- **Recommended:** CHI 1020 - Elementary Chinese II / FRE 1020 - Elementary French II / GER 1020 - Elementary German II / ITA 1020 - Elementary Italian II / JPS 1020 - Elementary Japanese II / SPA 1020 - Elementary Spanish II
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)
- **Recommended:** CHI 1020 / FRE 1020 / GER 1020 / ITA 1020 / JPS 1020 / SPA 1020

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Option II: French Concentration

- 42 cr. hours of French, including Senior Experience, as outlined in World Languages Major, B.A. Option I
- 18 cr. hours in a secondary language, as outlined below.

## Option II: Spanish Concentration

- 42 cr. hours of Spanish, including Senior Experience, as outlined in World Languages Major, B.A. Option I
- 18 cr. hours in a secondary language, as outlined below.

## French

- FRE 2010 - Intermediate French I **Credits: 3**
- FRE 2020 - Intermediate French II **Credits: 3**
- FRE 2110 - French Reading and Conversation **Credits: 3**
- FRE 3010 - French as a Global Language **Credits: 3**
- French electives (upper division) **Credits: 6**

**Subtotal: 18 credits**

## German

- GER 2010 - Intermediate German I **Credits: 3**
- GER 2020 - Intermediate German II **Credits: 3**
- GER 2110 - German Reading and Conversation **Credits: 3**
- GER 2120 - German Civilization **Credits: 3**
- German electives (upper division) **Credits: 6**

**Subtotal: 18 credits**

## Italian

- ITA 2010 - Intermediate Italian I **Credits: 3**
- ITA 2020 - Intermediate Italian II **Credits: 3**
- ITA 2110 - Italian Reading and Conversation **Credits: 3**
- ITA 3140 - Advanced Italian Grammar **Credits: 3**
- Italian Electives (upper division) **Credits: 6**

**Subtotal: 18 credits**

## Japanese

- JPS 2010 - Intermediate Japanese I **Credits: 5**
- JPS 2020 - Intermediate Japanese II **Credits: 5**
- JPS 2110 - Conversational Japanese I **Credits: 3**
- JPS 2120 - Kanji I **Credits: 3**
- Japanese electives (upper division) **Credits: 3**

**Subtotal: 19 credits**

## Spanish



- SPA 2010 - Intermediate Spanish I **Credits: 3**
- SPA 2020 - Intermediate Spanish II **Credits: 3**
- SPA 2110 - Spanish Reading and Communication I **Credits: 3**
- SPA 2120 - Spanish Reading and Communication II **Credits: 3**
- Spanish electives (upper division) **Credits: 6**

**Subtotal: 18 credits**

## Notes

The courses required to complete the remaining 60 semester hours must be taken with departmental approval.

Students preparing for teacher licensure may include the three (3) credits of MDL 4960 *Teaching Foreign Languages in K-12* in the 42 semester hours if they so desire.

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Option I French with Second Language or Option I Spanish with Second Language	60 credits
Senior Experience	counted elsewhere in major
Unrestricted Electives	24-27 credits
<b>Total for the World Languages Major, B.A. Option II</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## World Languages Major, Option II with K-12 Licensure

Please review the following program page for details on this teacher preparation program.

World Languages Major, B.A. with K-12 World Languages Teacher Licensure Concentration

## ***World Languages Major, B.A. with K-12 World Languages Teacher Licensure Concentration***

[Department of World Languages](#)

[College of Letters, Arts and Sciences](#)

Available Program Format(s): [In-Person](#)

## ***World Languages Major Option I and Option II with K-12 World Languages Teacher Licensure Concentration***

Degree-seeking candidates who wish to obtain Colorado licensure for K-12 World Languages must earn a Bachelor of Arts (B.A.) degree in World Languages. Candidates must complete either Option I or Option II of this major with a primary language of French or Spanish. The curriculum focuses on the current Colorado content standards for teachers of World Languages and prepares licensure candidates to pass the required content test.

## Student Outcomes

- Demonstrate appropriate level of language proficiency in all areas of communication, with a strong emphasis on oral communication.
- Demonstrate understanding of the numerous areas of language studies, including cultures, linguistics, and literatures.
- Apply skills and knowledge from language studies to other disciplines, such as literacy and mathematics, particularly in field experiences and during student teaching.
- Demonstrate understanding of language acquisition and implement this knowledge during student teaching through the development of learning environments that are linguistically and culturally rich.
- Demonstrate an understanding of child and adolescent development, context of instruction, learners' social and emotional needs, and individual differences. Apply this knowledge during student teaching to create inclusive, supportive learning environments that enhance diversity, equity, and inclusion.
- Demonstrate an understanding of the standards for language learning issued by national organization, state of Colorado, and school district. Standards are used during student teaching to inform proficiency targets for learners, pedagogical choices, and materials development.
- Develop assessments of learners' communication skills and understanding of cultural and literary products, practices, and perspectives. Analyze results of assessments to modify instructional practice to meet learners' needs, and report assessment results to stakeholders.
- Engage in professional development activities to reflect on practice of language teaching as well as to continuously improve their own linguistic, cultural, and pedagogical competence.
- Advocate for the role and value of language learning as a means to prepare students to interact in a global community and become lifelong learners.
- Use reflection and inquiry to ensure the responsibilities of student teaching are executed with ethical conduct, professionalism, and

leadership for the benefit of students, colleagues, and all stakeholders.

Outcomes based on: American Council on the Teaching of Foreign Languages. (2015). ACTFL/CAEP program standards for the preparation of foreign language teachers.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree and teacher licensure. Students should note that programs differ in the minimum grade required.
- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- **Recommended:** MTH 1610 - Integrated Mathematics I
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- **Recommended:** EDS 3130 - Foundations of Educational Psychology and Philosophy and EDS 3150 - Critical Sociocultural Lenses for Teachers
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement (see below for recommended courses which are also part of the degree program). Students should consult with their advisor to determine what program courses may fulfill this requirement.

## World Language Sequence Options

### Option I - French Concentration with K-12

Licensure: 43 credits

#### French Concentration Courses

- FRE 2010 - Intermediate French I **Credits:** 3
- FRE 2020 - Intermediate French II **Credits:** 3
- FRE 2110 - French Reading and Conversation **Credits:** 3
- FRE 3010 - French as a Global Language **Credits:** 3
- FRE 3110 - Survey of French Literature I **Credits:** 3
- FRE 3120 - Survey of French Literature II **Credits:** 3
- FRE 3150 - French Phonetics: Theory and Practice **Credits:** 3
- FRE 3310 - Advanced French Composition and Grammar **Credits:** 3
- FRE 3320 - Cinema in French for Advanced Conversation **Credits:** 3
- FRE 3550 - French Historical Perspectives **Credits:** 3
- FRE 3560 - Contemporary Socio-Cultural Issues **Credits:** 3
- LANG 4960 - Teaching World Languages in K-12 **Credits:** 3
- LANG 4961 - Field Experience in Teaching World Languages in K-12 **Credits:** 1

#### Select any two of the following:

- FRE 4520 - Modern French Theater **Credits:** 3
- FRE 4530 - The French Novel **Credits:** 3
- FRE 4750 - Senior Seminar in French Studies **Credits:** 3

### Option II - French Concentration with K-12

Licensure and a Second Language: 58-59 credits

Students must take the French core courses and select German, Italian, Japanese, or Spanish for a second language.

### Option II - French Core: 40 credits

- FRE 2010 - Intermediate French I **Credits:** 3
- FRE 2020 - Intermediate French II **Credits:** 3
- FRE 2110 - French Reading and Conversation **Credits:** 3
- FRE 3010 - French as a Global Language **Credits:** 3
- FRE 3110 - Survey of French Literature I **Credits:** 3
- FRE 3120 - Survey of French Literature II **Credits:** 3
- FRE 3150 - French Phonetics: Theory and Practice **Credits:** 3

- FRE 3310 - Advanced French Composition and Grammar **Credits:** 3
- FRE 3320 - Cinema in French for Advanced Conversation **Credits:** 3
- FRE 3550 - French Historical Perspectives **Credits:** 3
- FRE 3560 - Contemporary Socio-Cultural Issues **Credits:** 3
- LANG 4960 - Teaching World Languages in K-12 **Credits:** 3
- LANG 4961 - Field Experience in Teaching World Languages in K-12 **Credits:** 1

**Take one of the following courses:**

- FRE 4520 - Modern French Theater **Credits:** 3
- FRE 4530 - The French Novel **Credits:** 3
- FRE 4750 - Senior Seminar in French Studies **Credits:** 3

## Option II - Second Language: 18-19 credits

Select a second language below.

### Second Language - German

- GER 2010 - Intermediate German I **Credits:** 3
- GER 2020 - Intermediate German II **Credits:** 3
- GER 2110 - German Reading and Conversation **Credits:** 3
- GER 2120 - German Civilization **Credits:** 3
- German Electives (Upper Division) 6 credits

**German Second Language total credits: 18**

### Second Language - Italian

- ITA 2010 - Intermediate Italian I **Credits:** 3
- ITA 2020 - Intermediate Italian II **Credits:** 3
- ITA 2110 - Italian Reading and Conversation **Credits:** 3
- ITA 3140 - Advanced Italian Grammar **Credits:** 3
- Italian Electives (Upper Division) 6 credits

**Italian Second Language total credits: 18**

### Second Language - Japanese

- JPS 2010 - Intermediate Japanese I **Credits:** 5
- JPS 2020 - Intermediate Japanese II **Credits:** 5
- JPS 2110 - Conversational Japanese I **Credits:** 3
- JPS 2120 - Kanji I **Credits:** 3
- Japanese Electives (Upper Division) 3 credits

**Japanese Second Language total credits: 19**

### Second Language - Spanish

- SPA 2010 - Intermediate Spanish I **Credits:** 3
- SPA 2020 - Intermediate Spanish II **Credits:** 3
- SPA 2110 - Spanish Reading and Communication I **Credits:** 3
- SPA 2120 - Spanish Reading and Communication II **Credits:** 3
- Spanish Electives (Upper Division) 6 credits

**Spanish Second Language total credits: 18**

## Option I - Spanish Concentration with K-12

Licensure: 43 credits

**Spanish Concentration Courses**

- SPA 2010 - Intermediate Spanish I **Credits:** 3
- SPA 2020 - Intermediate Spanish II **Credits:** 3
- SPA 2110 - Spanish Reading and Communication I **Credits:** 3
- SPA 2120 - Spanish Reading and Communication II **Credits:** 3
- SPA 3110 - Advanced Conversation **Credits:** 3
- SPA 3140 - Advanced Composition **Credits:** 3
- SPA 3150 - Spanish Phonetics: Theory and Practice **Credits:** 3
- SPA 3200 - Culture and Civilization of Spain **Credits:** 3
- or
- SPA 3210 - Spanish-American Culture and Civilization **Credits:** 3
- or
- SPA 3220 - Folklore and Culture of the Mexican Southwest **Credits:** 3
- SPA 3250 - Introduction to Literary Studies in Spanish **Credits:** 3
- SPA 3400 - Survey of Spanish Literature I **Credits:** 3
- or
- SPA 3410 - Survey of Spanish Literature II **Credits:** 3
- SPA 4010 - Advanced Spanish Writing and Grammar I **Credits:** 3
- SPA 4020 - Advanced Spanish Writing and Grammar II **Credits:** 3
- SPA 4110 - Contemporary Spanish Literature **Credits:** 3
- or
- SPA 4120 - Contemporary Latin-American Literature **Credits:** 3
- or
- SPA 4310 - History of the Spanish Language **Credits:** 3
- LANG 4960 - Teaching World Languages in K-12 **Credits:** 3
- LANG 4961 - Field Experience in Teaching World Languages in K-12 **Credits:** 1

## Option II - Spanish Concentration with K-12 Licensure and Second Language: 58-59 credits

Students must take the Spanish Core courses and select French, German, Italian, or Japanese for a second language.

## Option II - Spanish Core: 40 credits

**Take each of the following courses:**

- LANG 4960 - Teaching World Languages in K-12 **Credits:** 3
- LANG 4961 - Field Experience in Teaching World Languages in K-12 **Credits:** 1
- SPA 2010 - Intermediate Spanish I **Credits:** 3
- SPA 2020 - Intermediate Spanish II **Credits:** 3
- SPA 2110 - Spanish Reading and Communication I **Credits:** 3
- SPA 2120 - Spanish Reading and Communication II **Credits:** 3
- SPA 3110 - Advanced Conversation **Credits:** 3
- SPA 3140 - Advanced Composition **Credits:** 3
- SPA 3250 - Introduction to Literary Studies in Spanish **Credits:** 3
- SPA 4010 - Advanced Spanish Writing and Grammar I **Credits:** 3
- SPA 4020 - Advanced Spanish Writing and Grammar II **Credits:** 3

**Take one of the following courses:**

- **Recommended:** SPA 3150 - Spanish Phonetics: Theory and Practice **Credits:** 3
- SPA 3200 - Culture and Civilization of Spain **Credits:** 3
- SPA 3210 - Spanish-American Culture and Civilization **Credits:** 3

- SPA 3220 - Folklore and Culture of the Mexican Southwest **Credits: 3**

**Take one of the following courses:**

- SPA 3400 - Survey of Spanish Literature I **Credits: 3**
- SPA 3410 - Survey of Spanish Literature II **Credits: 3**

**Take one of the following courses:**

- SPA 4110 - Contemporary Spanish Literature **Credits: 3**
- SPA 4120 - Contemporary Latin-American Literature **Credits: 3**
- SPA 4310 - History of the Spanish Language **Credits: 3**

## Option II - Second Language: 18-19 credits

Select a second language below.

### Second Language - French

- FRE 2010 - Intermediate French I **Credits: 3**
- FRE 2020 - Intermediate French II **Credits: 3**
- FRE 2110 - French Reading and Conversation **Credits: 3**
- FRE 3010 - French as a Global Language **Credits: 3**
- French Electives (Upper Division) 6 credits

**French Second Language total credits: 18**

### Second Language - German

- GER 2010 - Intermediate German I **Credits: 3**
- GER 2020 - Intermediate German II **Credits: 3**
- GER 2110 - German Reading and Conversation **Credits: 3**
- GER 2120 - German Civilization **Credits: 3**
- German Electives (Upper Division) 6 credits

**German Second Language total credits: 18**

### Second Language - Italian

- ITA 2010 - Intermediate Italian I **Credits: 3**
- ITA 2020 - Intermediate Italian II **Credits: 3**
- ITA 2110 - Italian Reading and Conversation **Credits: 3**
- ITA 3140 - Advanced Italian Grammar **Credits: 3**
- Italian Electives (Upper Division) 6 credits

**Italian Second Language total credits: 18**

### Second Language - Japanese

- JPS 2010 - Intermediate Japanese I **Credits: 5**
- JPS 2020 - Intermediate Japanese II **Credits: 5**
- JPS 2110 - Conversational Japanese I **Credits: 3**
- JPS 2120 - Kanji I **Credits: 3**
- Japanese Electives (Upper Division) 3 credits

**Japanese Second Language total credits: 19**

## Foundation and Methods for K-12 Education: 28 credits

### Foundation Course

- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits: 4 \***
- EDS 3140 - First Field Experience in Secondary Education **Credits: 1 \***

- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits: 3 \***

- EDT 3010 - Integrating Educational Technology into Teaching **Credits: 3**

- SED 3600 - Exceptional Learners in the Classroom **Credits: 3**

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**

### Methods Courses

- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools **Credits: 3 \*\***

- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools **Credits: 1 \*\***

- EDU 3444 - Instructional and Assessment Practices in Differentiated Classrooms **Credits: 3 \*\***

- EDU 3445 - Field Experience: Assessment Practices in Differentiated Classrooms **Credits: 1 \*\***

- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits: 3 \*\***

*\* Requires at least provisional admission to the School of Education*

*\*\*Requires formal admission to the School of Education*

## Senior Experience: 12 credits

Student Teaching offers an essential conclusion to this degree program. Typically, students should register for 12 credits of EDS 4290 in their final semester. Students who register for only 6 credits of EDS 4290 should also register for 6 credits of CLD 4590 Culturally and Linguistically Diverse: ESL Student Teaching and Seminar.

## Summary of Requirements

Option I Summary	
General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
French or Spanish Option I Major	43 credits
Foundation and Methods for K-12 Education	28 credits
Senior Experience	12 credits
Unrestricted Electives	1-10 credits
<b>World Languages Option I Major, B.A. with K-12 World Languages Licensure</b>	<b>120 credits</b>

Option II Summary	
General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
French or Spanish Option II Major Core	40 credits
Option II Second Language	18-19 credits
Foundation and Methods for K-12 Education	28 credits
Senior Experience	12 credits
<b>World Languages Option II Major, B.A. with K-12 World Languages Licensure</b>	<b>Minimum of 125 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

- GWS 3510 - Feminist Theories and Practices **Credits:** 3
- GWS 4750 - Feminist Research and Activism **Credits:** 3

## Electives

A minimum of 6 additional semester hours is required in Gender, Women, and Sexualities courses. Please refer to the online schedule and see a GWS advisor for more information.

Total Credits: 21

## *Gender, Women, and Sexualities Studies Major, B.A.*

[Gender Institute for Teaching and Advocacy](#)

[College of Letters, Arts and Sciences](#)

Available Program  
Format(s): [In-Person](#)

## Gender Institute for Teaching and Advocacy

Location: Boulder Creek, Room 132

Phone: 303-615-2052

E-Mail: [GITA@msudenver.edu](mailto:GITA@msudenver.edu)

Website: [Gender Institute for Teaching and Advocacy Website](#)

## About the Program

The Bachelor of Arts in Gender, Women and Sexualities Studies identifies and critically examines systems of power utilizing intersectional and transnational frameworks that allow for self-reflection and active engagement in social change. It prepares students for professional and graduate education, as well as employment in many different fields, such as victim advocacy, health care, LGBTQI+ services, prevention education, public policy, family services, counseling and therapy, and media.

## Student Outcomes

Upon graduation, students in this program will be able to:

### KNOWLEDGE

- Describe the main social, economic, political, technological, psychological, and cultural issues facing sexed and gendered individuals in a transnational context.
- Describe and identify major actors and events within feminist and LGBTQ activism and movements in the United States.
- Critique and apply feminist and LGBTQ thoughts and theories and research methods to the social realities of lived intersectional experiences.

### WRITTEN AND ORAL SKILLS

- Demonstrate college level written and oral skills that show information literacy and grammatical, organizational, and stylistic sophistication appropriate to their audience.

## *Gender Studies Minor*

The Gender Studies minor offers courses on gender and women's studies. The minor prepares students to examine contemporary social justice issues using gender as a category of analysis, while embracing an intersectional, transnational, and feminist perspective.

The Gender Studies minor must be planned in consultation with a faculty member in GWS. A grade of "C-" or better is required for each course in this program to count toward the minor.

## Core Required Courses

- GWS 1001 - Introduction to Gender, Women, and Sexualities Studies **Credits:** 3
- GWS 2100 - Women of Color **Credits:** 3
- GWS 2200 - Feminist and Queer Research Methods **Credits:** 3

- Create and support a focused and coherent analytical essay that demonstrates effective use of library collections and other scholarly resources.

### CRITICAL THINKING SKILLS

- Utilize self-reflexivity to appraise one's sociopolitical location in relation to scholarship and activism.
- Design and implement an applied feminist experience through an internship, service learning, research or teaching assistantship.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Students must take GWS 3510 or GWS 3280 and GWS 4750 in sequence.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Core Required Courses: 18 credits

The recommended sequence for courses are as follows: 1000-level introductory courses, 2000-level courses, 3000-level theory course followed by GWS 4750 Feminist Research and Activism.

### **Choose Two 1000-Level Courses:**

- GWS 1001 - Introduction to Gender, Women, and Sexualities Studies **Credits: 3**
- GWS 1200 - Sexuality, Race, and Power **Credits: 3**
- GWS 1550 - Introduction to Transgender Studies **Credits: 3**

### **Complete Two Required 2000-Level Courses:**

- GWS 2100 - Women of Color **Credits: 3**
- GWS 2200 - Feminist and Queer Research Methods **Credits: 3**

### **Choose One 3000-Level Theory Course:**

- GWS 3510 - Feminist Theories and Practices **Credits: 3**  
or
- GWS 3280 - Queer Theory **Credits: 3**

### **Choose One 4000-Level Experiential Course:**

- GWS 4920 - Gender, Women, and Sexualities Studies Internship **Credits: 1-12**  
or
- GWS 4970 - Undergraduate Teaching Assistant Training **Credits: 3**

## Core Elective Requirements: 15 credits

A minimum of 15 additional semester hours in GWS courses selected in consultation with and approved by a Department of Gender, Women and Sexualities Studies advisor. Among those courses for students to choose are:

- GWS 1001 - Introduction to Gender, Women, and Sexualities Studies **Credits: 3**
- GWS 1030 - Introduction to Social Justice and Decoloniality **Credits: 3**
- GWS 1200 - Sexuality, Race, and Power **Credits: 3**
- GWS 1550 - Introduction to Transgender Studies **Credits: 3**
- GWS 2400 - Women's Folklore and Folklife **Credits: 3**
- GWS 2600 - Meditation and Activism **Credits: 2**
- GWS 3130 - Independent Study in Gender, Women, and Sexualities Studies **Credits: 1-6**
- GWS 3170 - Social Justice, Self, and Citizenship: A Service Learning Course **Credits: 3**
- GWS 3230 - Bodies and Embodiment **Credits: 3**
- GWS 3270 - Beauty Cultures **Credits: 3**

- GWS 3280 - Queer Theory **Credits: 3**
- GWS 3300 - Women's Leadership **Credits: 2**
- GWS 3310 - Women and the Law **Credits: 3**
- GWS 3365 - Structural Violence, Poverty and Human Rights **Credits: 3**
- GWS 3395 - Transnational Genders and Sexualities **Credits: 3**
- GWS 3530 - Gender and Global Politics **Credits: 3**
- GWS 3540 - Women in the Developing World **Credits: 3**
- GWS 3780 - Gender and Disaster **Credits: 3**
- GWS 3910 - Women's Spirituality **Credits: 3**
- GWS 3920 - Gender Politics of Health **Credits: 3**
- GWS 3930 - Theories of Love and Sex **Credits: 3**
- GWS 3940 - Victim Advocacy for Survivors of Interpersonal Violence **Credits: 3**
- GWS 4240 - Gender and Violence **Credits: 3**
- In addition to the courses listed above, new classes may be developed as part of the permanent catalog offerings, and other courses that are appropriate for the major may be offered as a cross-listed course, or under a variable topic, omnibus, or internship heading. Please refer to the online schedule and see a GWS advisor for more information.

## Interdisciplinary Electives: 6 credits

An additional six credit hours is required in any GWS prefix course.

## Senior Experience: 3 credits

- GWS 4750 - Feminist Research and Activism **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Core Required Courses	18 credits
Core Electives	15 credits
Interdisciplinary Electives	6 credits
Senior Experience Requirement	3 credits

Unrestricted Electives	42-60 credits
<b>Total for the Gender, Women, and Sexualities Studies Major, B.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Sexualities Studies Minor*

The Sexualities Studies minor complements any major, but is particularly important for students who hope to work with LGBTQIA and other sexual and gender minority populations. This minor prepares students to examine content and historical issues through critical queer and trans lenses, in local and global contexts.

The Sexualities Studies minor must be planned in consultation with a faculty member in GWS. A grade of "C-" or better is required for each course in this program to count toward the Bachelor's degree. Students should note that programs differ in the minimum grade required.

## Required Courses

- GWS 1200 - Sexuality, Race, and Power **Credits: 3**
- GWS 1550 - Introduction to Transgender Studies **Credits: 3**
- GWS 2200 - Feminist and Queer Research Methods **Credits: 3**
- GWS 3280 - Queer Theory **Credits: 3**
- GWS 4750 - Feminist Research and Activism **Credits: 3**

**Subtotal: 15 credits**

## Electives

A minimum of 6 additional credit hours is required in Gender, Women, and Sexualities courses. Please refer to the online schedule and see a GWS advisor for more information.

## Total Credits: 21



# School of Education

## Mission

"The School of Education at Metropolitan State University of Denver prepares people who will **Teach, Lead, and Transform.**"

Metropolitan State University of Denver's School of Education develops excellent teachers and educational leaders who engage in reflective practice and scholarly activity, and who are ethical decision makers and agents of social change.

We do this by:

- Providing intellectually rigorous, culturally relevant curriculum that fosters pedagogical expertise, cultivates critical thinking, and promotes imagination;
- Facilitating clinical placements that incorporate a diversity of perspectives and experiences;
- Creating and sustaining mutually beneficial school and community partnerships;
- Collaborating across disciplines to advance the scholarship of teaching and learning; and
- Attracting and retaining innovative faculty who model expertise within their professional communities.

## Departments

- [Department of Elementary Education and Literacy](#)
- [Department of Special Education, Early Childhood and Culturally and Linguistically Diverse Education](#)
- [Department of Secondary, K-12 and Educational Technology](#)

## Alternative Licensure Programs

- [One Year General Education - ALP](#)
- [Two Year General Education - ALP](#)
- [Special Education - ALP](#)

## School of Education Transfer policy

Students transferring coursework from another teacher education program must complete a minimum of 9 credit hours of teacher education coursework at MSU Denver, including at least one course which includes field experience, to become eligible to student teach or begin residency. Coursework to fulfill these 9 credit hours will be determined by an appropriate MSU Denver School of Education (SOE) representative. Transfer credit or credit from a previous institution cannot be used to satisfy the SOE student teaching or residency course requirements. All additional program requirements and student teaching/residency eligibility requirements must also be satisfied.

In addition to the 9 credit hours of teacher education coursework completed at MSU Denver, the student must provide a letter of recommendation from a faculty member at the previous institution, attesting to the student's professional dispositions, performance in the field, and good academic standing.

## K-12 Education Licensure Programs

The K-12 Education Licensure Programs prepare candidates to teach content-area courses in grades K-12. Through the sequence of courses and field experiences, the candidate satisfies all of Colorado's performance-based standards for licensure in K-12 Education. Degree seeking K-12 Education Licensure candidates must choose from one of the following programs to complete earn recommendation for licensure in K-12 Education.

Candidates seeking teacher licensure must gain admission to the Secondary Education Teacher Licensure Program. You can learn about the application process by visiting the Student Services Office within the School of Education. Each Major program might have a different minimum grade.

- K-12 Art Licensure
- K-12 World Languages Licensure
- K-12 Music Licensure
- K-12 Physical Education Licensure

## Post-Baccalaureate K-12 Education Licensure Programs

Post-baccalaureate licensure candidates may need to fulfill some general studies requirements and complete additional content area courses that are required for licensure. Students interested in the Post-Baccalaureate programs should meet with a professional advisor located in the Student Services Office within the School of Education as well as a professional advisor in their licensure content area\*. This advisor will review prior transcripts to ensure required content coursework for licensure is complete.

*\* Candidates interested in Art Education should meet directly with an Art Education advisor in the Art Department, and candidates interested in Music Education should meet directly with a Music Education advisor in the Music Department.*

Visit the following pages for details on each post-baccalaureate K-12 teacher licensure program:

- [K-12 Art Licensure: Post-Baccalaureate Program](#)
- [K-12 World Languages Teacher Licensure: Post-Baccalaureate Program](#)
- [K-12 Physical Education Licensure: Post-Baccalaureate Program](#)



# Post-Baccalaureate Secondary Education Teacher Licensure Programs

Admission requirements for post-baccalaureate candidates seeking licensure include evidence of having a conferred Bachelor's degree, as well as having met the University's and School of Education's admission criteria. Post-baccalaureate students should see an advisor in both their content area and in the School of Education at their earliest opportunity for advising.

It may be necessary for a post-baccalaureate candidate to complete additional courses in their chosen content area. These courses are in addition to the licensure sequence course work required to complete their approved teacher licensure program. All courses required for Post-Baccalaureate Secondary Education Teacher Licensure Programs need to be passed with a grade of C- and above.

Post-baccalaureate Secondary Education Licensure is available in the following content areas, please visit each page for program details:

- [Secondary Education Post-Baccalaureate Licensure - English](#)
- [Secondary Education Post-Baccalaureate Licensure - Mathematics](#)
- [Secondary Education Post-Baccalaureate Licensure - Science](#)
- [Secondary Education Post-Baccalaureate Licensure - Social Studies](#)

## Secondary Education Teacher Licensure Programs

The Secondary Education Licensure Program prepares candidates to teach content-area courses in grades 7-12. Through the sequence of courses and field experiences, the candidate satisfies all of Colorado's performance-based standards for licensure in Secondary Education. Degree seeking Secondary Education Licensure candidates must choose from one of the following approved majors in order to complete a licensure program in Secondary Education.

### Majors with Secondary Education Licensure

- English
- Mathematics
- Science (Biology, Chemistry, Environmental Science, or Physics)
- Social Studies (Africana Studies, Chicana/o Studies, Economics, History, or Political Science)

The requirements of each major are designed to ensure licensure programs meet Colorado Licensure Standards to prepare candidates to pass required licensure content examinations and teach the Colorado Academic Standards within their discipline.

**\*All secondary licensure candidates must consult two advisors, one in the Secondary Education/K-12 Department in the School of Education and one in their major department (licensure content area).**

Candidates seeking teacher licensure must gain admission to the Secondary Education Teacher Licensure Program. You can learn about the application process by visiting the Student Services Office within the School of Education. Each Major program might have a different minimum grade requirement. However, all courses required for Secondary Education Teacher Licensure Program need to be passed with a grade of C- and above.

Visit the following pages for details on each undergraduate degree-seeking secondary teacher licensure program:

- [English Major, B.A. with Secondary English Teacher Licensure Concentration](#)
- [Mathematics Major with Secondary Mathematics Licensure](#)
- [Secondary Science Teacher Licensure Program](#)
- [Secondary Social Studies Teacher Licensure Program](#)

## Secondary Science Teacher Licensure Program

Undergraduate degree-seeking students interested in earning teacher licensure in Secondary Science Education must select from the following science major programs with teacher licensure. Please visit each individual page for program details.

- [Biology Major, B.A. with Secondary Science Teacher Licensure Concentration](#)
- [Chemistry Major, B.A. with Secondary Science Teacher Licensure Concentration](#)
- [Environmental Science Major, B.S., with Secondary Science Teacher Licensure Concentration](#)
- [Physics Major, B.A. with Secondary Science Teacher Licensure Concentration](#)

## Secondary Social Studies Teacher Licensure Program

Candidates who wish to obtain Colorado Licensure for Secondary Social Studies must earn a Bachelor of Arts (B.A.) degree in one of the following disciplines: History, Political Science, Economics, Chicano Studies, or African American Studies. In addition to course requirements in the major, all Social Studies licensure candidates must complete a core curriculum that provides a foundation in History, Geography, Political Science, Economics, and Behavioral Science and prepares them to pass the appropriate Social Studies Content examination. The core curriculum is supported by courses in the major. Social Studies Licensure candidates must declare their

major with the appropriate concentration in Secondary Social Studies Licensure.

Undergraduate degree-seeking students interested in earning teacher licensure in Secondary Social Studies Education must select from the following Social Studies major programs with teacher licensure. Please visit each individual page for program details.

- [Africana Studies Major, B.A. with Secondary Social Studies Teacher Licensure Concentration](#)
- [Chicano Studies Major, B.A. with Secondary Social Studies Teacher Licensure Concentration](#)
- [Economics Major, B.A. with Secondary Social Studies Teacher Licensure Concentration](#)
- [History Major, B.A. with Secondary Social Studies Teacher Licensure Concentration](#)
- [Political Science Major, B.A. with Secondary Social Studies Teacher Licensure Concentration](#)

## Department of Elementary Education and Literacy

Location: West Classroom Building, Suite 136

Phone: 303-615-1777

E-Mail: [education@msudenver.edu](mailto:education@msudenver.edu)

Website: [Elementary Education and Literacy Department Website](#)

### *Elementary Education Major, B.A.*

[Department of Elementary Education and Literacy](#)

[School of Education](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

The Bachelor of Arts (BA) degree in Elementary Education features best practices denoted in current literature on teacher education as facilitating development of highly effective elementary teachers. The program's clinical foundation provides teacher candidates authentic opportunities to learn and apply best practices while collaborating with some of the most effective teachers and schools in the Denver Metropolitan area. Students completing the Elementary Education Major complete coursework and participate in supervised clinical experiences. For those seeking a state teaching licensure in Elementary Education, this includes a culminating two-semester residency that supports development of the knowledge, understandings, and competencies required of successful elementary teachers in widely diverse classrooms.

### Student Outcomes

The Bachelor of Arts degree in Elementary Education is an extended major with increasingly rigorous courses that build upon foundational introductory coursework for all Elementary Education majors. In addition, each student selects a concentration to specialize their professional knowledge. The culminating clinical experience is a two-semester teacher residency program completed in cohort-based schools within our partner districts in the Denver metropolitan area. Teacher candidates pursuing licensure graduate with appropriate preparation for initial licensure in Elementary Education in Colorado. Students within the Elementary Education Major have an option to select a non-licensure pathway with alternative coursework in place of the final residency coursework. Please visit the School of Education (SOE) website for information on admission to this program.

### General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

### Program Requirements

- A total of at least 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- All candidates for a BA in Elementary Education must satisfy General Studies, ESSJ, Global Diversity, and all Elementary Education program requirements.
- Please note: The majority of field experience hours and all clinical experience hours occur during the elementary school day in university-designated classrooms supervised by licensed teachers.
- This program is defined as an extended major.

### General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)

- We recommend the following courses for this category: MTH 1610 - Integrated Mathematics I Note: MTH 1610 also satisfies a requirement in the major.
- Arts and Humanities (6 credits)
  - We recommend the following courses for this category: ARTE 2060 - The Arts and Creative Thinking and ENG 2460 - Introduction to Children's Literature
- Historical (3 credits)
  - We recommend one of the following courses for this category: HIS 1210 - American History to 1865 or HIS 1220 - American History since 1865
- Natural and Physical Sciences (6 credits)
  - We recommend the following courses for this category: SCI 2600 - Integrated Biology and Earth Science and SCI 2610 - Integrated Physical and Chemical Sciences Note: SCI 2600 and SCI 2610 also satisfy requirements in the major.
- Social and Behavioral Sciences (6 credits)
  - We recommend the following courses for this category: GEG 1000 - World Regional Geography and PSY 1800 - Developmental Educational Psychology Note: GEG 1000 also satisfies University Global Diversity course requirement
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.
  - We recommend the following course: EDU 1111 - Education within Diverse Communities Note: EDU 1111 also satisfies a requirement in the major.

## Core Courses Required for the Major: 62 credits

All Elementary Education Majors, whether licensure or non-licensure, complete the following core coursework. Registering for

3000-level methods courses and clinical fields requires application to the School of Education. Up to 9 credits indicated below can also be used to fulfill General Studies requirements.

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners Credits: 3
- CLD 3910 - Assessment of English Language Learners Credits: 3
- EDT 3010 - Integrating Educational Technology into Teaching Credits: 3
- EDU 1111 - Education within Diverse Communities Credits: 3 (Note: EDU 1111 also satisfies the University ESSJ requirement.)
- EDU 2111 - Becoming an Elementary Teacher Credits: 3
- EDU 3222 - Developing Differentiated Learning Environments Credits: 3
- EDU 3444 - Instructional and Assessment Practices in Differentiated Classrooms Credits: 3
- EDU 3445 - Field Experience: Assessment Practices in Differentiated Classrooms Credits: 1
- EDU 3550 - Teaching Elementary School Science and Health Credits: 3
- EDU 3665 - Field Experience: Teaching Science, Health and Mathematics Credits: 1
- EDU 3666 - Teaching Elementary School Mathematics Credits: 3
- EDU 4011 - Teaching Elementary School Social Studies Credits: 3
- MTH 1610 - Integrated Mathematics I Credits: 3 (Note: MTH 1610 also satisfies a University General Studies requirement.)
- MTH 2620 - Integrated Mathematics II Credits: 3
- MTL 3600 - Mathematics of the Elementary Curriculum Credits: 3
- PETE 2130 - Health and Physical Education for Elementary Teachers Credits: 2
- RDG 3111 - Emergent Literacy K-3 Credits: 3
- RDG 3222 - Teaching Elementary School Writing Credits: 3
- RDG 3333 - Intermediate Literacy 4-6 Credits: 3
- RDG 3335 - Field Experience: K-6 Literacy Credits: 1
- SCI 2600 - Integrated Biology and Earth Science Credits: 3 (Note: SCI 2600 also satisfies a University General Studies requirement.)
- SCI 2610 - Integrated Physical and Chemical Sciences Credits: 3 (Note: SCI 2610 also satisfies a University General Studies requirement.)
- SED 3600 - Exceptional Learners in the Classroom Credits: 3

Students in the Elementary Education Major may differentiate their studies by choosing one of two pathways: Licensure (22 credits leading to a state teaching license) or Non-Licensure (18 credits).

## Licensure Pathway: 22 credits

Teacher candidates in the Elementary Education Major, who seek a state teaching license, complete a two-semester, culminating clinical experience: Residency I (3 days per week) and Residency II (4 days per week). One co-requisite course is paired with each residency semester (RDG 4444 and EDU 4222).

- EDU 4222 - Designing Instruction For All Learners Credits: 3
- RDG 4444 - Accountability in Whole Class Literacy Assessment Credits: 3

All teacher candidates (2018 catalog year or later) within the licensure pathway complete 7 credits of Residency I. For most teacher candidates, this is EDU 4115.

However, teacher candidates earning an endorsement in Culturally and Linguistically Diverse (CLD) Education or as a CLD Bilingual Education Specialist, complete EDU 4116 CLD Residency I instead of EDU 4115 Residency I. All state initial licensure requirements must be met in order to qualify for the additional CLD or CLD BES endorsement.

- EDU 4115 - Residency I Credits: 3-7  
or
- EDU 4116 - CLD Residency I Credits: 3-7

All teacher candidates seeking initial teacher licensure complete 9 credits of Residency II. Teacher candidates, who are completing the requirements for an additional endorsement in CLD or CLD BES, complete EDU 4226 CLD Residency II instead of EDU 4225 Residency II. All state licensure requirements must be met in order to qualify for the additional state CLD or CLD BES endorsement.

- EDU 4225 - Residency II Credits: 9 \*
- or
- EDU 4226 - CLD Residency II Credits: 9 \*

\*Either EDU 4225 or EDU 4226 can fulfill the Senior Experience requirement.

## Non-Licensure Pathway: 18 credits

Students majoring in Elementary Education may differentiate their plan of study by choosing 18 credits of coursework that supports a professional pathway related to educational studies. Non-licensure pathway students are encouraged to complete EDS 4010 Action Research within Communities of Practice, as a means to bridge their differentiated studies to their future professional communities through the high leverage practice of engaging in undergraduate research.

- EDS 4010 - Action Research within Communities of Practice Credits: 3 (fulfills the Senior Experience requirement)

- PSY 1001 - Introductory Psychology Credits: 3
- PSY 2850 - Psychology of Sexuality Credits: 3
- PSY 3000 - Theories of Personality Credits: 3
- PSY 3030 - Multicultural Psychology Credits: 3
- PSY 3050 - Psychology of Gender Credits: 3
- PSY 3070 - Psychology of Sexual Orientation Credits: 3
- PSY 3170 - Social Justice: Self and Citizenship: A Service Learning Course Credits: 3
- PSY 3370 - Undergraduate Research Assistant Credits: 3
- PSY 3390 - Undergraduate Teaching Assistant Training Credits: 3
- PSY 3410 - Health Psychology Credits: 3
- PSY 3450 - Organizational Psychology Credits: 3
- PSY 3460 - Psychology of Play Credits: 3
- PSY 3700 - Psychology of Group Prejudice Credits: 3
- PSY 3920 - Gender Politics of Health Credits: 3
- PSY 4100 - Clinical/Counseling Psychology: Treatment, Practice, and Skills Credits: 3

## Concentration Choices: 15 credits

Students further differentiate their plan of study through selecting one of the following 15-credit concentrations. While students are only required to complete one concentration, they may choose to declare an additional concentration.

### Applied Developmental Psychology Concentration

- PSY 1001 - Introductory Psychology Credits: 3
- PSY 3250 - Child Psychology Credits: 3
- PSY 3340 - Cognitive Development and Learning Credits: 3
- PSY 3350 - Psychology of Social Development Credits: 3

#### **Choose one elective from the following:**

- PSY 2210 - Psychology of Human Development Credits: 3
- PSY 3240 - Infancy Credits: 3
- PSY 3260 - Psychology of Adolescence Credits: 3
- PSY 3400 - Child Psychopathology Credits: 3

### Ethnic Studies Concentration

#### **Required Course (choose one of the following):**

- AAS 1030 - Introduction to Social Justice and Decoloniality Credits: 3
- CHS 1030 - Introduction to Social Justice and Decoloniality Credits: 3
- GWS 1030 - Introduction to Social Justice and Decoloniality Credits: 3
- NAS 1030 - Introduction to Social Justice and Decoloniality Credits: 3

**Choose one AAS course from the following:**

- AAS 1010 - Introduction to Africana Studies Credits: 3
- AAS 1130 - Survey of African History Credits: 3
- AAS 2200 - Politics and Black People Credits: 3

**Choose one CHS course from the following:**

- CHS 1000 - Introduction to Chicana/o Studies Credits: 3
- CHS 3020 - Chicana/o History, 1836 to the Present Credits: 3
- CHS 3300 - Education of Chicano Children Credits: 3
- CHS 3460 - Chicana Feminisms Credits: 3

**Choose one GWS course from the following:**

- GWS 1001 - Introduction to Gender, Women, and Sexualities Studies Credits: 3
- GWS 1200 - Sexuality, Race, and Power Credits: 3
- GWS 1550 - Introduction to Transgender Studies Credits: 3

**Choose one elective from the following:**

- AAS 2010 - Interdisciplinary Research Methods in Social Issues Credits: 3
- AAS 2100 - Women of Color Credits: 3
- CHS 2030 - Interdisciplinary Research Methods in Social Issues Credits: 3
- CHS 2100 - Women of Color Credits: 3
- GWS 2010 - Interdisciplinary Research Methods in Social Issues Credits: 3
- GWS 2100 - Women of Color Credits: 3
- NAS 1000 - Introduction to Native American Studies Credits: 3

## Culturally and Linguistically Diverse Concentration

Students completing the CLD concentration as part of the licensure pathway can apply for an additional state CLD teaching endorsement upon completing all state initial licensure requirements. Students completing the CLD concentration as part of the non-licensure pathway would not qualify for a state endorsement.

- ANT 2330 - Cross-Cultural Communication Credits: 3  
or
- COMM 3000 - Diversity and Communication in the U.S. Credits: 3
- CLD 2890 - Second Language Acquisition: K-12 Educational Implications Credits: 3
- CLD 3290 - Literacy Development for Culturally and Linguistically Diverse Students K-12 Credits: 3
- CLD 3310 - Integrated Methods of Teaching English as a Second Language Credits: 3

**Choose one elective from the following:**

- CHS 3300 - Education of Chicano Children Credits: 3
- CLD 3940 - Spanish Bilingual Language and Literacy Development Credits: 3  
Note: CLD 3940 Bilingual Language and Literacy is taught mainly in Spanish. This course is one of the courses required for the endorsement in Culturally and Linguistically Diverse (CLD) Bilingual Education Specialist K-12 in Spanish and English.
- LING 3011 - Analyzing English Credits: 4
- Any level language classes whether transfer, prior learning, or those taken at MSU Denver will be accepted as fulfilling this requirement. MSU Denver course prefixes include ASL, CHI, FRE, GER, ITA, JPS, LANG, SPA. Prior learning includes Advanced Placement (AP), College Level Examination Program (CLEP), or International Baccalaureate (IB) credit. General Studies status is not required.

## Disciplinary Knowledge Concentration

**Choose at least one elective of the following courses:**

- ECO 2010 - Principles of Macroeconomics Credits: 3  
or
- ECO 2020 - Principles of Microeconomics Credits: 3
- HIS 1030 - World History to 1500 Credits: 3
- HIS 1040 - World History since 1500 Credits: 3
- HIS 3425 - Colorado and the Nation Credits: 3
- HIS 3430 - American Revolution and Early National Period, 1763-1848 Credits: 3
- PSC 1010 - American National Government Credits: 3
- Choose at least one 3-credit elective in the Natural and Physical Sciences (prefixes: BIO, PHY, GEL, ENV, MTR, GEG, CHE).
- Choose a remaining combination of courses among those listed above in order to total 15 credits in the concentration.
- Note: In addition to at least one of the Social Science courses listed above and at least one of the Natural and Physical Science courses, students select additional electives from the options listed above for either Social Sciences or Natural and Physical Sciences so that their overall total for the concentration is at least 15 credits. These courses do not need General Studies designation.

## Mathematics Concentration

- MTL 3750 - Number and Algebra in the K-8 Curriculum Credits: 3
- MTL 3760 - Geometry and Statistics in the K-8 Curriculum Credits: 3

**Choose one of the following three options in order to meet the Algebra requirement:**

- MTH 1108 - College Algebra Stretch, Part I Credits: 4 and
- MTH 1109 - College Algebra Stretch, Part II Credits: 4  
Note: MTH 1108 and MTH 1109 counts as two of the five courses for the concentration.  
or
- MTH 1110 - College Algebra for Calculus Credits: 4  
or
- MTH 1112 - College Algebra Through Modeling Credits: 4

**Choose among the following mathematics or mathematics education elective courses for a total of 5 credits.**

- MTH 1210 - Introduction to Statistics Credits: 4
- MTL 4630 - Teaching Secondary Mathematics Credits: 4
- MTL 3850 - STEM Teaching and Learning Credits: 2
- MTL 3858 - STEM Teaching and Learning Practicum Credits: 1
- Or any mathematics course that has MTH 1110 as a prerequisite.  
Notes:
- MTL 3630 is recommended for teacher candidates who intend to add a middle school mathematics endorsement to their elementary license. For teacher candidates in the Elementary Education Mathematics concentration, the course instructor will waive the co-requisite field.
- In order to count MTL 3850 towards the concentration, students must also participate in the STEM Learning Assistant program.

## Senior Experience: 3-7 credits

For students completing the Licensure Pathway, the following will fulfill the Senior Experience requirement:

- EDU 4115 - Residency I Credits: 3-7  
or
- EDU 4116 - CLD Residency I Credits: 3-7

For students completing the Non-Licensure Pathway, the following course will fulfill the Senior Experience requirement:

- EDS 4010 - Action Research within Communities of Practice Credits: 3

Please note: Senior Experience course credit is counted elsewhere in the major

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits

Required Courses	62 credits
Licensure Pathway	22 credits
Non-Licensure Pathway	18 credits
Selected Concentration	15 credits
Senior Experience	counted elsewhere in major
Unrestricted Electives	0-10 credits
<b>Total for the Elementary Education Major, B.A.</b>	<b>Minimum of 120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Elementary Education Minor (Non-Licensure)*

The Elementary Education Minor (Non-Licensure) serves individuals who are interested in working with elementary aged children (ages 5-12) outside the K-6 classroom (for example, recreation fields, summer camps, travel programs, after-school enrichment programs, day care). The Elementary Education Minor does not meet licensure requirements. A grade of C- or better is required in these courses.

## Required Courses:

- EDT 3010 - Integrating Educational Technology into Teaching Credits: 3
- EDU 1111 - Education within Diverse Communities Credits: 3
- EDU 2111 - Becoming an Elementary Teacher Credits: 3
- EDU 3222 - Developing Differentiated Learning Environments Credits: 3
- PETE 2130 - Health and Physical Education for Elementary Teachers Credits: 2
- RDG 3111 - Emergent Literacy K-3 Credits: 3
- SED 3600 - Exceptional Learners in the Classroom Credits: 3

Total Required Hours: 20 credits

## *Elementary Education Post-Baccalaureate Licensure Program*

Post-baccalaureate elementary licensure candidates should consult with an advisor in the Department of Elementary Education & Literacy prior to registering for any courses. A grade of C- or better is required of all courses with letter grades. Please visit the School of Education (SOE) website for information on admission to this program.

## Required Content Courses

These are required content knowledge although not prerequisite to the other coursework.

- MTH 1610 - Integrated Mathematics I Credits: 3
- MTH 2620 - Integrated Mathematics II Credits: 3
- MTL 3600 - Mathematics of the Elementary Curriculum Credits: 3

Required Content Classes Total: 9 credits

These courses are required but can be taken simultaneously with the required licensure courses.

## Recommended Content Courses

The following courses are highly recommended if the earned bachelor's degree does not include comparable coursework.

- EDU 2111 - Becoming an Elementary Teacher Credits: 3
- SED 3600 - Exceptional Learners in the Classroom Credits: 3
- PSY 1800 - Developmental Educational Psychology Credits: 3

## Required Licensure Courses

- RDG 3111 - Emergent Literacy K-3 **Credits: 3**
- EDU 3444 - Instructional and Assessment Practices in Differentiated Classrooms **Credits: 3**
- EDU 3445 - Field Experience: Assessment Practices in Differentiated Classrooms **Credits: 1**
- RDG 3222 - Teaching Elementary School Writing **Credits: 3**
- RDG 3333 - Intermediate Literacy 4-6 **Credits: 3**
- RDG 3335 - Field Experience: K-6 Literacy **Credits: 1**
- EDU 3550 - Teaching Elementary School Science and Health **Credits: 3**
- EDU 3666 - Teaching Elementary School Mathematics **Credits: 3**
- EDU 3665 - Field Experience: Teaching Science, Health and Mathematics **Credits: 1**
- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**
- CLD 3910 - Assessment of English Language Learners **Credits: 3**

- EDU 4011 - Teaching Elementary School Social Studies **Credits: 3**
- EDU 4115 - Residency I **Credits: 3-7**  
OR
- EDU 4116 - CLD Residency I **Credits: 3-7**
- EDU 4222 - Designing Instruction For All Learners **Credits: 3**
- EDU 4225 - Residency II **Credits: 9**  
OR
- EDU 4226 - CLD Residency II **Credits: 9**
- RDG 4444 - Accountability in Whole Class Literacy Assessment **Credits: 3**

**Total for Licensure Program: 61 credits**

**The total required licensure courses combined with required content courses equals 70 credits.**

Students who are simultaneously completing coursework towards an endorsement in Culturally and Linguistically Diverse (CLD) education must enroll in the CLD versions of Residency: EDU 4116 CLD Residency I and EDU 4226 CLD Residency II. Overall credit requirements do not change although additional learning outcomes are expected of students relative to serving CLD children. All licensure students are required to complete 7 credits of Residency I (EDU 4115 or EDU 4116) and 9 credits of Residency II (EDU 4225 or EDU 4226).

## Department of Secondary, K-12 and Educational Technology

Location: West Classroom Building, Suite 136

Phone: 303-615-1777

E-Mail: [education@msudenver.edu](mailto:education@msudenver.edu)

Website: [Secondary, K-12 and Educational Technology Department Website](#)

### Secondary Education Teacher Licensure Programs

### *Instructional Design and Technology Certificate*

The Instructional Technology Undergraduate Certificate Program focuses on the design, creation, utilization, and evaluation of dynamic learning objects within the context of a variety of real world learning experiences. The field of instructional design and technology relies on highly-trained professionals with credentials in design, implementation, and evaluation of multimedia learning materials and instructional design theories. Providing a comprehensive, interdisciplinary experience, this certificate program combines the



fields of education, cognitive science, instructional design, information technology, and social media management. Completers of this certificate program are versatile designers who are able to:

- Incorporate highly-effective design practices and theories in the development of curriculum, training and instruction
  - Apply instructional design practices and technologies in real world environments to solve social, cultural, and economic challenges
  - Facilitate organizational change and strategically recommend technology adoption
  - Utilize instructional tools and practices to increase learner-related performance through the employment of emerging instructional technologies
  - Develop and assess effective and accessible technology-supported learning assets and environments
  - Perform as a liaison and expert to empower others in the effective use of instructional design tools and practices
  - Evaluate, critique, and recommend appropriate technologies to enhance teaching and learning
- Working collaboratively with discipline and subject matter experts, certificate holders in this field provide instructional design expertise in a number of exciting environments including:

- PK-12 and postsecondary classroom and online instruction
- Instructional media production
- Corporate training
- Health institutions and training
- Public and cultural institutions
- Publishing companies
- Non-profit organizations
- Military organizations

This certificate program is open to all undergraduate students who have not already completed a bachelor's degree. To complete the certificate program, a minimum grade of "C" in all certificate courses is required.

## Required Courses

- EDT 2050 - Instructional Design Thinking **Credits:** 3
- EDT 2060 - Digital Life and Learning **Credits:** 3
- EDT 3050 - Games, Applications, and Instructional Interaction **Credits:** 3
- EDT 3060 - Instructional Multimedia **Credits:** 3
- EDT 4050 - Emerging Issues and Innovation **Credits:** 3

**Program Total: 15 Credits**

## *Instructional Design and Technology Major, B. A*

[Department of Secondary, K-12 and  
Educational Technology](#)

[School of Education](#)

Available Program  
Format(s): [Online](#)

## About the Program

The Instructional Design and Technology Major focuses on the design, creation, utilization, and evaluation of dynamic learning objects within the context of a variety of real-world learning experiences. The field of instructional design and technology relies on highly trained professionals with credentials in design, implementation, and evaluation of multimedia learning materials and instructional design theories. Providing a comprehensive, interdisciplinary experience, this major program combines the fields of education, cognitive science, instructional design, information technology, multimedia and social media management.

Working collaboratively with discipline and subject matter experts, graduates with this major may continue to obtain an advanced degree in the field and/or provide instructional design expertise in a number of exciting environments including:

- PK-12 and postsecondary classroom and online instruction
- Instructional media production
- Corporate training
- Health institutions and training
- Public and cultural institutions
- Publishing companies
- Non-profit organizations
- Military organizations

Completion of this major program will lead to becoming versatile designers who are able to:

## Student Outcomes

- Incorporate highly-effective design practices and theories in the development of curriculum, training and instruction.
- Apply instructional design practices, and technologies in real-world environments to solve social, cultural, and economic challenges.
- Facilitate organizational change and strategically recommend technology adoption.
- Utilize instructional tools and practices to increase learner-related performance through the employment of emerging instructional technologies.
- Develop and assess effective and accessible technology-supported learning assets and environments.
- Perform as a liaison and expert to empower others in the effective use of instructional design tools and practices.
- Evaluate, critique, and recommend appropriate technologies to enhance teaching and learning.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)



- [Senior Experience Graduation Requirements](#)

## Program Requirements

- This Instructional Design and Technology major is a completely online program. All Major classes take place in online asynchronous or online synchronous learning environments. A computer and access to the internet are required to participate in classes. A minimum GPA of 2.0 for the program is required to graduate.
- A minimum of 120 semester hours are required for graduation.
- A minimum of 39 upper division semester hours are required for graduation.
- While a minor is not required, credits toward a minor will count toward the minimum credit requirement to graduate in place of general elective credit. Please consult with an advisor for meeting graduation requirements.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- **Recommended:** PSY 1800 - Developmental Educational Psychology

- Global Diversity (0 or 3 credits\*\*)

**\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.**

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.

## Required Courses: 45 Credits

- PSY 1800 - Developmental Educational Psychology **Credits: 3**
- EDT 2050 - Instructional Design Thinking **Credits: 3**
- EDT 2060 - Digital Life and Learning **Credits: 3**
- EDT 3010 - Integrating Educational Technology into Teaching **Credits: 3**

- EDT 3040 - Interpreting and Developing Instructional Visuals **Credits: 3**
- EDT 3050 - Games, Applications, and Instructional Interaction **Credits: 3**
- EDT 3060 - Instructional Multimedia **Credits: 3**
- EDT 4010 - Practical Instructional Design **Credits: 3**
- EDT 4020 - Project Management and Human Performance Technology in Instructional Design **Credits: 3**
- EDT 4050 - Emerging Issues and Innovation **Credits: 3**

Take one of the following:

- EDT 4060 - Capstone for Instructional Design and Technology **Credits: 3**
- or
- EDT 4090 - Instructional Prototyping **Credits: 3 \***

- JMP 2610 - Introduction to Technical Writing **Credits: 3**
- JMP 3470 - Writing for Interactive Media **Credits: 3**
- JMP 3540 - Mobile and Social Media Communication **Credits: 3**
- JMP 3625 - UX and UI: The User Experience **Credits: 3**

*\* This course requires special permission to register. Please consult with an advisor.*

## Additional Credits for Graduation: minimum 36 credits

In addition to the courses required for this major, a minimum of 36 credits are required to meet the minimum graduation requirement of 120 credits. Among these 36 credits, at least 3 credits must be upper division. Please consult with an advisor for more information.

## Senior Experience: 3 credits

- EDS 4010 - Action Research within Communities of Practice **Credits: 3**

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
Major Requirement	45 credits
Additional Credits for Graduation	36-42 credits
Senior Experience	3 credits
<b>Total for the Instructional Design and Technology Major, B.A.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## ***Instructional Design and Technology Minor***

The Instructional Design and Technology Minor focuses on the design, creation, utilization, and evaluation of dynamic learning objects within the context of a variety of real world learning experiences. The field of instructional design and technology relies on highly-trained professionals with credentials in design, implementation, and evaluation of multimedia learning materials and instructional design theories. Providing a comprehensive, interdisciplinary experience, this minor program combines the fields of education, cognitive science, instructional design, information technology, and social media management. Completion of this minor program will lead students to becoming versatile designers who are able to:

- Incorporate highly-effective design practices and theories in the development of curriculum, training and instruction
  - Apply instructional design practices and technologies in real world environments to solve social, cultural, and economic challenges
  - Facilitate organizational change and strategically recommend technology adoption
  - Utilize instructional tools and practices to increase learner-related performance through the employment of emerging instructional technologies
  - Develop and assess effective and accessible technology-supported learning assets and environments
  - Perform as a liaison and expert to empower others in the effective use of instructional design tools and practices
  - Evaluate, critique, and recommend appropriate technologies to enhance teaching and learning
- Working collaboratively with discipline and subject matter experts, graduates with this minor may continue to obtain an advanced degree in the field and/or provide instructional design expertise in a number of exciting environments including:

- PK-12 and postsecondary classroom and online instruction
- Instructional media production
- Corporate training
- Health institutions and training
- Public and cultural institutions
- Publishing companies
- Non-profit organizations
- Military organizations

This minor program is open to all MSU Denver undergraduate students. To successfully complete the minor program, a minimum grade of "C-" in all Minor courses is required.

## **Required Courses**

This Minor program requires the following six courses, including one capstone course:

- EDT 2050 - Instructional Design Thinking **Credits: 3**
- EDT 2060 - Digital Life and Learning **Credits: 3**
- EDT 3050 - Games, Applications, and Instructional Interaction **Credits: 3**
- EDT 3060 - Instructional Multimedia **Credits: 3**
- EDT 4050 - Emerging Issues and Innovation **Credits: 3**
- EDT 4060 - Capstone for Instructional Design and Technology **Credits: 3**

**Program Total: 18 credits**

## ***Instructional Design and Technology Post-Baccalaureate Certificate***

The Instructional Technology post-baccalaureate certificate program focuses on the design, creation, utilization, and evaluation of dynamic learning objects within the context of a variety of real world learning experiences. The field of instructional design and technology relies on highly-trained professionals with credentials in design, implementation, and evaluation of multimedia learning materials and instructional design theories. Providing a comprehensive, interdisciplinary experience, this certificate program combines the fields of education, cognitive science, instructional design, information technology, and social media management. Students are required to complete an experiential capstone course at the end of the program. Completers of this certificate program are versatile designers who are able to:

- Incorporate highly-effective design practices and theories in the development of curriculum, training and instruction
  - Apply instructional design practices and technologies in real world environments to solve social, cultural, and economic challenges
  - Facilitate organizational change and strategically recommend technology adoption
  - Utilize instructional tools and practices to increase learner-related performance through the employment of emerging instructional technologies
  - Develop and assess effective and accessible technology-supported learning assets and environments
  - Perform as a liaison and expert to empower others in the effective use of instructional design tools and practices
  - Evaluate, critique, and recommend appropriate technologies to enhance teaching and learning
- Working collaboratively with discipline and subject matter experts, certificate holders in this field provide instructional design expertise in a number of exciting environments including:

- PK-12 and postsecondary classroom and online instruction
- Instructional media production
- Corporate training
- Health institutions and training
- Public and cultural institutions

- Publishing companies
- Non-profit organizations
- Military organizations

Only students with a conferred bachelor's degree from an accredited institution are eligible to earn the certificate. To complete the certificate program, a minimum grade of "C" in all certificate courses is required.

## Required Courses

- EDT 2050 - Instructional Design Thinking **Credits: 3**
- EDT 2060 - Digital Life and Learning **Credits: 3**
- EDT 3050 - Games, Applications, and Instructional Interaction **Credits: 3**
- EDT 3060 - Instructional Multimedia **Credits: 3**
- EDT 4050 - Emerging Issues and Innovation **Credits: 3**

### Capstone/Internship

- EDT 4090 - Instructional Prototyping **Credits: 3**

**Program Total: 18 Credits**

## *K-12 Art Licensure*

Students pursuing recommendation for K-12 art licensure should complete the Bachelor of Fine Arts in Art Education. Please refer to the Art Education Major, B.F.A. for program requirements.

## *K-12 Art Licensure: Post-Baccalaureate Program*

Admission requirements for post-baccalaureate candidates seeking K-12 licensure include evidence of having a conferred bachelor's degree in the licensure subject area, and meeting the criteria for formal admission. Upon application to the Teacher Education Program, an official transcript from the accredited colleges where the candidate attended, including the one granting the baccalaureate degree must be brought to the Teacher Application Center. The appropriate content area advisors will review the transcript for completed course work appropriate for the endorsement being sought. It may be necessary for a Post-Baccalaureate candidate to complete specified courses in the content area, in addition to the professional licensure sequence course work, as part of their approved teacher preparation program. Post-baccalaureate students should begin the licensure program by taking the first education courses in their licensure sequence and should take the licensure content examination as soon as possible.

Coursework in teacher licensure is available through the Art Department. An existing BF A in a studio area is required. Students interested in the post-bac program that have a BA in a studio area will be required to submit a portfolio for review for entrance into the program. Students that are not accepted to the licensure program after the portfolio review can reapply for review the following semester. Students provisionally accepted may need to complete additional content area coursework to meet licensure requirements. Students

must also achieve satisfactory scores on the state licensure examination. See your advisor for more information.

## Required Courses

- ARTE 3601 - Introduction to Art Education: History and Philosophy **Credits: 3**
- ARTE 3605 - Creating an Inclusive Art Classroom: Curriculum and Instruction **Credits: 3**
- ARTE 4130 - Elementary Art Education: Curriculum and Instruction **Credits: 3**
- ARTE 4140 - Field Experience: Art Education Elementary **Credits: 1**
- ARTE 4230 - Secondary Art Education: Curriculum and Instruction **Credits: 3**
- ARTE 4240 - Field Experience: Art Education Secondary **Credits: 1**
- ARTE 4701 - Student Teaching and Seminar: Art Education K-12 **Credits: 12**
- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**
- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits: 4**
- EDS 3140 - First Field Experience in Secondary Education **Credits: 1**
- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits: 3**
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits: 3**

**Total: 40 credits**

## Technology Based Studio Course

Students must complete one technology based studio course if not taken as part of previous degree. Technology based studio course work includes photography, printmaking or communication design.

## Possible Additional Coursework

If any of the following courses can not be identified on transcripts, they will need to be taken as part of the licensure requirements.

- ART 1101 - Art Studio: 2D **Credits: 3**
- ART 1141 - Art Studio: Drawing **Credits: 3**
- ART 1501 - Art Studio: 3D **Credits: 3**
- ARTH 1600 - Art of the Ancient World **Credits: 3**
- ARTH 1700 - Art of the Medieval and Early Modern World **Credits: 3**
- ARTH 1800 - Art of the Modern and Contemporary World **Credits: 3**

## *K-12 Music Licensure*

The K-12 Licensure Program prepares candidates to teach content-area courses in grades K-12. Through the sequence of courses and field experiences, the candidate satisfies all of Colorado's performance-based standards for licensure in K-12 Education.

Candidates seeking teacher licensure must also gain admission to the Teacher Education Program. The application form for the program must be completed by attending an Application Meeting during the semester prior to the first semester of education course work. Application Meetings are scheduled by the Teacher Application Center (WC 136). Formal admission must be obtained BEFORE Methods coursework can be taken and provisional admission must be obtained before any field experience placement will be made.

Music Education licensure candidates must consult an advisor in their selected major and one in education.

For more information on this program, see the Bachelor of Music Education section of the catalog.

## ***K-12 Physical Education Licensure***

The core curriculum is designed to prepare candidates to pass the K-12 Physical Education Content Exam and to teach to the Colorado Model Content Standards for K-12 Physical Education. **Licensure candidates need to meet with a K-12 Physical Education advisor.**

Candidates seeking teacher licensure must also gain admission to the Teacher Education Program. Formal admission must be obtained BEFORE Methods coursework can be taken and provisional admission must be obtained before any field experience placement will be made.

For more information on this program, see the [K-12 Physical Education Major, B.S.](#) section of the catalog.

## ***K-12 Physical Education Licensure: Post-Baccalaureate Program***

Admission requirements for post-baccalaureate students seeking K-12 Physical Education licensure include evidence of having a conferred Bachelor's degree and meeting the criteria for formal admission to the K-12 Physical Education Post-Baccalaureate Licensure Program.

The K-12 Physical Education advisors will review the transcript for completed coursework appropriate for the licensure being sought. Coursework meeting standards for K-12 Physical Education is available through the Secondary, K-12, and Educational Technology Department website. The coursework prepares the candidate to pass the state required licensure exam for K-12 Physical Education and to utilize the current state approved standards for teaching.

The following courses are required and must be completed with a grade of "C-" or better.

Candidates for the K-12 Physical Education Licensure: Post-Baccalaureate Program can complete a minimal number of additional courses to earn a second bachelor's degree in Physical Education. Please see the K-12 Physical Education Major, B.S. listing and speak with a K-12 Physical Education advisor for details.

## **Physical Education and Health Courses**

- PETE 3000 - School Health Education **Credits: 3**
- ESS 4500 - Motor Learning and Development **Credits: 3**
- PETE 1601 - Introduction to Teaching Physical Education **Credits: 3**
- PETE 1665 - Methods of Teaching Outdoor Education **Credits: 3**
- PETE 1670 - Curricular Aspects of Elementary Physical Education **Credits: 3**
- PETE 1680 - Curricular Aspects of Secondary Physical Education **Credits: 3**
- PETE 2010 - Methods of Teaching Team Activities **Credits: 3**
- PETE 2030 - Teaching Weight Training and Fitness Education **Credits: 3**
- PETE 2040 - Methods of Teaching Individual/Dual Activities, Level I **Credits: 3**  
or
- PETE 2090 - Methods of Teaching Individual/Dual Activities, Level II **Credits: 3**
- PETE 3010 - Clinical Experience in School Health Education **Credits: 2**
- PETE 3200 - Movement Science for Teacher Education **Credits: 4**
- PETE 3400 - Methods of Teaching Secondary Physical Education **Credits: 3**
- PETE 3410 - Clinical Experience in Secondary Physical Education **Credits: 2**
- PETE 3460 - Health and Physical Education Assessment **Credits: 3**
- PETE 3500 - Methods of Teaching Elementary Physical Education **Credits: 3**
- PETE 3510 - Clinical Experience in Elementary Physical Education **Credits: 2**
- PETE 3800 - Risk Prevention, Assessment, and Intervention for Teacher Education **Credits: 3**
- PETE 4620 - Methods of Teaching Adapted Physical Education **Credits: 3**

*Pre-requisites and Co-requisites: Please see individual courses for pre- and co-requisites*

**Subtotal: Minimum of 52 credit hours**

## **Licensure Sequence**

- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits: 4**

- EDS 3140 - First Field Experience in Secondary Education  
**Credits:** 1
  - EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits:** 3
  - EDT 3010 - Integrating Educational Technology into Teaching  
**Credits:** 3
  - CLD 3310 - Integrated Methods of Teaching English as a Second Language **Credits:** 3
- or
- CLD 3910 - Assessment of English Language Learners **Credits:** 3
  - CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits:** 3
  - EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits:** 3
  - EDU 4190 - Elementary Student Teaching and Seminar: K-6  
**Credits:** 6,12
  - EDS 4290 - Student Teaching and Seminar: Secondary 7-12  
**Credits:** 6,12

*Pre-requisites and Co-requisites: Please see individual courses for pre- and co-requisites*

**Subtotal: 32 credit hours**

**Total for K-12 Physical Education Licensure: 84 credit hours**

## ***K-12 Physical Education Major, B.S.***

[Department of Secondary, K-12 and Educational Technology](#)  
[School of Education](#)

Available Program  
Format(s): [In-Person](#)

### **About the Program**

The Bachelor of Science in K-12 Physical Education prepares students to teach in public or private schools. Course work leads to elementary, secondary and K-12 physical education/ health education licensure in Colorado. In addition to the bachelor's degree program, we offer a licensure-only option for students who already hold a bachelor's degree in another discipline. Many of the classes are experience-based, meaning students are either physically active in our gyms, outdoor athletic facility or are in K-12 schools implementing teaching assignments. Additional opportunities are also provided by helping with field days and special events in schools and volunteer coaching opportunities. We prepare our students to teach diverse populations by giving them the opportunity to work and learn in urban, suburban, and rural environments. The core curriculum is designed to prepare candidates to pass the K-12 Physical Education PRAXIS exam and to utilize the Colorado Teacher Quality Standards. Licensure candidates need to meet with a K-12 Physical Education advisor. Candidates seeking teacher licensure must also gain admission to the Teacher Education Program. A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. In addition to preparing students for entry into teaching and coaching positions in grades K-12, this degree provides

students the prerequisites for advanced degrees in education, sports administration, and other related disciplines. Health and Physical Educators are making a lasting impact on the future health of America. We take pride in helping students understand the importance of a healthy and active lifestyle.

### **Student Outcomes**

- Demonstrate physical education content and scientific and theoretical foundations when delivering an effective K-12 physical education program aligned with local, state and/or national standards.
- Exhibit skills of a physically literate individual who can demonstrate skillful performance in physical education content areas and health-enhancing levels of fitness.
- Validate an effective use of resources, accommodations and/or modifications, technology to address the diverse needs of all students.
- Engage students in meaningful learning experiences using communication, feedback, technology, and instructional and managerial skills to enhance student learning.
- Display knowledge to select and implement appropriate assessments to monitor students' progress and guide decision making related to instruction and learning.
- Connect Literacy and Math-Connect literacy, including Culturally and Linguistically Diverse (CLD), teaching strategies as well as mathematics to Physical Education teaching.
- Create Inclusive Teaching Environment-Create a safe, inclusive and respectful learning environment that facilitates learning for diverse populations, including CLD students.
- Demonstrate professionalism through ethical conduct, reflection, and leadership.
- Demonstrate knowledge of first and second language acquisition and teaching strategies for CLD students.

### **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

### **Program Requirements**

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- This program is defined as an extended major.

### **General Studies Requirements: 33 credits**

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- **Recommended:** MTH 1610 - Integrated Mathematics I (Note: This course is required for the major/teacher licensure and can also meet general studies requirements in this category. However the credits for this course can only count toward the total credits for the degree once.)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.
- **Recommended:** EDS 3150 - Critical Sociocultural Lenses for Teachers (Note: This course is required for teacher licensure and can also meet the ESSJ requirement. However the credits for these courses can only count toward the total credits for the degree once.)

## Required K-12 Physical Education Major Courses: 56 credits

Please note:

Field experience courses require establishing a COOL account to obtain a fingerprint and background check. Please see major advisor for assistance with mentor teachers/schools for field experiences.

- PETE 1601 - Introduction to Teaching Physical Education **Credits:** 3
- PETE 1665 - Methods of Teaching Outdoor Education **Credits:** 3
- PETE 1670 - Curricular Aspects of Elementary Physical Education **Credits:** 3
- PETE 1680 - Curricular Aspects of Secondary Physical Education **Credits:** 3
- PETE 2010 - Methods of Teaching Team Activities **Credits:** 3

- PETE 2030 - Teaching Weight Training and Fitness Education **Credits:** 3
- PETE 2040 - Methods of Teaching Individual/Dual Activities, Level I **Credits:** 3
- PETE 2090 - Methods of Teaching Individual/Dual Activities, Level II **Credits:** 3
- PETE 3000 - School Health Education **Credits:** 3
- PETE 3010 - Clinical Experience in School Health Education **Credits:** 2
- PETE 3130 - Foundation of Educational Psychology and Philosophy **Credits:** 4
- PETE 3200 - Movement Science for Teacher Education **Credits:** 4
- PETE 3400 - Methods of Teaching Secondary Physical Education **Credits:** 3
- PETE 3410 - Clinical Experience in Secondary Physical Education **Credits:** 2
- PETE 3460 - Health and Physical Education Assessment **Credits:** 3
- PETE 3500 - Methods of Teaching Elementary Physical Education **Credits:** 3
- PETE 3510 - Clinical Experience in Elementary Physical Education **Credits:** 2
- PETE 3800 - Risk Prevention, Assessment, and Intervention for Teacher Education **Credits:** 3
- PETE 4620 - Methods of Teaching Adapted Physical Education **Credits:** 3

## K-12 Physical Education Major Electives: 6 credits

Select two courses from the following list.

- CLD 3310 - Integrated Methods of Teaching English as a Second Language **Credits:** 3
- CLD 3910 - Assessment of English Language Learners **Credits:** 3
- ESS 4500 - Motor Learning and Development **Credits:** 3
- SPA 1006 - Conversational Spanish for School Personnel I **Credits:** 3
- SPA 1007 - Conversational Spanish for School Personnel II **Credits:** 3
- SWK 3010 - Social Work Practice with Children and Youth **Credits:** 3
- SWK 3040 - Creative Approaches to Change **Credits:** 3
- CHS 3300 - Education of Chicano Children **Credits:** 3

## Additional Requirements for K-12 Physical Education Teacher Licensure: 18 credits

All students must complete the following courses in teaching foundations and strategies. Before registering for these courses, students should obtain admission to the School of Education. Please consult with an academic advisor.

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits:** 3
- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits:** 3 (satisfies Ethnic Studies and Social Justice (ESSJ) requirement)
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits:** 3
- EDT 3010 - Integrating Educational Technology into Teaching **Credits:** 3
- MTH 1610 - Integrated Mathematics I **Credits:** 3
- SED 3600 - Exceptional Learners in the Classroom **Credits:** 3

## Senior Experience: 12 credits

Students may take 6 credits of EDU 4190 in an elementary education setting or 6 credits of EDS 4290 in a secondary setting or 12 credits of either student teaching and seminar course. Please consult with a major advisor.

- EDU 4190 - Elementary Student Teaching and Seminar: K-6 **Credits:** 6,12
- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 **Credits:** 6,12

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Major Courses	56 credits
Required Major Electives	6 credits
Additional Requirements	18 credits
Senior Experience	12 credits
Unrestricted Electives	0-1 credits
<b>Total for the K-12 Physical Education Major, B.S.</b>	<b>Minimum 120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## *K-12 World Languages Teacher Licensure: Post-Baccalaureate Program*

Admission requirements for post-baccalaureate students seeking licensure include evidence of having at least a conferred bachelor's degree from a regionally accredited university, as well as the stated

admission criteria. Students should see an advisor in the World Languages department and the secondary/K-12 education department for detailed information on post-baccalaureate licensure in World Languages. Faculty will review the transcript for completed coursework appropriate for the endorsement being sought. It may be necessary for a post-baccalaureate candidate to complete specified courses in the content area in addition to the teacher licensure coursework.

## K-12 World Languages Teacher Licensure: Post-Baccalaureate

Please meet with a faculty advisor in the World Languages department for the detailed content coursework. The coursework basically includes the following categories:

- Language/Grammar/Composition/Linguistics/Conversation
- Phonetics
- Culture/Civilization
- Literature

## Licensure Core for K-12 World Languages

### Foundations

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits:** 3
- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits:** 4
- EDS 3140 - First Field Experience in Secondary Education **Credits:** 1
- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits:** 3
- EDT 3010 - Integrating Educational Technology into Teaching **Credits:** 3
- MTH 1610 - Integrated Mathematics I **Credits:** 3
- SED 3600 - Exceptional Learners in the Classroom **Credits:** 3

### Methods

- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools **Credits:** 3
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools **Credits:** 1
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits:** 3
- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 **Credits:** 6,12
- EDU 3444 - Instructional and Assessment Practices in Differentiated Classrooms **Credits:** 3
- EDU 3445 - Field Experience: Assessment Practices in Differentiated Classrooms **Credits:** 1
- LANG 4960 - Teaching World Languages in K-12 **Credits:** 3
- LANG 4961 - Field Experience in Teaching World Languages in K-12 **Credits:** 1

## ***Secondary Education Minor (Non-Licensure)***

The Secondary Education Minor will be of interest to candidates who wish to work with secondary aged children outside the classroom (for example, recreation programs, travel, summer camps, enrichment programs) or work with learners of all ages in corporate or other training/education programs. It provides necessary knowledge, skills and applications in real school settings to develop candidates' understanding of the principles of teaching and learning in middle and high schools. The minor provides an option that assists degree-seeking candidates pursuing licensure to complete their baccalaureate and teacher licensure requirements in four years. To emphasize the application of knowledge in the field as required in new performance standards for teachers, the minor features 120 field experience hours. The third field experience (which is normally connected to the content methods courses), is not required in the minor, but may be a required co-requisite for the methods course. Candidates seeking licensure need to complete additional requirements including formal admission to the Teacher Licensure Program and student teaching. The minor does not include all courses required for teacher licensure. A minimum grade of C- is required for each course to count toward the Secondary Education Minor.

### **Required Courses:**

#### **Foundations: (14 credits)**

- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits: 4**
- EDS 3140 - First Field Experience in Secondary Education **Credits: 1**
- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits: 3**
- EDT 3010 - Integrating Educational Technology into Teaching **Credits: 3**
- SED 3600 - Exceptional Learners in the Classroom **Credits: 3**

#### **Methods: (10-16 credits)**

- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools **Credits: 3**
  - EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools **Credits: 1**
  - EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits: 3**
- or
- RDG 3280 - Teaching Content Literacy Skills **Credits: 3**
  - XXX XXX Content Methods in Major\*

**Total: 24-30**

### **Note:**

*\*Content and Methods coursework may be waived if required as part of major. See department.*

## ***Secondary Education Post-Baccalaureate Licensure - English***

Admission requirements for post-baccalaureate students seeking licensure include evidence of having at least a conferred bachelor's degree, as well as the stated admission criteria. Students should see an advisor in the English department and the secondary/K-12 education department for detailed information on post-baccalaureate licensure in English. Faculty will review the transcript for completed coursework appropriate for the endorsement being sought. It may be necessary for a post-baccalaureate candidate to complete specified courses in the content area in addition to the teacher licensure coursework.

### **Approved courses (or the approved equivalent) in the following content areas are required:**

- Literary Criticism or Literary Studies
- American Literature Survey
- British Literature Survey or Shakespeare
- Mythology or World Literature
- Language and Linguistics (History of English and the Structure of English)
- Composition (beyond freshman level)

### **Licensure Core for Secondary Education - Post-Baccalaureate:**

#### **Foundations:**

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**
- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits: 4**
- EDS 3140 - First Field Experience in Secondary Education **Credits: 1**
- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits: 3**
- EDT 3010 - Integrating Educational Technology into Teaching **Credits: 3**
- MTH 1610 - Integrated Mathematics I **Credits: 3**
- SED 3600 - Exceptional Learners in the Classroom **Credits: 3**

#### **Methods:**

- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools **Credits: 3**
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools **Credits: 1**
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits: 3**
- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 **Credits: 6,12**



- ENG 4601 - Methods in Secondary English I: Literacies and Literature **Credits: 4**
- ENG 4602 - Methods in Secondary English II: Writing and Assessment **Credits: 4**
- ENG 4641 - Field Experience in Teaching English in Secondary Schools **Credits: 1**

## ***Secondary Education Post-Baccalaureate Licensure - Mathematics***

### **Secondary Education Post-Baccalaureate Licensure - Mathematics**

Admission requirements for post-baccalaureate students seeking licensure include evidence of having at least a conferred bachelor's degree, as well as the stated admission criteria. Students should see an advisor in the Math department and the secondary/K-12 education department for detailed information on post-baccalaureate licensure in Math. Faculty will review the transcript for completed coursework appropriate for the endorsement being sought. It may be necessary for a post-baccalaureate candidate to complete specified courses in the content area in addition to the teacher licensure coursework.

### **Licensure Core for Secondary Education - Post-Baccalaureate:**

#### **Foundations:**

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**
- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits: 4**
- EDS 3140 - First Field Experience in Secondary Education **Credits: 1**
- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits: 3**
- EDT 3010 - Integrating Educational Technology into Teaching **Credits: 3**
- SED 3600 - Exceptional Learners in the Classroom **Credits: 3**

#### **Methods:**

- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools **Credits: 3**
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools **Credits: 1**
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits: 3**
- MTL 3620 - Mathematics of the Secondary Curriculum **Credits: 4**
- MTL 4630 - Teaching Secondary Mathematics **Credits: 4**
- MTL 3638 - Secondary Mathematics Field Experience **Credits: 2**
- MTL 4690 - Student Teaching and Seminar: Secondary **Credits: 12**

## ***Secondary Education Post-Baccalaureate Licensure - Science***

### **Secondary Education Post-Baccalaureate Licensure - Science**

Admission requirements for post-baccalaureate students seeking licensure include evidence of having at least a conferred bachelor's degree, as well as the stated admission criteria. Students should see an advisor in the appropriate content department (Biology, Chemistry, Physics, and Environmental Science) and the secondary/K-12 education department for detailed information on post-baccalaureate licensure in Science. Faculty will review the transcript for completed coursework appropriate for the endorsement being sought. It may be necessary for a post-baccalaureate candidate to complete specified courses in the content area in addition to the teacher licensure coursework.

### **Licensure Core for Secondary Education - Post-Baccalaureate:**

#### **Foundations:**

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**
- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits: 4**
- EDS 3140 - First Field Experience in Secondary Education **Credits: 1**
- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits: 3**
- EDT 3010 - Integrating Educational Technology into Teaching **Credits: 3**
- SED 3600 - Exceptional Learners in the Classroom **Credits: 3**

#### **Methods:**

- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools **Credits: 3**
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools **Credits: 1**
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits: 3**
- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 **Credits: 6,12**
- SCI 3950 - Teaching Science in Secondary Schools **Credits: 3**
- SCI 3960 - Field Experience in Teaching Science in Secondary Schools **Credits: 1**

## ***Secondary Education Post-Baccalaureate Licensure - Social Studies***

## Secondary Education Post-Baccalaureate Licensure - Social Studies

Admission requirements for post-baccalaureate students seeking licensure include evidence of having at least a conferred bachelor's degree, as well as the stated admission criteria. Students should see an advisor in the content/History department and the secondary/K-12 education department for detailed information on post-baccalaureate licensure in Social Studies. Faculty will review the transcript for completed coursework appropriate for the endorsement being sought. It may be necessary for a post-baccalaureate candidate to complete specified courses in the content area in addition to the teacher licensure coursework.

### Content Knowledge Requirements:

*The National Council for Social Studies Teachers requires the following Programmatic Standards - course(s) in:*

- U.S. History, World History (both Western and Non-Western)
- Political Science
- Economics
- American History
- History of Western World
- History of Nonwestern World
- Behavioral Science (Anthropology course is recommended)
- Political Science (includes U.S. Government)
- Geography (includes Cultural and Physical)
- Social Studies Content Exam

### Social Studies Concentration Requirement:

Student must complete at least 18 credit hours in social studies concentration area. The concentration area must include a minimum of 9 upper division credits. See an advisor.

## Licensure Core for Secondary Education - Post-Baccalaureate:

### Foundations:

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits:** 3
- EDS 3130 - Foundations of Educational Psychology and Philosophy **Credits:** 4
- EDS 3140 - First Field Experience in Secondary Education **Credits:** 1
- EDS 3150 - Critical Sociocultural Lenses for Teachers **Credits:** 3
- EDT 3010 - Integrating Educational Technology into Teaching **Credits:** 3
- MTH 1610 - Integrated Mathematics I **Credits:** 3
- SED 3600 - Exceptional Learners in the Classroom **Credits:** 3

### Methods:

- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools **Credits:** 3
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools **Credits:** 1
- EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools **Credits:** 3
- EDS 4290 - Student Teaching and Seminar: Secondary 7-12 **Credits:** 6,12
- HIS 4010 - Methods of Teaching Social Science: Secondary School **Credits:** 3
- HIS 4020 - Field Experience in Teaching Social Studies in Secondary Schools **Credits:** 1

## Department of Special Education, Early Childhood and Culturally and Linguistically Diverse Education

Location: West Classroom Building, Suite 136

Phone: 303-615-1777

E-Mail: [education@msudenver.edu](mailto:education@msudenver.edu)

Website: [Special Education, Early Childhood and Culturally and Linguistically Diverse Education Department Website](#)

## *Culturally and Linguistically Diverse Education Endorsement Program*

The Culturally and Linguistically Diverse (CLD) Education Endorsement is an additional credential that all licensed educators in the state of Colorado can add to their teaching license. The CLD Endorsement provides educators the skills and knowledge to support second language learners in both their English language development and their overall academic achievement. The CLD Endorsement is a K-12 credential that is officially awarded by the Colorado Department of Education, upon Institutional recommendation from MSU Denver, School of Education. A minimum of C- is required for all courses in order to successfully complete the CLD endorsement.

### Required Core Courses

- CLD 2890 - Second Language Acquisition: K-12 Educational Implications **Credits:** 3
- CLD 3290 - Literacy Development for Culturally and Linguistically Diverse Students K-12 **Credits:** 3
- CLD 3310 - Integrated Methods of Teaching English as a Second Language **Credits:** 3

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits:** 3
- CLD 3910 - Assessment of English Language Learners **Credits:** 3
- ANT 2330 - Cross-Cultural Communication **Credits:** 3  
OR
- COMM 3000 - Diversity and Communication in the U.S. **Credits:** 3

Subtotal: 18 credits

## One of the following depending on licensure status:

### **Additional Course for Option 1: (Pre-service Teachers)**

- CLD 4590 - Culturally and Linguistically Diverse: ESL Student Teaching and Seminar **Credits:** 6

Total for Option 1: 24 credits

### **Additional Course for Option 2: (Licensed Educators)**

- CLD 4520 - Field Experience in Culturally and Linguistically Diverse Education **Credits:** 3

Total for Option 2: 21 credits

## ***Early Childhood Education Major, B.A.***

[Department of Special Education, Early Childhood and Culturally and Linguistically Diverse Education](#)

[School of Education](#)

Available Program  
Format(s): [In-Person](#)

## **About the Program**

The Early Childhood Education (ECE) Major is designed to prepare students to become highly effective and culturally responsive teachers, coaches, advocates, and policy makers who promote quality care and education for young children, birth through age eight. ECE students take classes and participate in field experiences that support the knowledge, understandings, and competencies established by the National Association for the Education of Young Children (NAEYC), the Colorado Department of Education (CDE), and the Colorado Department of Human Services (CDHS) to ensure successful work with children in inclusive classrooms and diverse settings.

The Early Childhood Education Major offers a Bachelor of Arts (BA) degree with two concentration options leading to licensure or early learning specialization. Students graduating from MSU Denver with a BA degree in Early Childhood Education will meet current Director Qualifications for a Large Childcare Center.

[Early Childhood Education Concentrations](#)

- **Licensure: Early Childhood Educator:** This option is specifically designed for those students who seek to become Colorado Department of Education (CDE) licensed teachers of children, birth through age eight. Licensure path culminates in either a 12 credit one semester student teaching experience (ECE 4390) or a 16 credit two semester residency consisting of both ECE 4415 in fall and ECE 4425 in spring.
- **Early Learning Specialization:** This option is specifically for those students who seek to become 1) early childhood teachers, directors, and coaches in centers, districts, and non-profit agencies that require Colorado Department of Human Services (CDHS) credentials but do not require CDE teacher licensure; OR 2) licensing specialists, family advocates, quality improvement raters, and policy experts for young children and families; OR 3) candidates who choose to pursue advanced studies in early childhood education, special education, social work, educational policy, child development, or other related fields.

## **Student Outcomes**

The Metropolitan State University of Denver (MSU Denver) ECE degree provides a strong foundation in:

- young children's development and learning;
- observation, documentation and assessment;
- effective teacher research;
- preparation to teach literacy, math, science, social studies;
- meaningful curriculum design;
- differentiation for all learners, including children with special needs, cultural and linguistic differences, and socio-economic inequality;
- trauma-informed and social justice pedagogy;
- developmentally effective approaches;
- building family and community relationships; and
- becoming an early childhood professional.

## **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## **Program Requirements**

- A total of 120 semester hours are required for graduation.
- A grade of C- or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Please note: The majority of preschool and primary clinical experience hours occur in the mornings and afternoons in designated classrooms supervised by licensed teachers. Some courses require

ECE students to work with children in unsupervised situations that may take place in the evenings or weekends.

- This program is defined as an extended major.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- **Recommended:** MTH 1610 - Integrated Mathematics I as a prerequisite to MTL 3600 - Mathematics of the Elementary Curriculum
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.
- ECE 3860 - Cultural Socialization of Children is required for the Early Childhood major and meets this requirement.

## Courses Required for the Major: 63 credits

- ECE 2100 - Introduction to Early Childhood Education **Credits:** 3
- ECE 2310 - Families and Communities: Advocacy and the Law **Credits:** 3
- ECE 2330 - Creativity and Expressive Arts for the Young Child **Credits:** 3
- ECE 2345 - Administration of Early Childhood Programs **Credits:** 4
- ECE 2360 - Infants and Toddlers I **Credits:** 3
- ECE 2370 - Curriculum for the Young Learner **Credits:** 3
- ECE 2400 - Development and Characteristics of Early Learners **Credits:** 3
- ECE 2500 - Health, Safety and Nutrition **Credits:** 3

- ECE 2600 - The Exceptional Child **Credits:** 3
- ECE 2950 - Developmentally Effective Practice (DEP) I: The Intentional Preschool Teacher **Credits:** 3
- ECE 2970 - Supporting Social Emotional Competence **Credits:** 3
- ECE 3120 - Early Literacy Development: Birth to Age 5 **Credits:** 3
- ECE 3140 - Math and Science: Birth to Age 5 **Credits:** 3
- ECE 3150 - Developmentally Effective Practice II: Planning for Beginning Readers **Credits:** 4
- ECE 3350 - Documentation and Assessment in Early Childhood Education **Credits:** 3
- ECE 3500 - Teaching with Children's Literature **Credits:** 3
- ECE 3610 - Teaching for Social Justice **Credits:** 4
- ECE 3750 - The Young Culturally and Linguistically Diverse Learner **Credits:** 3
- ECE 3860 - Cultural Socialization of Children **Credits:** 3
- EDT 3010 - Integrating Educational Technology into Teaching **Credits:** 3

## Additional Courses for the Teacher

### Licensure Concentration: 16 credits

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits:** 3
- ECE 4000 - Differentiation of Literacy Instruction **Credits:** 3  
or
- RDG 3111 - Emergent Literacy K-3 **Credits:** 3
- ECE 4340 - Math and Science: Ages 5-8 **Credits:** 3
- ECE 4370 - Developmentally Effective Practice III: Teaching in the Content Areas **Credits:** 4
- MTL 3600 - Mathematics of the Elementary Curriculum **Credits:** 3

## Additional Courses for the Early Learning Specialization: 15 credits

- ECE 3250 - Advocacy in Early Childhood Education **Credits:** 3  
Electives: 12 credits
- Early Learning Specialization concentration students should consult with an Early Childhood Education advisor on specific coursework for the 12 elective hours.

## Senior Experience: 6-16 credits

- Teacher Licensure Concentration:
- ECE 4390 - Student Teaching and Seminar: Early Childhood (Preschool through Third Grade) Credits: 6,12\*
- Early Learning Specialization:
- ECE 4350 - Senior Experience in Early Childhood Education Credits: 6

\*The following two courses can be taken as a combined alternative to ECE 4390. Please speak with an advisor about this option.

- ECE 4415 - Early Childhood Residency I Credits: 7
- ECE 4425 - Early Childhood Residency II Credits: 9

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Required Major Courses	63 credits
Additional Teacher Licensure Requirements (choose this or Early Learning Specialization)	16 credits
Additional Requirements for the Early Learning Specialization (choose this or Teacher Licensure)	15 credits
Senior Experience	6-16 credits
Unrestricted Electives	0-3 credits
<b>Total for the Early Childhood Education Major, B.A.</b>	<b>Minimum of 120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Early Childhood Education Minor (Non-Licensure)

The Early Childhood Education Minor is designed for individuals interested in developing a foundational knowledge of the care and education of young children. Candidates should understand that this 18-semester-hour program of study fulfills MSU Denver's requirements for a minor, but it does not lead to licensure in early childhood education. A grade of "C-" or better is required for each course in this program to count toward the minor.

## ECE Required Courses

The following courses are required for the Early Childhood Education Minor:

- ECE 2100 - Introduction to Early Childhood Education **Credits: 3**
- ECE 2970 - Supporting Social Emotional Competence **Credits: 3**

**Subtotal: 6 credits**

## ECE Elective Courses

Twelve additional credits are required for the Early Childhood Education minor, 3 of which must be upper-division. Students should consult with an ECE advisor to ensure coursework is aligned with individual educational goals.

**Subtotal: 12 credits**

**Early Childhood Education Minor Total: 18 credits**

## Early Childhood Education Post-Baccalaureate Licensure Program

The Early Childhood Education (ECE) Post-baccalaureate program is designed to prepare degreed individuals to become highly effective and culturally responsive teachers and related professionals who promote quality care and education for young children. This program includes a 12-credit, one semester student teaching experience. All program courses must be passed with a C- or better.

Candidates who successfully complete the program will earn recommendation to the Colorado Department of Education for teacher licensure in Early Childhood Education (ages 0-8).

Candidates must earn admission to this program through the School of Education to complete required coursework. Visit the School of Education website for details.

## Required Courses

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**
- ECE 2100 - Introduction to Early Childhood Education **Credits: 3**
- ECE 2600 - The Exceptional Child **Credits: 3**
- ECE 2950 - Developmentally Effective Practice (DEP) I: The Intentional Preschool Teacher **Credits: 3**
- ECE 2970 - Supporting Social Emotional Competence **Credits: 3**
- ECE 3150 - Developmentally Effective Practice II: Planning for Beginning Readers **Credits: 4**
- ECE 3350 - Documentation and Assessment in Early Childhood Education **Credits: 3**
- ECE 3750 - The Young Culturally and Linguistically Diverse Learner **Credits: 3**
- ECE 4000 - Differentiation of Literacy Instruction **Credits: 3**
- ECE 4340 - Math and Science: Ages 5-8 **Credits: 3**
- ECE 4370 - Developmentally Effective Practice III: Teaching in the Content Areas **Credits: 4**
- ECE 4390 - Student Teaching and Seminar: Early Childhood (Preschool through Third Grade) **Credits: 6,12**
- MTH 1610 - Integrated Mathematics I **Credits: 3**
- MTL 3600 - Mathematics of the Elementary Curriculum **Credits: 3**

Grand Total For Program: 53 credit hours

## ***Spanish Culturally and Linguistically Diverse (CLD) Bilingual Education Specialist K-12 Added Endorsement Program***

The Culturally & Linguistically Diverse (CLD) Bilingual Education Specialist K-12 Endorsement is an additional credential that all licensed educators in the state of Colorado can add to their teaching license. This endorsement has been approved by the state to be recognized as an official program and is a non-degree and non-certificate program. Completion of this program will lead to a recommendation for an added endorsement through the Colorado Department of Education (CDE). This recommendation will come from the School of Education and not the University's Office of the Registrar.

A minimum grade of a C- is required in all courses to successfully complete the program and earn a recommendation for this endorsement.

This endorsement is intended for those pre-service and in-service teachers who want to work in bilingual Spanish classrooms. Coursework will provide educators the pedagogy, skills, and knowledge to support second language learners in both their primary language (Spanish) as well as English language development.

The Oral Proficiency Interview is a requirement for specific courses in the program, please see individual course descriptions for details. In addition, a capstone project which measures reading and writing proficiency in Spanish is also required. A score of "advanced low" (grading criteria put forth by the American Council of Teachers of Foreign Language) (ACTFL) must be achieved in order to acquire this endorsement. These exams must be scheduled with the Modern Languages Department.

## **Elementary, Special Education and Early Childhood Majors and Licensed Teacher Option**

In addition to coursework, students must also demonstrate Spanish oral, reading, and writing proficiency. Oral proficiency will be measured by the Oral Proficiency Interview and reading and writing proficiency will be measured by the Capstone Project. Students must pass these exams with a score of "advanced low."

- CLD 2890 - Second Language Acquisition: K-12 Educational Implications **Credits: 3**
- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**
- CLD 3910 - Assessment of English Language Learners **Credits: 3**
- CLD 3930 - Spanish Bilingual Education Theory and Research **Credits: 3**

- CLD 3940 - Spanish Bilingual Language and Literacy Development **Credits: 3**
  - CLD 3950 - Spanish Bilingual Methods and Materials **Credits: 3**
  - CLD 3951 - Spanish Culturally and Linguistically Diverse (CLD) Bilingual Education Specialist K-12 Added Endorsement Field Experience **Credits: 1**
- Total: 19

## **Modern Language Spanish Major Option**

In addition to coursework, students must also demonstrate Spanish oral, reading, and writing proficiency. Oral proficiency will be measured by the Oral Proficiency Interview and reading and writing proficiency will be measured by the Capstone Project. Students must pass these exams with a score of "advanced low."

Because field experiences are structured differently in the School of Education (SoE) and the Modern Languages Department, there was a need to require different field experiences courses for this endorsement.

- CLD 2890 - Second Language Acquisition: K-12 Educational Implications **Credits: 3**
  - CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**
  - CLD 3910 - Assessment of English Language Learners **Credits: 3**
  - CLD 3930 - Spanish Bilingual Education Theory and Research **Credits: 3**
  - CLD 3940 - Spanish Bilingual Language and Literacy Development **Credits: 3**
  - CLD 3950 - Spanish Bilingual Methods and Materials **Credits: 3**
  - LANG 4961 - Field Experience in Teaching World Languages in K-12 **Credits: 1**
- Total: 19

## ***Special Education Major, B.A.***

[Department of Special Education, Early Childhood and Culturally and Linguistically Diverse Education](#)

Available Program  
Format(s): [In-Person](#)

[School of Education](#)

## **About the Program**

The Special Education Major is a course of study that will prepare candidates to meet the educational needs of children and adolescents with mild to severe disabilities. The curriculum incorporates the current approved statewide standards for teachers in Colorado/Special Education Generalist, the Teacher Quality Standards, and the current Council for Exceptional Children (CEC) International Standards for the Preparation and Certification of Special Education Teachers. In addition to the special education core, all special education majors must complete a General Studies program as well as courses in elementary

and secondary education. The program's clinical foundation provides teacher candidates authentic opportunities to learn and apply best practices in a variety of classrooms for students with disabilities from kindergarten through high school.

Teacher candidates graduate with appropriate preparation for special education generalist licensure K-12.

The Generalist licensure exam must be passed prior to state licensure.

## Student Outcomes

The special education curriculum is organized into sequences of course work that provide candidates with guidance in program planning. They are comprised of course clusters that candidates may take in any order; however, it is suggested that students completed all courses in a sequence before moving on to the next sequence when possible. Students are highly encouraged to meet with a faculty advisor to discuss their class schedule.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 125 semester hours are required for graduation.
- A grade of "C-" or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- **Recommended:** MTH 1610 - Integrated Mathematics I
- Arts and Humanities (6 credits)
- **Recommended:** ARTE 2060 - The Arts and Creative Thinking
- **Recommended:** ENG 2460 - Introduction to Children's Literature
- Historical (3 credits)
- **Recommended:** HIS 1210 - American History to 1865 or HIS 1220 - American History since 1865
- Natural and Physical Sciences (6 credits)

- **Recommended:** SCI 2600 - Integrated Biology and Earth Science and SCI 2610 - Integrated Physical and Chemical Sciences
- Social and Behavioral Sciences (6 credits)
- **Recommended:** GEG 1000 - World Regional Geography
- **Recommended:** PSY 1800 - Developmental Educational Psychology
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Special Education Major Content Course

### Requirements: 15 credits

All special education majors must complete the following Content Course Requirements. These courses prepare candidates to pass the elementary content exam required of all special education candidates prior to recommendation for licensure. Most of these courses will also satisfy the general studies requirements noted in the General Studies section above.

Note: Up to 12 credits from this section may be counted toward the credit total for General Studies.

- MTH 1610 - Integrated Mathematics I **Credits:** 3
- MTH 2620 - Integrated Mathematics II **Credits:** 3
- PSY 1800 - Developmental Educational Psychology **Credits:** 3
- SCI 2600 - Integrated Biology and Earth Science **Credits:** 3
- SCI 2610 - Integrated Physical and Chemical Sciences **Credits:** 3

## Special Education Major Core:

The special education curriculum is organized into sequences of course work that provide candidates with guidance in program planning. They are comprised of course clusters that candidates may take in any order; however, it is suggested that students completed all courses in a sequence before moving on to the next sequence when possible. Students are highly encouraged to meet with a faculty advisor to discuss their class schedule.



## Sequence I Courses: 18 credits

- SED 2200 - Social Justice and Disability Issues for Educators **Credits: 3**
- SED 2700 - Social/Emotional Development and Disorders **Credits: 3**
- SED 3100 - Communication Supports for Inclusive Classrooms **Credits: 3**
- SED 3300 - Introduction to Responsive Pedagogy **Credits: 3**
- SED 3600 - Exceptional Learners in the Classroom **Credits: 3**  
Take one of the following two courses:
- CLD 2890 - Second Language Acquisition: K-12 Educational Implications **Credits: 3**  
Or
- SLHS 2100 - Language Acquisition and Development **Credits: 3**

## Sequence II Courses: 16 credits

- SED 3050 - Assessment and Instructional Planning **Credits: 3**
- SED 3250 - Effective Behavioral Support Systems **Credits: 3**
- SED 3625 - Instructional Methods for Supporting Students with Disabilities **Credits: 3**
- SED 3650 - Understanding Special Education Law and the IEP **Credits: 3**
- SED 3820 - Elementary Literacy: Intervention and Instruction for Students with Diverse Learning Needs **Credits: 3**
- SED 3821 - Special Education Field Experience: Teaching Students with Mild/Moderate Disabilities **Credits: 1**

## Sequence III Courses: 17 credits

- EDU 3550 - Teaching Elementary School Science and Health **Credits: 3**
- EDU 3665 - Field Experience: Teaching Science, Health and Mathematics **Credits: 1**
- EDU 3666 - Teaching Elementary School Mathematics **Credits: 3**
- SED 3550 - Introduction to Inclusive Supports and Services for Students with Significant Needs **Credits: 3**
- SED 3950 - Mathematics Instruction for Students with Disabilities **Credits: 3**
- SED 4100 - Including Students with Significant Support Needs **Credits: 3**
- SED 4101 - Teaching Students with Significant Support Needs **Credits: 1**

## Sequence IV Course: 14 credits

- EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools **Credits: 3**
- EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools **Credits: 1**
- SED 3675 - Transition Planning for Inclusive Adulthoods **Credits: 3**

- SED 4200 - Reading Disabilities and Content Instruction **Credits: 3**
- SED 4300 - Assessment and Methods for Emotional and Behavioral Disorders **Credits: 3**
- SED 4301 - Special Education Field Experience: Teaching Students with Emotional/Behavioral Disabilities **Credits: 1**

## Sequence V Courses: 12 credits

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**
- EDT 3010 - Integrating Educational Technology into Teaching **Credits: 3**
- SED 4440 - K-12 Practicum in Special Education **Credits: 3 or 6** (Special Education Majors are required to take SED 4440 for 6 credits.)

## Senior Experience: 12 credits

### Sequence VI Courses (Student Teaching)

Candidates must take 12 credits of student teaching, which may include either 12 credit hours of Special Education student teaching or 6 hours of Special Education and 6 hours of Elementary. Students who simultaneously complete the Culturally and Linguistically Diverse (CLD) Education endorsement will take 6 hours of special education and 6 hours of CLD student teaching. Students must consult with their advisor to identify the appropriate courses.

- CLD 4590 - Culturally and Linguistically Diverse: ESL Student Teaching and Seminar **Credits: 6**
- EDU 4190 - Elementary Student Teaching and Seminar: K-6 **Credits: 6,12**
- SED 4490 - Special Education Student Teaching and Seminar **Credits: 6 or 12**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
Content Course Requirements	15 credits
Major Course Requirements (Sequence I-V)	77 credits
Senior Experience	12 credits
<b>Total for the Special Education Major, B.A.</b>	<b>125 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**



**Up to 12 of the 33 General Studies credits in this program may be fulfilled through requirements for the degree.**

## ***Special Education Minor (Non-Licensure)***

The minor in Special Education is designed to prepare teachers, physical educators, counselors, and professionals to work with individuals with exceptional needs in educational, therapeutic, and recreational settings. Candidates should understand that this 18 hour course of study fulfills MSU Denver's requirements for a minor, but it does not lead to licensure. A grade of C- or better is required for each course in this program to count toward the minor. Admission to the School of Education will be required to complete this minor. Visit the School of Education website for more information.

### **Special Education Minor Courses:**

- SED 3600 - Exceptional Learners in the Classroom **Credits: 3**

**PLUS a minimum of 15 hours selected in consultation with a Special Education advisor, from the following courses:**

- SED 2200 - Social Justice and Disability Issues for Educators **Credits: 3**
- SED 2700 - Social/Emotional Development and Disorders **Credits: 3**
- SED 3050 - Assessment and Instructional Planning **Credits: 3**
- SED 3250 - Effective Behavioral Support Systems **Credits: 3**
- SED 3550 - Introduction to Inclusive Supports and Services for Students with Significant Needs **Credits: 3**
- SED 3625 - Instructional Methods for Supporting Students with Disabilities **Credits: 3**
- SED 3650 - Understanding Special Education Law and the IEP **Credits: 3**
- SED 3675 - Transition Planning for Inclusive Adulthoods **Credits: 3**
- SED 3820 - Elementary Literacy: Intervention and Instruction for Students with Diverse Learning Needs **Credits: 3**
- SED 3950 - Mathematics Instruction for Students with Disabilities **Credits: 3**
- SED 4200 - Reading Disabilities and Content Instruction **Credits: 3**
- SED 4300 - Assessment and Methods for Emotional and Behavioral Disorders **Credits: 3**

**Total for Minor: 18**

## ***Special Education Post-Baccalaureate Licensure Program***

MSU Denver's post-baccalaureate licensure program in Special Education provides candidates with a case-based curriculum designed to prepare candidates to meet the needs of children and adolescents with mild to severe disabilities. This professional education sequence provides content that emphasizes developing effective decision-making in diverse contexts and leads to a Special Education Generalist license. Candidates who do not have a baccalaureate degree should pursue the Special Education undergraduate major. All candidates who enroll in the post-baccalaureate licensure program for Special Education Generalist must have an education psychology and math content prerequisite course. Candidates must see their special education advisors at least twice a year for information regarding program planning. The Generalist licensure exam must be passed prior to state licensure. All courses must have a grade of C- or better in order to count toward the Special Education Post-Bac program.

### **General Course Requirements: 6 credits**

- PSY 1800 - Developmental Educational Psychology **Credits: 3**
- MTH 1610 - Integrated Mathematics I **Credits: 3**

### **Sequence I Courses: 6 credits**

- SED 3600 - Exceptional Learners in the Classroom **Credits: 3**
- SED 3650 - Understanding Special Education Law and the IEP **Credits: 3**

### **Sequence II Courses: 19 credits**

- CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners **Credits: 3**
- SED 3550 - Introduction to Inclusive Supports and Services for Students with Significant Needs **Credits: 3**
- SED 3625 - Instructional Methods for Supporting Students with Disabilities **Credits: 3**
- SED 3675 - Transition Planning for Inclusive Adulthoods **Credits: 3**
- SED 3820 - Elementary Literacy: Intervention and Instruction for Students with Diverse Learning Needs **Credits: 3**
- SED 3821 - Special Education Field Experience: Teaching Students with Mild/Moderate Disabilities **Credits: 1**
- SED 3950 - Mathematics Instruction for Students with Disabilities **Credits: 3**

### **Sequence III Courses: 17 credits**

- SED 3050 - Assessment and Instructional Planning **Credits: 3**
- SED 4200 - Reading Disabilities and Content Instruction **Credits: 3**
- SED 3250 - Effective Behavioral Support Systems **Credits: 3**
- SED 4100 - Including Students with Significant Support Needs **Credits: 3**
- SED 4101 - Teaching Students with Significant Support Needs **Credits: 1**

- SED 4300 - Assessment and Methods for Emotional and Behavioral Disorders **Credits:** 3
- SED 4301 - Special Education Field Experience: Teaching Students with Emotional/Behavioral Disabilities **Credits:** 1

## Sequence IV Course: 3 credits

- SED 4440 - K-12 Practicum in Special Education **Credits:** 3 or 6

## Sequence V Courses: 12 credits

- SED 4490 - Special Education Student Teaching and Seminar **Credits:** 6 or 12

## Totals

General Course Requirements: 6 credits  
 Licensure Total: 57 credits  
 Grand Total: 63 credits

## *Special Education Undergraduate Added Endorsement Program*

The Special Education Added Endorsement program prepares students to become highly effective and culturally responsive teachers of students with disabilities in K-12 settings. This Special Education Generalist (K-12) added endorsement program is for licensed or pre-service teachers interested in taking undergraduate coursework leading to an added endorsement in special education on their Colorado teaching license. Students seeking an endorsement in special education must either be accepted to a School of Education teacher licensure program OR hold a valid teaching license in Colorado. Upon successful completion of this added endorsement program, candidates will be recommended for added endorsement in Special Education through the Colorado Department of Education.

## Required Courses

These are the courses we require for recommendation to the state for added endorsement in Special Education (Generalist K-12).

- SED 3050 - Assessment and Instructional Planning **Credits:** 3
- SED 3100 - Communication Supports for Inclusive Classrooms **Credits:** 3
- SED 3250 - Effective Behavioral Support Systems **Credits:** 3
- SED 3600 - Exceptional Learners in the Classroom **Credits:** 3
- SED 3625 - Instructional Methods for Supporting Students with Disabilities **Credits:** 3
- SED 3650 - Understanding Special Education Law and the IEP **Credits:** 3
- SED 3675 - Transition Planning for Inclusive Adulthoods **Credits:** 3

- SED 3820 - Elementary Literacy: Intervention and Instruction for Students with Diverse Learning Needs **Credits:** 3
- SED 3950 - Mathematics Instruction for Students with Disabilities **Credits:** 3

## Recommended Courses

These are additional courses that are recommended to provide students with a deeper understanding of special education content and instruction and to give students opportunities to take field experience working with individuals who have disabilities. These courses do not fulfill the Colorado Department of Education added special education endorsement requirements.

- SED 3300 - Introduction to Responsive Pedagogy **Credits:** 3
- SED 3821 - Special Education Field Experience: Teaching Students with Mild/Moderate Disabilities **Credits:** 1
- SED 4200 - Reading Disabilities and Content Instruction **Credits:** 3
- SED 4300 - Assessment and Methods for Emotional and Behavioral Disorders **Credits:** 3

## Alternative Licensure Teacher Preparation Programs

### *One Year General Education - ALP*

MSU Denver offers a third alternative pathway to regular education elementary and secondary licensure. This Colorado Department of Education-approved, One-year Alternative Licensure Program (ALP 1) has been created to assist candidates with at least two years of contractual instructional experience. This program is based on the Colorado Teacher Quality Standards for teachers. All ALP 1 candidates must attend a summer training module and create a teaching portfolio documenting proficiency on approximately half of the Colorado Teacher Quality Standards for teachers based upon their previous contracted teaching experiences. Each candidate's portfolio is then reviewed by the ALP portfolio committee, and an Individual Training Plan (ITP) is created, which identifies which standards were addressed successfully in the ALP 1 candidate's portfolio and which standards must be addressed via ALP-1 assignments and classroom observations during the coming academic year.

After being hired by a Front Range-school district, charter school, or accredited private school, ALP candidates must enroll in the Alternative Licensure Program at MSU Denver. The Alternative Licensure Program is designed to be completed in one school year, during which each candidate will work as both a full-time teacher and full-time student.

The candidate earns 25 credit hours by attending MSU Denver seminar courses. Additionally, each candidate is responsible for completing the individualized training plan (ITP) in one year. By the end of the year, having completed all program requirements, the candidate will be recommended for an initial license by MSU

Denver. College credit received for participating in the ALP is not interchangeable with the existing traditional licensure program curriculum and credit. Candidates must successfully complete the entire year to receive any college credit for the program and MSU Denver's recommendation for licensure.

To participate in ALP 1, all candidates must:

- Have an Alternative License pending employment/program status from the Colorado Department of Education (CDE).

AND

- Have a full time teaching job in the same content as the Alternative License in a front range school district or charter school

To get an Alternative License, the candidate must:

- Submit the alternative license application to the CDE and include transcripts from a regionally-accredited college or university, showing a Baccalaureate degree.
- Pass a Colorado Bureau of Investigation fingerprint check.

AND

- Elementary teachers must pass the Praxis II (5001) Elementary Education content exam.
- ECE teachers must pass the PRAXIS II (5024) Early Childhood exam (ages birth through 8 years old) OR the PRAXIS II (5001) Elementary Education content exam OR have the 24 semester hours of required content specific coursework shown on the transcript(s).
- Secondary teachers must either pass the Praxis II content test OR have the 24 semester hours of required content specific coursework shown on the transcript(s).

In addition, all ALP 1 candidates will be required to:

- Verify two years of contractual instructional teaching experience in their content area.
- Demonstrate proficiency on approximately half of the Teacher Quality Standards for Teachers by means of a portfolio.

Please call 303-615-0013 for further information about the program or visit the Alternative Licensure Program website: [msudenver.edu/alp](http://msudenver.edu/alp).

## Required Courses: 25 credits

- ALP 4491 - Alternative Licensure Program I **Credits:** 10
- ALP 4492 - Alternative Licensure Program II **Credits:** 15

## *Two Year General Education - ALP*

One alternative pathway to regular education elementary and secondary licensure at MSU Denver is the Colorado Department of Education-approved, Two-year Alternative Licensure Program. After being hired by a metro Denver public school district, charter school, or accredited private school, ALP candidates must enroll in the AL program. The program requires an intensive orientation before school starts, weekly classes for two semesters, submission of a portfolio/teacher work sample and extensive ongoing coaching and mentoring throughout the first two years of teaching.

ALP candidates earn 30 semester credit hours by participating in intensive coursework through weekly instruction designed to build the skills and knowledge necessary to effectively teach and successfully manage a classroom along with classroom mentoring and coaching by master teachers and ALP faculty. At the end of the second year, the ALP staff will consult to determine if the candidate has successfully completed all program requirements and should be recommended for a Colorado teacher's license. College credit received for participation in ALP is not interchangeable with the existing traditional licensure program curriculum and credit.

To participate in ALP 2, all candidates must:

- Have an Alternative License pending employment/program status from the Colorado Department of Education (CDE).

AND

- Have a full time teaching job in the same content as the Alternative License in a front range school district or charter school.

To get an Alternative License, the candidate must:

- Submit the alternative pathway application to the CDE, and include transcripts from a regionally-accredited college or university showing a baccalaureate degree.
- Pass a Colorado Bureau of Investigation fingerprint check.

AND

- Elementary teachers must pass the Praxis II (5004) Elementary Education content exam.
- ECE teachers must pass the PRAXIS II (5024) Early Childhood exam (ages birth through 8 years old) OR the PRAXIS II (5001) Elementary Education content exam OR have the 24 semester hours of required content specific coursework shown on the transcript(s).
- Secondary teachers must pass the Praxis II content exam OR have the 24 semester hours of required content specific coursework shown on the transcript(s).

## Year 1

### Required Courses: 30 credits

- ALP 4493 - Educational Theory and Methods **Credits:** 10
- ALP 4494 - Advanced Field Experience **Credits:** 20

## Year 2

During the second year of the ALP 2 program, candidates will work with their MSU Denver coach to complete and document all the standards and elements found in the Colorado Teacher Quality Standards for Teachers via artifacts, observations, and a portfolio which includes a teacher work sample. After successfully demonstrating proficiency on all Colorado Teacher Quality Standards during year two of the program, the employing school/district and the ALP staff will consult to determine if the candidate has successfully completed all program requirements and should be recommended for a Colorado teacher's license.

Call 303-615-0013 for more information about the program or visit the website, [msudenver.edu/alp](http://msudenver.edu/alp).

## ***Special Education - ALP***

The Alternative Licensure Program Special Education is an Alternative Licensure Program that provides an alternative pathway to K-12 licensure as a Special Education Generalist. Courses required for this program are the same as those required for the post-baccalaureate licensure program for Special Education Generalist.

To enroll in ALP SED, candidates must:

- Have an Alternative License pending employment/program status from the Colorado Department of Education (CDE).

AND

- Have a full-time special education teaching job in a Front Range school district or charter school.

To get an Alternative License, the candidate must:

- Submit the alternative pathway application to the CDE and include transcripts from a regionally-accredited college or university, showing a baccalaureate degree.
- Pass a Colorado Bureau of Investigation fingerprint check.

AND

- Pass the Praxis II (5001) Elementary Education Content Exam.

The program requires an intensive orientation before school begins, weekly classes for four semesters, and a four-week practicum during the summer between years one and two.

At the end of the second year, the ALP SED staff will consult to determine if the candidate has successfully completed all program

requirements and should be recommended for a Colorado teacher's license.

Please call 303-615-0013 for further information about the program, or visit the Alternative Licensure Program website: [msudenver.edu/alp](http://msudenver.edu/alp).

## **Required Courses: 48 credits**

- ALP 2200 - Diversity and Multicultural Education **Credits: 3**
- ALP 3600 - Exceptional Learners in the Classroom **Credits: 3**
- ALP 4050 - Assessment and Instructional Planning **Credits: 3**
- ALP 4250 - Effective Behavioral Support Systems **Credits: 3**
  
- ALP 3650 - Individualized Education and Curriculum **Credits: 3**
- ALP 3675 - Transition Planning and Instruction **Credits: 3**
- ALP 3820 - Elements of Literacy Instruction for Students with Disabilities **Credits: 3**
- ALP 3950 - Mathematics Instruction for Students with Disabilities **Credits: 3**
- ALP 4200 - Reading Disabilities and Content Instruction **Credits: 3**
  
- ALP 4440 - K-12 Practicum in Special Education **Credits: 3**
  
- ALP 3750 - Assessment, Methods, and Assistive Technology for Severe Disabilities **Credits: 3**
- ALP 4300 - Assessment and Methods for Emotional and Behavioral Disorders **Credits: 3**
  
- ALP 4490 - Special Education Student Teaching and Seminar **Credits: 12**

# School of Hospitality

The School of Hospitality is uniquely situated in the center of downtown Denver's hospitality industry.

Our programs are specifically designed to give you innovative leadership skills, arm you with the latest technology, and effectively educate you. When you graduate from our program, you can be confident you will be well prepared to start your career in the hospitality industry.

Our program is ever-changing to meet the student's needs. We are continuing to add online courses, as well as weekend and night courses. Our faculty have years of actual experience and they continue to be an active part of the hospitality industry.

Our mission is to cultivate a community of learning that prepares students for leadership roles, addressing local and global opportunities in the Hospitality Industry.

Our shared values reflect a foundation of respect for the leadership skills necessary for our graduates to provide a quality hospitality experience for customers, balanced with respect for ourselves, our resources, and the effect of our decisions on the environment, our diverse teams, and the community to which we serve.

Our vision is to provide Relevant, Open-minded, Global, Unconventional Education. Go ROGUE with us.

## Rita and Navin Dimond Department of Hotel Management

Location: Hospitality Learning Center, Room 209

Phone: 303-615-1616

E-Mail: [schoolofhospitality@msudenver.edu](mailto:schoolofhospitality@msudenver.edu)

Website: [Rita and Navin Dimond Department of Hotel Management Department Website](#)

**The Rita and Navin Dimond Department of Hotel Management prepares** students for operations and management positions in various segments of the hospitality industry. Named for the founders and owners of Stonebridge Companies, one of the nation's leading development and hospitality management companies, the Rita and Navin Dimond Department of Hotel Management reflects the weight of the Dimonds' esteemed reputation through a shared commitment to excellence and a passion for fostering future hospitality leaders.

## *Airport Hospitality Management Certificate*

The Airport Hospitality Management Certificate at MSU Denver focuses upon the management of Airport facilities that include hospitality outlets. To be awarded the Airport Hospitality Management Certificate, students must complete the Airport Hospitality Operations Certificate. The combination of both the operational and management levels of Airport Operations address the industry's need for professionals who can manage the complexities of food, beverage, lodging, and event services within an airport setting.

A grade of "C" or above is required in all courses to be awarded the Airport Hospitality Management Certificate.

## Required Courses: 22 credits

Core content courses in hospitality management for the Airport Hospitality Management Certificate program. The core is supplemented by an applied field experience, and advanced airport planning or internship course.

- EVT 2020 - Event Project Planning **Credits: 3**
- HLDR 2200 - Quality Service Leadership **Credits: 3**
- HLDR 3200 - Talent Leadership **Credits: 3**
- HLDR 3600 - Organizational Leadership for Hospitality **Credits: 3**
- HLDR 4000 - Cost Control for Hospitality and Tourism **Credits: 3**
- RST 4100 - Applied Foodservice Operations **Credits: 4**

Choose one of the following three credit courses:

- AES 3980 - Internship in Aviation and Aerospace Science **Credits: 1-15**
- AES 4210 - Airport Planning and Management II **Credits: 3**
- HLDR 3980 - Internship in Hospitality **Credits: 3**

## Total for Certificate: 22 credits

Notes:

- The Airport Hospitality Operations Certificate is a required prerequisite for the Airport Hospitality Management Certificate.
- The minimum passing grade of C is required in all courses to receive the Airport Hospitality Management Certificate.

## *Airport Hospitality Operations Certificate*

The Airport Hospitality Operations Certificate at MSU Denver integrates the expertise of Airport Management with the dynamic field of Hospitality Operations. The coursework within the certificate, focuses upon the skill set of Food, Beverage, Lodging, and Event Operations within an airport setting. The certificate program addresses the industry's need for professionals who can coordinate the complexities of hospitality operations to provide an innovative and unique airport experience.

A grade of "C" or above in all courses is required to award the Airport Hospitality Operations Certificate.

## Required Courses: 22 credits

The following courses are required to receive the Airport Hospitality Operations Certificate (22 credits). A minimum grade of C or above is required in all courses to be awarded the Airport Hospitality Operations Certificate.

Select either AES 1010 or AES 1100:

- AES 1010 - Introduction to Aviation and Aerospace Operations **Credits: 4**
- AES 1100 - Private Pilot Ground **Credits: 4**
- AES 4200 - Airport Planning and Management I **Credits: 3**
- BVG 2015 - Beverage Management Principles **Credits: 3**
- EVT 2010 - Introduction to The Event Industry **Credits: 3**
- HLDR 1000 - Introduction to Hospitality **Credits: 3**
- HLDR 3400 - Facilities Operations **Credits: 3**
- RST 1200 - Basic Cooking Skills **Credits: 3**

**Total Credits: 22**

## *Bar, Tap, and Tasting Room Manager Certificate*

The Bar, Tap, and Tasting Room Manager Certificate program provides an industry-relevant certificate of completion that demonstrates student completion of a broad range of financial and operational management courses. Students engage in the marketing, talent management, financial analysis, leadership, and legal requirements for a successful bar and beverage manager. The bar, tap, and tasting room industry remains one of the largest revenue generating sectors in the hospitality industry within Colorado, as well as in our national and global beverage production, sales, and service businesses.

The world-class facilities at MSU Denver, and the School of Hospitality include the Degree Restaurant and Bar, Tivoli Brewery and Tap House, Beverage Analytic Laboratory, Powered by Siebel, the Springhill Suites Downtown, Sensory Analysis Lab, Culinary Demonstration Theater, Food Laboratories, Wine Cellar Laboratory, Pilot Brewery, Fermentation Laboratory, and state of the art multi-media classrooms. The Bar, Tap, and Tasting Room Manager Certificate program assists non-degree and degree-seeking students in creating a pathway to a managerial career in the field. The Beverage Scholar Certificate is a required pre-requisite to the Bar, Tap, and Tasting Room Manager Certificate. A minimum passing grade of "C" or higher is required for all courses within the Bar, Tap, and Tasting Room Manager Certificate program.

## Bar, Tap and Tasting Room Manager Certificate Required Core

Core Courses within the Bar and Beverage Manager Certificate

- BVG 2015 - Beverage Management Principles **Credits: 3**
- HLDR 2200 - Quality Service Leadership **Credits: 3**
- HLDR 3950 - Product and Service Promotion for Hospitality **Credits: 3**
- HLDR 4000 - Cost Control for Hospitality and Tourism **Credits: 3**
- ACC 3120 - Financial Leadership for Hospitality **Credits: 3**
- or
- HLDR 3250 - Managerial Accounting for Hospitality **Credits: 3**

## Bar, Tap, and Tasting Room Manager Certificate Electives

Choose six credits from the following elective courses:

- BVG 1910 - Introduction to Homebrewing and Fermentation **Credits: 3**
- BVG 3220 - Beer and Food **Credits: 3**
- BVG 3683 - Beer and Spirits **Credits: 3**
- BVG 4633 - Wine and Food **Credits: 3**
- BVG 4950 - Enology: The Making of Wine **Credits: 3**

**Total Credits: 21**

## *Beverage Management Minor*

The courses in the core are required of all students, with a passing grade of a "C" or above.

## Required Courses

- BVG 2015 - Beverage Management Principles **Credits: 3**
- BVG 3010 - Beers of the World **Credits: 3**
- BVG 3613 - Wine Fundamentals **Credits: 3**
- BVG 3685 - Spirits and Mixology **Credits: 3**
- HLDR 3950 - Product and Service Promotion for Hospitality **Credits: 3**

Total Required Courses: 15

Select a total of 6 credits from the following courses (prerequisites may be required):

- BVG 3220 - Beer and Food **Credits: 3**
- BVG 3610 - Wines of the World: Variable Topics **Credits: 1 \***
- BVG 3683 - Beer and Spirits **Credits: 3**
- BVG 3750 - Alcohol Beverage Law **Credits: 3**
- BVG 4010 - Beer Styles and Service **Credits: 3**
- BVG 4633 - Wine and Food **Credits: 3**
- BVG 4950 - Enology: The Making of Wine **Credits: 3**

\*Note: BVG 3610, Wines of the World is a repeatable course, wherein students repeat the parent course (BVG

3610) as topical courses listed as, BVG 361A, BVG 361B, etc., for the desired amount of credits, maximum six credits.

**Total for Minor: 21 credits**

## *Beverage Scholar Certificate*

The Beverage Scholar Certificate program provides an industry-relevant certificate of completion that demonstrates student completion of a broad range of appreciation, production, and service of beverage courses in both alcoholic and non-alcoholic beverages, including, but not limited to, coffee, tea, beer, wine, spirits, kombucha, water, soju, sake, vermouths, bitters, and more. Students engage in their awareness of beverage styles and service through the process of sensory analysis, evaluation of beverage taste components, and measures of quality. The common industries that value beverage certifications include bars, restaurants, liquor stores, markets, tasting rooms, beverage producers, distributors, and education programs. The Beverage Scholar Certificate provides a strong foundation of beverage styles and service. It is the prerequisite program to the Bar, Tap, and Tasting Room Manager Certificate program, where students broaden their managerial skillset in the beverage industry. A minimum passing grade of "C" is required for all courses within the certificate. All courses in the Beverage Scholar Certificate are required, with no additional electives.

The School of Hospitality has existing partnerships with beverage organizations that provide credentials available to students, including, The Society of Wine Educators, National Restaurant Association, Cicerone, Master Brewers Association, and more. The world-class facilities at MSU Denver, and the School of Hospitality include the Degree Restaurant and Bar, Tivoli Brewery and Tap House, Beverage Analytics Laboratory, Powered by Siebel, the Springhill Suites Downtown, Sensory Analysis Lab, Culinary Demonstration Theater, Food Laboratories, Wine Cellar Laboratory, Pilot Brewery, Fermentation Laboratory, and state of the art multi-media classrooms.

## Beverage Scholar Certificate Core

Required courses in the Beverage Scholar Certificate

- BVG 3010 - Beers of the World **Credits:** 3
- BVG 3613 - Wine Fundamentals **Credits:** 3
- BVG 4010 - Beer Styles and Service **Credits:** 3
- BVG 3610 - Wines of the World: Variable Topics **Credits:** 1  
Note: BVG 3610, Wines of the World is a repeatable course, wherein students repeat the parent course (BVG 3610) as topical courses listed as, BVG 361A, BVG 361B, etc. until the six required credits are completed for the certificate.
- BVG 3685 - Spirits and Mixology **Credits:** 3  
or
- BVG 3683 - Beer and Spirits **Credits:** 3

**Total Credits: 18**

## *Brewery Operations Major, B.S.*

[School of Hospitality](#)

[Rita and Navin Dimond Department  
of Hotel Management](#)

Available Program  
Format(s): [In-Person](#)

### About the Program

Program Slogan: "Crafting Leaders in the Beer Industry!"

The Bachelor of Science in Brewery Operations is designed for students and professionals looking to break into or further their career within the competitive beer and brewing industry. Created for those wishing to have baccalaureate level training and for those looking to gain vital credentials and certifications, this degree will prepare them for the challenges they will face once they are employed in the beer world. Brewery professionals are involved in the operations, management, creation and analysis of beer in a brewery setting. The Bachelor of Science degree program in Brewery Operations provides a broad foundation in: 1) practical understanding and implementation of the brewing process, equipment, maintenance, and safety within the physical plant as well as through understanding and the ingredients of beer, 2) chemical and biological analysis and improvement of beer, 3) brewery management and operations, 4) serving and hospitality in the beer world, 5) packaging techniques, 6) draft quality and system design, 7) professional applications of theoretical knowledge. The program is one of the only bachelor degrees related specifically to beer and the brewing industry in the world.

It is particularly unique because it is an expansive course of study based out of the School of Hospitality, Events, and Tourism and is not exclusively a food science degree.

### Student Outcomes

- Develop a range of leadership skills and abilities to succeed in the beer industry, including resourceful and ethical decision making, team interaction skills, and critical & reflective thinking skills within the larger hospitality industry.
- Implement beer production and distribution principles within the increasingly diverse beer industry environment.
- Formulate and apply strategies and techniques to enhance abilities within the scientific and technical realm of the brewing industry.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- **Recommended:** MTH 1109 - College Algebra Stretch, Part II or MTH 1110 - College Algebra for Calculus or MTH 1111 - College Algebra for Calculus with Laboratory or MTH 1112 - College Algebra Through Modeling or MTH 1210 - Introduction to Statistics
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- **Recommended:** Many courses in the Science requirement for the degree can fulfill this requirement.
- Social and Behavioral Sciences (6 credits)
- **Recommended:** ECO 2010 - Principles of Macroeconomics and ECO 2020 - Principles of Microeconomics (required in the major)
- Global Diversity (0 or 3 credits\*\*)
- **Recommended:** GEG 1910 - Global Water Concerns

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## Science Courses: 23 credits

- BIO 1080 - General Biology I **Credits:** 3
- BIO 1081 - General Biology II **Credits:** 3
- BIO 1090 - General Biology Laboratory I **Credits:** 1

- BIO 1091 - General Biology Laboratory II **Credits:** 1
- BIO 2400 - General Microbiology **Credits:** 5
- CHE 1100 - Principles of Chemistry **Credits:** 4
- CHE 1150 - Principles of Chemistry Laboratory **Credits:** 1
- CHE 2100 - Introduction to Organic and Biological Chemistry **Credits:** 4
- CHE 2150 - Introduction to Organic and Biological Chemistry Laboratory **Credits:** 1

## Major Core Courses: 42 credits

- ACC 3120 - Financial Leadership for Hospitality **Credits:** 3
- BVG 2350 - Brewery Mechanics **Credits:** 3
- BVG 3010 - Beers of the World **Credits:** 3
- BVG 3350 - Brewery Operations **Credits:** 3
- BVG 3750 - Alcohol Beverage Law **Credits:** 3
- BVG 3810 - Sensory Quality Analysis of Beer **Credits:** 3
- BVG 4010 - Beer Styles and Service **Credits:** 3
- BVG 4220 - Brewing Fermentation **Credits:** 3
- BVG 4350 - Brewing Science and Technology **Credits:** 3
- BVG 4810 - Brewing Quality Analysis **Credits:** 3
- ECO 2010 - Principles of Macroeconomics **Credits:** 3
- ECO 2020 - Principles of Microeconomics **Credits:** 3
- HLDR 4000 - Cost Control for Hospitality and Tourism **Credits:** 3
- PHI 3360 - Business Ethics **Credits:** 3

## Major Electives: 9 credits

Select 3 courses

- BVG 3220 - Beer and Food **Credits:** 3
- HLDR 3500 - Hospitality Entrepreneurship **Credits:** 3
- BVG 3683 - Beer and Spirits **Credits:** 3
- HLDR 3950 - Product and Service Promotion for Hospitality **Credits:** 3
- HLDR 0370 - Study Abroad in Hospitality **Credits:** 0
- HLDR 3200 - Talent Leadership **Credits:** 3
- HLDR 3300 - Hospitality Marketing and Sales **Credits:** 3
- HLDR 3400 - Facilities Operations **Credits:** 3
- HLDR 3600 - Organizational Leadership for Hospitality **Credits:** 3
- HLDR 3980 - Internship in Hospitality **Credits:** 3
- HLDR 4400 - Strategic Management for Hospitality **Credits:** 3

## Senior Experience: 3 credits

- BVG 4850 - Applied Brewing Operations **Credits:** 3

## Summary of Requirements

General Studies Requirements	33 credits
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ESSJ Requirement	0-3 credits
Science Courses	23 credits
Major Requirements	42 credits
Major Electives	9 credits
Senior Experience	3 credits
Unrestricted Electives	7-25 credits
<b>Total Credits for the Brewery Operations Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## ***Cannabis Hospitality Manager Certificate***

The Cannabis Hospitality Manager Certificate program is an industry-focused program designed to equip aspiring professionals with the knowledge, skills, and expertise needed to excel in the rapidly growing field of cannabis operations and hospitality. This program covers a wide range of topics, from regulatory compliance and safety to customer service responsible vending, global economic impact, food preparation, and hospitality events, all tailored to the unique needs and challenges of the cannabis industry. Graduates of the program are better prepared to manage cannabis-friendly hotels, restaurants, events, and other hospitality-related businesses.

The Cannabis Hospitality Specialist Certificate is a prerequisite and required prior to the award of the Cannabis Hospitality Manager Certificate. A minimum passing grade of "C" is required for all courses within the certificate. There are no elective courses required for the Cannabis Hospitality Manager Certificate.

### **Certificate Core**

All courses within the Cannabis Hospitality Manager Certificate Core are required. There are no electives and a minimum passing grade of C is required in each course.

- HLDR 2140 - Cannabis in the Global Economy **Credits: 3**
- HLDR 3200 - Talent Leadership **Credits: 3**
- HLDR 3250 - Managerial Accounting for Hospitality **Credits: 3**
- HLDR 3300 - Hospitality Marketing and Sales **Credits: 3**
- HLDR 3420 - Laws and Regulation in the Cannabis Industry **Credits: 3**

**Total for Certificate: 15 credits**

## ***Cannabis Hospitality Specialist Certificate***

The Cannabis Hospitality Specialist Certificate is a comprehensive training program for entry-level professionals seeking to excel in the rapidly growing cannabis hospitality industry. The program focuses on developing the knowledge and skills necessary to provide exceptional service in cannabis-related businesses, including dispensaries, cannabis-infused product manufacturers, event spaces, and other hospitality-focused enterprises. Students will gain a thorough understanding of the various aspects of cannabis, legal requirements, and customer service best practices to ensure a safe and enjoyable experience for consumers. The Cannabis Hospitality Specialist Certificate provides a strong foundation for cannabis hospitality operations. It is the prerequisite for the Cannabis Hospitality Manager Certificate program, where students broaden their managerial skillset in the cannabis industry. The minimum passing grade is a "C" for all courses within the certificate.

### **Certificate Core**

All courses within the Cannabis Hospitality Specialist Certificate Core are required. There are no electives and a minimum passing grade of C is required in each course.

- HLDR 1200 - Cannabis 101 for Hospitality **Credits: 3**
- HLDR 2200 - Quality Service Leadership **Credits: 3**
- HLDR 2201 - Intoxication and Responsible Vending in Hospitality **Credits: 3**
- HLDR 3950 - Product and Service Promotion for Hospitality **Credits: 3**
- RST 2420 - Cannabis in the Kitchen **Credits: 3**

**Total for Certificate: 15 credits**

## ***Culinary Arts Certificate***

The Culinary Arts Certificate at Metropolitan State University of Denver provides advanced knowledge and skills needed to succeed personally and professionally in the kitchen. This certificate gives the student a career advantage in all aspects of food service, including, healthcare, restaurants and school nutrition. Students complete 18 credit hours in classes related to food production and culinary arts.

Students must be accepted to the University and take courses for credit. The cost of the program is the same as undergraduate tuition for degree-seeking students. Students with similar courses in their prior experience may request that courses be transferred to meet part of the certificate requirements.

### **Admission and Graduation Requirements**

This certificate program is open to all undergraduate, degree-seeking students and to non-degree seeking students. To be awarded the

program certificate, the student must meet the following requirements:

- Review the certificate program plan with an advisor prior to or after enrollment.
- Earn at least a "C" or better in each of the certificate courses.
- No more than 40% of required courses can be fulfilled through transfer credits. At least 60% of required courses in the certificate must be completed at MSU Denver.

#### **Advising and Contact Information**

Individuals interested in this certificate program should contact the Academic Advisor at the School of Hospitality at 303-615-1616 or [schoolofhospitality@msudenver.edu](mailto:schoolofhospitality@msudenver.edu) to schedule an appointment for an advising session.

## Required Courses

A total of 18 credit hours is required for this certificate. All courses must be completed with a grade of "C" or better.

- RST 1200 - Basic Cooking Skills **Credits: 3**
- RST 2500 - Basic Baking Skills **Credits: 3**

## Electives

In addition to the two required courses, students must complete 12 hours of electives, chosen from the list below.

- BVG 3220 - Beer and Food **Credits: 3**
- BVG 4633 - Wine and Food **Credits: 3**
- RST 2200 - Foodservice Management Fundamentals **Credits: 4**
- RST 2550 - Food Preparation and Science **Credits: 3**
- NUT 3110 - Food Science **Credits: 3**
- RST 3110 - Food Science Laboratory **Credits: 1**
- RST 3530 - Healthy International Cooking **Credits: 3**
- RST 3350 - International Cooking: Variable Topics **Credits: 1-3**
- RST 3540 - Baking and Pastry **Credits: 3**
- RST 3875 - Food Preservation Techniques **Credits: 3**
- RST 3920 - Plant-Based Cooking **Credits: 3**
- RST 3950 - Healthy Lifestyle Cooking: Variable Topics **Credits: 1-3**
- UA 2735 - Urban Vegetable Farming **Credits: 3**
- RST 3905 - Farm to Table Sustainability **Credits: 3**

**Total Credits: 18**

## *Culinary Nutrition Certificate*

The Culinary Nutrition Certificate at the Metropolitan State University of Denver provides the opportunity for students to explore and master skills and knowledge related to the intersection of food, cooking, and nutrition. Students that complete the Culinary Nutrition Certificate may work in a variety of settings that focus on wellness

and nutrition while emphasizing the importance of culinary and food skills in a healthy lifestyle. Students complete classes in nutrition, food science, and a variety of healthy cooking techniques.

Students must be accepted to the university and take courses for credit. Students with similar courses in their prior experience may request that courses be transferred to meet part of the certificate requirements.

#### **Admission and Graduation Requirements**

This certificate program is open to all undergraduate, degree-seeking students and non-degree seeking students. To be awarded the program certificate, the student must meet the following requirements:

- Review the certificate program plan with an advisor prior to or after enrollment.
- Earn at least a "C" or better in each of the certificate courses.
- No more than 40% of required courses can be fulfilled through transfer credits. At least 60% of required courses in the certificate must be completed at MSU Denver.

#### **Advising and Contact Information**

Individuals interested in this certificate program should contact the Academic Advisor at the School of Hospitality at 303-615-1616 or [schoolofhospitality@msudenver.edu](mailto:schoolofhospitality@msudenver.edu) to schedule an appointment for an advising session.

## Required Courses

A total of 20 credit hours is required for this certificate, 17 hours of required courses and 3 hours of elective courses. All courses must be completed with a grade of "C" or better.

- NUT 2040 - Introduction to Nutrition **Credits: 3**
- NUT 3110 - Food Science **Credits: 3**
- NUT 3820 - Plant Based Nutrition **Credits: 1**
- RST 1200 - Basic Cooking Skills **Credits: 3**
- RST 3110 - Food Science Laboratory **Credits: 1**
- RST 3920 - Plant-Based Cooking **Credits: 3**
- RST 3950 - Healthy Lifestyle Cooking: Variable Topics **Credits: 1-3** (students must complete a total of 3 credits)

## Elective Courses

Students must complete 3 hours of elective courses, chosen from the list below.

- BVG 1910 - Introduction to Homebrewing and Fermentation **Credits: 3**
- NUT 3200 - Nutrition and Sports Performance **Credits: 3**
- NUT 3400 - Nutrition and Weight Management **Credits: 3**
- NUT 3850 - Nutrition and Chronic Disease **Credits: 3**
- RST 2500 - Basic Baking Skills **Credits: 3**
- RST 3350 - International Cooking: Variable Topics **Credits: 1-3** (students must complete a total of 3 credits)

- RST 3905 - Farm to Table Sustainability **Credits:** 3

**Total for Program: 20 credits**

## ***Event and Meeting Design Certificate***

The Event and Meeting Design Certificate at Metropolitan State University of Denver provides the opportunity for students to explore and master skills and knowledge related to the meeting and event industries including knowledge related to event design, site selection, stakeholder development, and risk management. Students who complete the Event and Meeting Design Certificate may work in a variety of roles in corporate events, expos, conventions, social events, governmental events, sports events, and association events. A grade of "C" or above is required in all courses within the program to be awarded the Event and Meeting Design Certificate.

Students must be accepted to the university and take courses for credit. Students with similar courses in their prior experience may request that courses be transferred to meet part of the certificate requirements.

**Required Courses: 15 credits**

- EVT 2010 - Introduction to The Event Industry **Credits:** 3
- EVT 2020 - Event Project Planning **Credits:** 3
- EVT 4020 - Event and Meeting Contracting **Credits:** 3
- EVT 4200 - Global Meetings and Events **Credits:** 3
- EVT 4300 - Event Design Experience and Strategy **Credits:** 3

**Total Credits: 15**

## ***Event and Meeting Management Major, B.S.***

[Rita and Navin Dimond Department  
of Hotel Management](#)

[School of Hospitality](#)

Available Program  
Format(s): [In-Person](#)

### **About the Program**

The Bachelor of Science in Event and Meeting Management is designed for students seeking careers as event and meeting professionals. MSU Denver is one of only four programs in the country to offer a standalone baccalaureate degree in event and meeting management. The curriculum is based on the Meeting and Business Event Competency Standards (MBECS) by Meeting Professionals International. Meeting and Event Management is recognized by the U.S. Department of Labor as a specific business sector, distinct from Lodging and Tourism. This degree prepares students for a variety of career paths within this fast-growing

industry. The in-depth course of study examines the interrelated industry components of corporate events, conventions, trade shows, special events, and other specialty areas not routinely taught in other programs. Our highly experienced faculty are certified in teaching various areas of event and meeting management and maintain active participation in industry associations, advisory board, and committees.

### **Student Outcomes**

- Evaluate quality project management specific to diverse hospitality and event industries
- Apply business concepts relevant to hospitality and event management
- Employ skills relevant to the operational areas of hospitality and event management
- Demonstrate effective communication with global hospitality and event industries.

## **General Degree Requirements**

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## **Program Requirements**

- A total of 120 semester hours are required for graduation.
- A grade of C or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.

## **General Studies Requirements: 33 credits**

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and*

humanities; historical; natural and physical sciences; or social and behavioral sciences.

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## School of Hospitality Core Courses: 46 credits

Students will take 15 courses (46 credits) in the School of Hospitality curriculum.

- BVG 2015 - Beverage Management Principles **Credits: 3**
- EVT 2010 - Introduction to The Event Industry **Credits: 3**
- HLDR 1000 - Introduction to Hospitality **Credits: 3**
- HLDR 1040 - Hospitality and Tourism Technology **Credits: 3**
- HLDR 2200 - Quality Service Leadership **Credits: 3**
- HLDR 3200 - Talent Leadership **Credits: 3**
- HLDR 3250 - Managerial Accounting for Hospitality **Credits: 3**
- HLDR 3300 - Hospitality Marketing and Sales **Credits: 3**
- HLDR 3400 - Facilities Operations **Credits: 3**
- HLDR 3600 - Organizational Leadership for Hospitality **Credits: 3**
- HLDR 3980 - Internship in Hospitality **Credits: 3**
- HLDR 4100 - Hospitality Law and Risk Management **Credits: 3**
- HLDR 4340 - Hospitality Industry Analytics **Credits: 3**
- HTL 1010 - Hotel Industry Fundamentals **Credits: 3**
- RST 2200 - Foodservice Management Fundamentals **Credits: 4**

## Event and Meeting Management Major Courses: 18 credits

Students will take 6 courses (18 credits) in the School of Hospitality curriculum.

- EVT 3000 - Event Catering Strategies **Credits: 3**
- EVT 4020 - Event and Meeting Contracting **Credits: 3**
- EVT 4030 - Advanced Planning and Risk Management **Credits: 3**
- EVT 4200 - Global Meetings and Events **Credits: 3**
- EVT 4300 - Event Design Experience and Strategy **Credits: 3**
- HLDR 3010 - Sustainable Hospitality and Tourism **Credits: 3**

## Senior Experience: 3 credits

- HLDR 4800 - Applied Hospitality and Tourism Concept Development **Credits: 3**

## Summary of Requirements

General Studies Requirement	33 credits
ESSJ Requirement	0-3 credits
School of Hospitality Core Courses	46 credits
Major Courses	18 credits
Senior Experience	3 credits
Unrestricted Electives	17-20 credits
<b>Total for the Event and Meeting Management Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## *Hospitality Leadership Major, B.S.*

[Rita and Navin Dimond Department of Hotel Management](#)

[School of Hospitality](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

Nestled in the heart of downtown Denver, the School of Hospitality is the epicenter of exceptional education through relevant, active participation in our unique, world-class facilities. Students majoring in Hospitality Leadership engage in cutting-edge learning opportunities to hone their leadership skills. Hospitality - hotels - restaurants - tourism - events - brewing - outdoor recreation - we CRUSH IT!

## Student Outcomes

- Develop a range of leadership skills and abilities for the hospitality industry, including responsible decision making, personal accountability, critical and reflective thinking skills.
- Implement leadership principles and styles, group dynamics, and effective teamwork within a diverse hospitality environment.
- Formulate strategies to enhance awareness and commitment towards effective citizenship and social responsibility.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.
- Students must present verification of 600 hours of on-the-job experience. These hours may be secured through paid job experience, cooperative education, internships or a combination of the three
- Students must present Adult CPR certification

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## School of Hospitality Core Courses: 46 credits

Students will take 15 courses (46 credits) in the School of Hospitality curriculum.

- BVG 2015 - Beverage Management Principles **Credits: 3**
- EVT 2010 - Introduction to The Event Industry **Credits: 3**
- HLDR 1000 - Introduction to Hospitality **Credits: 3**
- HLDR 1040 - Hospitality and Tourism Technology **Credits: 3**
- HLDR 2200 - Quality Service Leadership **Credits: 3**
- HLDR 3200 - Talent Leadership **Credits: 3**
- HLDR 3250 - Managerial Accounting for Hospitality **Credits: 3**
- HLDR 3300 - Hospitality Marketing and Sales **Credits: 3**
- HLDR 3400 - Facilities Operations **Credits: 3**
- HLDR 3600 - Organizational Leadership for Hospitality **Credits: 3**
- HLDR 3980 - Internship in Hospitality **Credits: 3**
- HLDR 4100 - Hospitality Law and Risk Management **Credits: 3**
- HLDR 4340 - Hospitality Industry Analytics **Credits: 3**
- HTL 1010 - Hotel Industry Fundamentals **Credits: 3**
- RST 2200 - Foodservice Management Fundamentals **Credits: 4**

## Hospitality Leadership Major Courses: 18 credits

Students will take 6 courses (18 credits) in the School of Hospitality curriculum.

- EVT 4030 - Advanced Planning and Risk Management **Credits: 3**
- HLDR 3010 - Sustainable Hospitality and Tourism **Credits: 3**
- HLDR 3500 - Hospitality Entrepreneurship **Credits: 3**
- HLDR 4000 - Cost Control for Hospitality and Tourism **Credits: 3**
- HLDR 4400 - Strategic Management for Hospitality **Credits: 3**
- HTL 4000 - Current Trends in Lodging Industry **Credits: 3**

## Food and Beverage Concentration: 19 credits

Students who opt to complete this concentration do not need to take the Hospitality Leadership Major Courses.

Students will take 6 courses (19 credits) in the School of Hospitality curriculum.

- HLDR 3500 - Hospitality Entrepreneurship **Credits: 3**
- HLDR 4000 - Cost Control for Hospitality and Tourism **Credits: 3**
- RST 3905 - Farm to Table Sustainability **Credits: 3**
- RST 4100 - Applied Foodservice Operations **Credits: 4**
- BVG 3010 - Beers of the World **Credits: 3**
- or
- BVG 3613 - Wine Fundamentals **Credits: 3**

- BVG 3220 - Beer and Food **Credits: 3**  
or
- BVG 4633 - Wine and Food **Credits: 3**

## Senior Experience: 3 credits

- HLDR 4800 - Applied Hospitality and Tourism Concept Development **Credits: 3**

## Summary of Requirements

### Without Concentration

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
School of Hospitality Core Courses	46 credits
Major Core Courses	18 credits
Senior Experience	3 credits
Unrestricted Electives	17-20 credits
<b>Total for the Hospitality Leadership Major, B.S.</b>	<b>120 credits</b>

### With Concentration

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
School of Hospitality Core Courses	46 credits
Food and Beverage Concentration	19 credits
Senior Experience	3 credits
Unrestricted Electives	16-19 credits
<b>Total for the Hospitality Leadership Major, B.S.</b>	<b>120 credits</b>

Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.

## *Hotel Management Major, B.S.*

[Rita and Navin Dimond Department  
of Hotel Management](#)

[School of Hospitality](#)

Available Program  
Format(s): [In-Person](#)

## About the Program

The Bachelor of Science Degree in Hotel Management offers a diverse approach to meeting the educational needs of the lodging industry professional. Students are immersed in a rigorous academic environment that not only encourages both critical thinking at the management theory level, as well as applying such theory to formulate solutions to complex management problems. This diverse approach allows students to develop skill sets in human resources, property management, legal issues, marketing, accounting, revenue management, and strategic management, among others.

As part of this application-based approach to learning, the Marriott Springhill Suites Hotel provides a 'real-world' environment in which students delve into experiential learning modules. Here, students are given a unique opportunity to directly observe a major hotel's daily operation in several key departments.

Students are also given the opportunity to apply their accumulated learned knowledge in a senior-level capstone course that allows them to manage a lodging property in a real-time simulated environment. This educational approach ensures that our graduates enter the workforce with the specialized, well-rounded educational experience desired by the industry.

## Student Outcomes

- Possess a broad range of competencies in general lodging operations,
- Be able to confidently enter the lodging industry ready to make an impact
- Demonstrate sound management practices built upon a foundation of ethical standards and values.

## General Degree Requirements

To earn a degree, students must satisfy all requirements in each of the four areas below, in addition to their individual major requirements.

- [Degree and Certificate Requirements](#)
- [General Studies Requirements](#)
- [Ethnic Studies & Social Justice Graduation Requirement](#)
- [Senior Experience Graduation Requirements](#)

## Program Requirements

- A total of 120 semester hours are required for graduation.
- A grade of C or better is required for each course in this program to count toward the bachelor's degree. Students should note that programs differ in the minimum grade required.



- Maintain a grade point average of 2.5.

## General Studies Requirements: 33 credits

Students should consult the General Studies Requirements for a list of courses that fulfill the General Studies Requirements for degree completion.

- Written Communication (6 credits)
- Oral Communication (3 credits)
- Quantitative Literacy (3 credits)
- Arts and Humanities (6 credits)
- Historical (3 credits)
- Natural and Physical Sciences (6 credits)
- Social and Behavioral Sciences (6 credits)
- Global Diversity (0 or 3 credits\*\*)

*\*\* Students will fulfill the global diversity requirement by taking an approved course within one of the following categories: arts and humanities; historical; natural and physical sciences; or social and behavioral sciences.*

## Ethnic Studies & Social Justice

### Requirement: 0 or 3 credits

- Students should consult the Ethnic Studies & Social Justice Graduation Requirement for a list of courses that fulfill the ESSJ Requirement for degree completion.
- Many programs include courses that meet this requirement. Students should consult with their advisor to determine what program courses may fulfill this requirement.

## School of Hospitality Core Courses: 46 credits

Students will take 15 courses (46 credits) in the School of Hospitality curriculum.

- BVG 2015 - Beverage Management Principles **Credits: 3**
- EVT 2010 - Introduction to The Event Industry **Credits: 3**
- HLDR 1000 - Introduction to Hospitality **Credits: 3**
- HLDR 1040 - Hospitality and Tourism Technology **Credits: 3**
- HLDR 2200 - Quality Service Leadership **Credits: 3**
- HLDR 3200 - Talent Leadership **Credits: 3**
- HLDR 3250 - Managerial Accounting for Hospitality **Credits: 3**
- HLDR 3300 - Hospitality Marketing and Sales **Credits: 3**
- HLDR 3400 - Facilities Operations **Credits: 3**
- HLDR 3600 - Organizational Leadership for Hospitality **Credits: 3**
- HLDR 3980 - Internship in Hospitality **Credits: 3**
- HLDR 4100 - Hospitality Law and Risk Management **Credits: 3**
- HLDR 4340 - Hospitality Industry Analytics **Credits: 3**

- HTL 1010 - Hotel Industry Fundamentals **Credits: 3**
- RST 2200 - Foodservice Management Fundamentals **Credits: 4**

## Hotel Management Major Courses: 18 credits

Students will take 6 courses (18 credits) in the School of Hospitality curriculum.

- HLDR 3010 - Sustainable Hospitality and Tourism **Credits: 3**
- HLDR 4400 - Strategic Management for Hospitality **Credits: 3**
- HTL 3500 - Resort Operations **Credits: 3**
- HTL 2600 - Casino and Gaming Management **Credits: 3**
- HTL 4000 - Current Trends in Lodging Industry **Credits: 3**
- HTL 4100 - Revenue Management **Credits: 3**

## Senior Experience: 3 credits

- HLDR 4800 - Applied Hospitality and Tourism Concept Development **Credits: 3**

## Summary of Requirements

General Studies Requirements	33 credits
ESSJ Requirement	0-3 credits
School of Hospitality Core Courses	46 credits
Major Courses	18 credits
Senior Experience	3 credits
Unrestricted Electives	17-20 credits
<b>Total for the Hotel Management Major, B.S.</b>	<b>120 credits</b>

**Required courses for the major may also count for General Studies and ESSJ requirements, so the total credits listed may be greater than the number required to complete the degree. Therefore, it is important that you work with your advisor to make sure you are meeting requirements for your degree.**

## Sociology of Tourism Certificate

The Sociology of Tourism certificate program provides a solid foundation in the development of core skills in tourism, as well as a focus on applied knowledge in the field of sociology as it relates to tourism. The curriculum builds on providing students with higher-level skills to assume first-line, supervisory and management positions, in the evolving, fast-paced, and rewarding world of the hospitality and tourism industry. Sociology of tourism studies the development of community-based tourism that carries with it a high

level of bottom-up community support and participation. Students should consult with an advisor for assistance with certificate planning for specific careers after graduation. This is a certificate program, available to current students, post-baccalaureate students, or anyone in related industries seeking additional skills and training for career advancement. A grade of "C" or better is required for each course in this program to count toward the awarded certificate.

## Required Courses

- SOC 1010 - People, Power, and Progress **Credits:** 3
- SOC 1600 - Tourism and Society **Credits:** 3  
or
- TTM 1600 - Tourism and Society **Credits:** 3
- HLDR 3010 - Sustainable Hospitality and Tourism **Credits:** 3
- TTM 3200 - Itinerary Design **Credits:** 3

## Elective Courses

Select two of the courses below:

- SOC 1020 - Globalization--The Transformation of Social Worlds **Credits:** 3
- SOC 3080 - Social Action Through Art **Credits:** 3
- SOC 3730 - Media and Society **Credits:** 3
- TTM 3800 - Cruise Tourism **Credits:** 3
- RTM 4100 - Adventure Travel **Credits:** 3
- TTM 4200 - Ecotourism **Credits:** 3

Total: 18 credits



# Course Descriptions

This section of the *Catalog* includes course descriptions, listed alphabetically by discipline. The descriptions provide information on course numbers, titles, the level of instruction, credit, course sequence, content, and prerequisites as shown in the following example:

*CHE 2100 Introduction to Organic and Biological Chemistry*

*Credits: 5*

*Prerequisite: CHE 1100*

*Description: A study of the elements of organic and biological chemistry. This course satisfies requirements for nursing programs and other fields requiring a survey of organic and biological chemistry.*

The first two to four letters, called the course subject code, represent the area of study or discipline, e.g., CHE represents chemistry. The course number follows the course subject code, e.g., 2100. The first digit in a four-digit course number designates the level of instruction. Only courses numbered 1000 or above will be included in credits toward a degree. Courses with numbers up to and including 1999 are primarily for freshmen, 2000 through 2999 primarily for sophomores, 3000 through 3999 primarily for juniors, and 4000 through 4999 primarily for seniors. In general, students should not take courses above the level of their class (based upon semester hours earned), but they may do so at one level above if they have the specified prerequisites. In special cases, students may be permitted to take courses more than one level above that designated for their class if they obtain the permission of their advisor and of the faculty member teaching the course and if they meet the prerequisite requirements. Course descriptions provide a summary of the content of the course. If a prerequisite must be met before a student can register for a course, this information is listed above the course description. Attributes, such as Ethnic Studies & Social Justice, General Studies, or Guaranteed Transfer, are listed after the course description. A list of courses being offered in a given semester, instructors, class meeting times, and locations is described in the Class Schedule.

## Types of Courses

- **Regular courses** appear in this section of the University Catalog and are offered on a regular basis.
- **Independent study courses** provide students the opportunity to pursue in-depth study of a topic of special interest. Independent study courses are specified as 498\_ and include an alpha character in the course number. Independent study courses are published in the Class Schedule.
- **Special topics or omnibus courses** are temporary courses that are not listed in the Catalog. They may be used to pilot-test a course, present a special topic, or provide a unique, experiential-learning opportunity. Omnibus courses use a specified range of course numbers: 190\_, 290\_, 390\_, 490\_ and include an alpha character in the course number. Omnibus courses are published in the Class Schedule.

- **Variable topics courses** allow courses of varying titles under an overall theme or “umbrella” course. Variable topic courses include an alpha character in the course number and are published in the Class Schedule.

## Accounting

### ACC 1010 - Fundamentals of Accounting

**Credits:** 3

**Prerequisite(s):** ENG 1010 or ENG 1009 and General Studies Requirements for Quantitative Literacy

**Description:** This course introduces the basic concepts of financial, managerial and tax accounting needed to promote entrepreneurial efforts. The content focuses on accepted accounting methods and specific organizational skills required for business owners to record, analyze and present their financial information.

*Note:* Students who have previously taken ACC 1010 - Accounting for Non Business Majors may not also receive credit for ACC 1010 - Fundamentals of Accounting.

### ACC 1985 - Introduction to Business Careers Internship

**Credits:** 3

**Description:** Approved internships introduce the specific field of business as well as provide an opportunity to gain practical, hands-on professional work experience. Students will learn about the profession, explore related career paths, and increase professionalism.

*Note:* Internship must be approved by the department using the C2 Hub process.

**Cross Listed Course(s):** CIS 1985, ECO 1985, FIN 1985, MGT 1985, MKT 1985

### ACC 2010 - Principles of Accounting I

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021; and Completion of General Studies Quantitative Literacy Requirement

**Description:** This course introduces students to the role of accounting in society. The course focuses on financial accounting and reporting as tools to aid external decision making, financial analysis, and interpretation.

### ACC 2020 - Principles of Accounting II

**Credits:** 3

**Prerequisite(s):** ACC 2010; ENG 1020; Completion of General Studies requirements in Oral Communication and Quantitative Literacy

**Description:** This course introduces students to the role of managerial accounting information in business. The course focuses on cost controls, budgeting and preparing relevant financial information for decision making.

## ACC 3090 - Income Tax I

**Credits:** 3

**Prerequisite(s):** MTH 1110 or 1310 or 1400 with C- or better; ACC 2010 with a grade of D- or better; and junior standing or higher

**Description:** This course is a study of federal income tax laws with an emphasis on personal income taxation, including such topics as gross income, gains and losses and deductions.

## ACC 3100 - Income Tax II

**Credits:** 3

**Prerequisite(s):** ACC 2020 and ACC 3090 with a grade of C or better

**Description:** This course is a continuation of ACC 3090 with a comparative focus on the taxation of organizational tax entities, including partnerships, corporations and S-corporations.

## ACC 3110 - Volunteer Income Tax Assistance (VITA)

**Credits:** 3

**Prerequisite(s):** ACC 3090 with a C or better

**Description:** Students will have primary responsibility for operating a VITA site as a tax service. Students will prepare both federal and State of Colorado income tax returns. The focus will be on preparing returns for the elderly, disabled, foreign students and low income individuals. This course contains a service learning component.

*Note:* Some sections of this course may be taught as Service Learning.

## ACC 3120 - Financial Leadership for Hospitality

**Credits:** 3

**Description:** This course introduces students to basic accounting and financial principles related to the hospitality and tourism industry, with an emphasis on examining relevant data for informed leadership decisions. Students will improve their oral and written communication skills using financial terminology, data analysis, and ethical decision making.

## ACC 3130 - Accounting for Entrepreneurs

**Credits:** 3

**Description:** This course is designed for the serious entrepreneur looking to effectively and successfully manage their accounting, cash flow, bookkeeping, and tax obligations. The content focuses on the fundamentals of business accounting, financial statement preparation and analysis, understanding of business taxes, tax planning strategies, payroll management, budgeting and forecasting, cash flow management, reporting compliance, and accounting software utilization.

## ACC 3200 - Governmental Accounting

**Credits:** 3

**Prerequisite(s):** ACC 3510 with a grade of C or better

**Description:** This course is a study of generally accepted accounting principles and financial reporting used by state and local governmental units. This includes achieving an understanding of fund accounting and inclusion of budgets within the accounting systems. A study of accounting and financial reporting of colleges, hospitals, voluntary health and welfare organizations, and other not-for-profit institutions is included.

## ACC 3300 - Accounting Information Systems

**Credits:** 3

**Prerequisite(s):** ACC 2010 and CIS 2010 with grades of C or better; at least junior standing

**Description:** This course is a study of principles and current issues relating to the design, implementation, control and regulation of accounting information systems. Tools and technologies related to accounting systems and the place of accounting systems within the modern enterprise provide a focus for the course, which includes an introduction to accounting-related information technology (IT) audit issues.

## ACC 3400 - Cost Accounting

**Credits:** 3

**Prerequisite(s):** MTH 1110 or MTH 1310 or MTH 1400; ACC 2020 with a grade of C or better

**Description:** This course includes coverage of cost behavior relationships, job order and process costing systems, overhead allocation methods, budgeting and budget variance analysis, cost-volume profit relationships, and cost prediction for supporting management decision-making in service, sales, and manufacturing organizations. Computer applications are an integral part of this course.

## ACC 3510 - Intermediate Accounting I

**Credits:** 3

**Prerequisite(s):** MTH 1110 or MTH 1310 or MTH 1400; ACC 2010 with a grade of C or better; and junior standing

**Description:** This is the first course in Intermediate Accounting. The Intermediate Accounting courses are designed to teach the concepts and procedures underlying the measurement and reporting of financial information.

## ACC 3520 - Intermediate Accounting II

**Credits:** 3

**Prerequisite(s):** A grade of "C" or better in ACC 3510

**Description:** This course is a continuation of ACC 3510 and covers an in-depth study of basic accounting principles with an emphasis on stockholders' equity and special problems.

## ACC 3700 - Risk Assurance and Advisory I

**Credits:** 3

**Prerequisite(s):** ACC 1010 or ACC 2010 with a grade of "C" or better; at least junior standing

**Description:** Risk assurance and advisory professionals serve as internal consultants to organizations and their governing bodies by performing assurance and advisory engagements across all business processes and functions. This course introduces students to the risk assurance and advisory profession and the internal audit process. Topics include the corporate governance, risk management, internal control, the Institute of Internal Auditor's International Professional Practices Framework (IPPF), risk management, risk assurance tools and techniques, and conducting risk assurance and advisory engagements.

## ACC 3750 - International Accounting

**Credits:** 3

**Prerequisite(s):** ACC 3510 or FIN 3100 with a grade of C or better

**Description:** This course is a study of the impact on financial reporting and managerial decision-making due to the similarities and differences in accounting standards throughout the world. This course examines the history and development of accounting standards and reviews current topics which affect the comparison of global financial reporting.

## ACC 3980 - Internship in Accounting

**Credits:** 1-15

**Prerequisite(s):** Major in accounting; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## ACC 4200 - Auditing and Attestation

**Credits:** 3

**Prerequisite(s):** ACC 3510 with a grade of C or better

**Prerequisite(s) or Corequisite(s):** ACC 3520

**Description:** This course is an introduction to contemporary theory and practice of auditing and attestation. The course will acquaint the students with Generally Accepted Auditing and Attestation Standards (GAAS), professional ethics, internal control, objectives and procedures for audits and attestation, risk assessment, audit and attestation reports, legal liability, research methodology, and corporate governance. Concepts included are professionalism, independence, evidence, risk, control, and enhancement of reliability and relevance properties of attester's services.

## ACC 4440 - Accounting Ethics and Professionalism

**Credits:** 3

**Prerequisite(s):** ACC 3510 and ACC 3090 with grades of "C" or better

**Description:** This course examines professional ethics for accountants from both a philosophical and business perspective. Moral development, ethical reasoning, and ethical decision-making provide a framework for examining the importance of ethics in the accounting profession. Professional guidance on ethics in accounting will also be examined, including the AICPA Code of Professional Conduct, the Colorado Board of Accountancy Statutes, Rules, and Regulations, the Sarbanes-Oxley Act, and the codes of conduct for other professional accounting organizations.

## ACC 4510 - Advanced Accounting

**Credits:** 3

**Prerequisite(s):** ACC 3520 with a C or better

**Description:** This course includes coverage of reporting requirements for partnerships, SEC-regulated companies, not-for-profit organizations, and financially distressed entities, as well as information disclosure requirements for state and local governments, international harmonization of accounting standards, and the possible conversion to International Accounting Standards in the U.S.

## ACC 4520 - Mergers and Acquisitions

**Credits:** 3

**Prerequisite(s):** ACC 3520 or FIN 4500

**Description:** This course is a comprehensive study of mergers and acquisitions focusing on the preparation of consolidated financial statements. Complexities inherent in consolidating investments in foreign subsidiaries are addressed in depth. Additional topics include: variable interest entities; accounting for foreign currency transactions, hedging transactions, and equity method investments; reporting disaggregated information; and interim reporting requirements.

## Advanced Manufacturing Sciences

### AMS 1010 - Survey of Advanced Manufacturing and Workplace Preparation

**Credits:** 3

**Description:** The student will learn the "soft skills" required by industry, such as leadership, interactive communication, and collaboration/teamwork skills, utilizing team exercises and team activities. The course also provides an introduction to Advanced Manufacturing and an overview of the Advanced Manufacturing Sciences (AMS) degree concentration's fit and associated employment potential with Advanced Manufacturing Industries.

### AMS 3010 - Additive Manufacturing Strategies Certification Preparation

**Credits:** 3

**Prerequisite(s):** IND 1450 or CET 1215 or MET 1200 with a grade of "C" or better, or permission of instructor

**Description:** Students receive industry-endorsed proof of workforce ready Additive Manufacturing skills and knowledge through a program of study in preparation for the certification exam: Proof of skills through assessment. The hands-on, project-based learning (PBL) course will let students design and fabricate 3D objects using computer-aided design (CAD) software and 3D printers. Students will experience the design process and become familiar with the advantages and limitations of each 3D printing technology in terms of precision, resolution, and material capabilities.

## AMS 3980 - Industry Internship

**Credits:** 1-15

**Prerequisite(s):** Major in AMS; Junior or Senior status; permission of instructor

**Description:** Students will have an opportunity to gain work experience under the guidance of an industry professional. Students must complete a minimum of 45 clock hours per credit hour during the semester in a placement relevant to their selected AMS concentration. All internship students will also be required to prepare weekly internship reports, complete a self-evaluation survey and a reflective paper at the completion of the placement.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* This course is variable credit and may be repeated for up to 15 credit hours.

## AMS 4700 - Team Project Experience

**Credits:** 3

**Prerequisite(s):** All CPM core courses completed with at least a "C-."

**Description:** Students will have an opportunity to gain team project work experience during collaborative projects with industry professionals.

**University Requirement(s):** Senior Experience

## AMS 4940 - Capstone: Advanced Manufacturing Project Planning and Process Development

**Credits:** 3

**Prerequisite(s):** Senior Standing

**Description:** Students in this course will plan and design an advanced manufacturing process comprised of top-level diagrams, process maps, schedules, outlines, and written instructions. Projects may be developed by the student or assigned by departmental faculty/staff. The project will reflect and identify the disciplines within the field of advanced manufacturing including process setup, planning, material and equipment acquisition, production planning, quality assurance, and packaging - and understand how they work together to achieve a final goal. The final project will demonstrate the

general understanding of concepts associated with advanced manufacturing processes to ensure efficient operations, intelligent production, and improve the overall effectiveness of the organization.  
**University Requirement(s):** Senior Experience

## AMS 4950 - Professional Internship

**Credits:** 1-15

**Prerequisite(s):** Junior or Senior standing and completion of the following AMS Core courses with a grade of "C" or better: AMS 1010, AMS 3010, JMP 2610, CSS 1751, EET 1001, IND 1450 or CET 1215 or MET 1200, MET 1310, MET 2010, MET 3000 and MTH 1120; Or, Junior or Senior standing and the permission of the AMSI Director

**Description:** Students will have an opportunity to gain work experience under the guidance of an industry professional. Students must complete a minimum of 3 credits (45 clock hours per credit hour) cumulatively during their degree program in a placement relevant to their selected CPM concentration. All internship students will also be required to prepare weekly internship reports, complete a self-evaluation survey and a reflective paper at the completion of the placement.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* This course is variable credit and may be repeated for up to 15 credit hours.

**University Requirement(s):** Senior Experience

**Cross Listed Course(s):** CPM 4950

## Africana Studies

### AAS 1010 - Introduction to Africana Studies

**Credits:** 3

**Description:** This interdisciplinary course in Africana Studies provides an overview of the evolution, scope and objectives of the field, and examines the history, literature, arts, material culture, as well as sociological, political, economic, and philosophical perspectives of the experiences of Blacks, particularly in the United States. The course places the experiences of African Americans within the broader context of the African Diaspora as it explores issues of identity and liberation movement. The course sheds light on the relationship between the past, present and future in shaping Black worldviews and their contributions to the human experience.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

**University Requirement(s):** Ethnic Studies & Social Justice

### AAS 1030 - Introduction to Social Justice and Decoloniality

**Credits:** 3

**Description:** This course introduces students to the interdisciplinary

fields of Social Justice and Decolonial Studies through interdisciplinary perspectives, methods, and approaches. Students learn about privilege, power, and oppression and their relationships to race, class, gender, sexuality, and other identities. This course asks complex and difficult questions regarding colonialism, decoloniality, sovereignty, and agency. It offers students opportunities to study social movements, and engage in social justice and decolonial praxis. *Note:* Credit will be granted for only one prefix.

**General Studies:** Social and Behavioral Sciences, Global Diversity  
**Cross Listed Course(s):** CHS 1030, GWS 1030, NAS 1030

### AAS 1080 - Readings in Africana Studies

**Credits:** 3

**Description:** This self-paced course is based upon selected readings in books, magazines and newspapers on Africana Studies.

### AAS 1090 - Social Justice and Advocacy

**Credits:** 3

**Description:** Students in this course survey theories and methods of social justice work. Students examine intersecting methods of oppression, modes of resistance, and strategies towards social transformation. Students also develop the analytical and practical skills necessary to address multiple and intersecting forms of oppressions and injustice.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** CHS 1090, GWS 1090

### AAS 1130 - Survey of African History

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading and writing pre-assessment placement tests

**Description:** This course surveys the major developments on the African continent from ancient times to the modern period. It focuses on political, social, economic, legal, historical, and cultural developments in African civilizations from ancient Egypt to the present.

*Note:* Credit will be granted for only one prefix: AAS or HIS.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

**Cross Listed Course(s):** HIS 1940

### AAS 1150 - Race and Social Justice in U.S. History

**Credits:** 3

**Description:** Students explore the broad history of the United States with a particular focus on race, inequality, and social justice. From Spanish and British settler colonialism through recent social movement protest, students examine how ideas about race and ethnicity were embedded in economic, legal, social, cultural, and political contexts. We compare the historically-rooted identities, agency, and resistance of marginalized groups. Students develop a foundational understanding of enduring inequalities and movement protests to realize democratic promises in America's past. We also

ask how history can shape national identity.

**General Studies:** Historical

**Guaranteed Transfer:** GT-HI1

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** CHS 1150, HIS 1150

### AAS 2000 - Social Movements and the Black Experience

**Credits:** 3

**Prerequisite(s):** AAS 1010, SOC 1010, or Permission of instructor

**Description:** This course analyzes and interprets the nature, cause, and consequence of Black social movements in the United States, ranging from the slave period to the present. Particular attention is given to the civil rights movement of the 1950s and 1960s.

*Note:* Credit will be granted for only one prefix: AAS or SOC.

**Cross Listed Course(s):** SOC 2000

### AAS 2010 - Interdisciplinary Research Methods in Social Issues

**Credits:** 3

**Prerequisite(s):** GWS 1001 or AAS 1010 or CHS 1000 or Permission of instructor

**Description:** This course focuses on the interdisciplinary study of methods, analyses and critiques used by scholars to study social issues within and across a range of disciplines (e.g., history, arts, humanities, sciences, education, health, economics, law and social/behavioral sciences). Research designs and general statistical interpretation will be reviewed for each methodology. Techniques for laboratory and field research, conducting qualitative and quantitative studies, and writing research reports will also be included.

*Note:* Credit will be granted for only one prefix: GWS or AAS or CHS.

**Cross Listed Course(s):** CHS 2030, GWS 2010

### AAS 2090 - The Black Lives Matter Movement and the Origins of Modern Black Protest

**Credits:** 3

**Description:** This course applies sociological concepts and historical themes to an analysis of the origins and nature of the Black Lives Matter (BLM) movement. The course begins with brief coverage of black resistance in the colonial period to the Abolitionist Movement but provides an in-depth exploration of modern black protest in the post-World War II civil rights decades and continues into the late 20th century with high-profile instances of police brutality. The remainder of the course follows a chronology, beginning in 2013 with the creation of #BlackLivesMatter and the growth of a new era of black protest. In addition to high-profile incidences of police brutality, attention is given to movement dynamics as shaped by Internet social media platforms and cable news. The course also addresses the #SayHerName movement, which has highlighted police violence against black women. Issues concerning misogynoir are also covered, including black radical feminist critiques of black male patriarchy, and debates within the black community about the

movement's focus. Finally, students will come away with a broad understanding of what systemic institutionalized racism is, as distinguished from incidences of racial violence by individual acts of terrorism or white supremacist terrorist organizations.

*Note:* The course is crosslisted. Credit will be granted for only one prefix.

**Cross Listed Course(s):** HIS 2090, PSC 2090, SOC 2090

## AAS 2100 - Women of Color

**Credits:** 3

**Description:** In this course students focus on the narratives, practices and everyday life experiences of women of color in the U.S. The similarities and differences among diverse groups of women, and other gender expansive minorities of color, are also examined to better understand the complexity of our gendered and racialized lives. Through an intersectional perspective, students address issues of work, health, interpersonal violence, media representations, globalization, as well as activism, social change and theoretical innovation. Students complete the course with a better understanding of the systems of privilege and oppression that have historically shaped the experiences of women of color and will acquire new tools to analyze social and cultural experiences.

*Note:* Credit will be granted for only one prefix: AAS, CHS, or GWS.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** CHS 2100, GWS 2100

## AAS 2200 - Politics and Black People

**Credits:** 3

**Prerequisite(s):** Completion of General Studies requirements in Quantitative Literacy, and either ENG 1009 or ENG 1010 or the General Studies requirement in Oral Communication

**Description:** Black politics is examined as a vehicle and potential in decision making for positive change for Black people in this country. The realities and the challenges, both historical and current, are emphasized.

*Note:* Credit will be granted for only one prefix: PSC or AAS.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** PSC 2200

## AAS 2300 - African Peoples and Cultures

**Credits:** 3

**Description:** This course examines traditional cultures of African peoples and gives added understanding of culture and people in relation to human problems and experiences.

*Note:* Credit will be granted for only one prefix: AAS or ANT.

**Cross Listed Course(s):** ANT 2350

## AAS 3130 - Readings in African History

**Credits:** 3

**Prerequisite(s):** AAS 1130 or Permission of instructor

**Description:** This course provides the opportunity for students to explore important writings in a selected subject area of African history. Students advance their knowledge of the materials and information related to the field of African history.

## AAS 3220 - Prejudice and Discrimination

**Credits:** 3

**Prerequisite(s):** SOC 1010, GWS 1001, AAS 1010 or permission of instructor, and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy

**Description:** Explore the origins and characteristics of bias, prejudice and discrimination in society; social constructions of race, ethnicity, and gender; and the impact of social forces on social structure, institutions, and access to life opportunities.

*Note:* Credit will be granted for only one prefix: AAS or SOC

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** SOC 3220

## AAS 3240 - African American Literature

**Credits:** 4

**Prerequisite(s):** ENG 2000 or ENG 2100 or AAS 1010 or permission of instructor

**Description:** Students read, analyze, and write about various forms of literature produced by African Americans with consideration of historical and social contexts. Students explore and analyze texts from various literary eras beginning with oral traditions through contemporary literature and from various literary genres including fiction, drama, poetry, life writing, and hip-hop.

*Note:* Credit will be granted for only one prefix: AAS or ENG.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** ENG 3240

## AAS 3250 - Black Women Writers

**Credits:** 3

**Prerequisite(s):** AAS 1010 or ENG 1020

**Description:** The course studies selected works chosen as representative of the issues and concerns of Black women worldwide as voiced by Black women writers from Africa and the Diaspora.

*Note:* Credit will be granted for only one prefix: AAS, ENG, GWS

**Cross Listed Course(s):** ENG 3250, GWS 3250

## AAS 3300 - The Black Community

**Credits:** 3

**Prerequisite(s):** AAS 1010 or AAS/SOC 2000, or Permission of instructor, and Completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This course relates fundamental concepts and theories of sociology and African American studies to the study of the Black

community through an analysis of educational, political, religious, economic, and family dimensions. It emphasizes local, national, and international Black communities. Classic and contemporary black community studies are examined.

*Note:* Credit will be granted for only one prefix: AAS, SOC or SWK.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** SOC 3140, SWK 3140

## AAS 3310 - Arts of Africa

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** In this course, students examine the art of the continent of Africa - from the pyramids of Giza to the rich masking traditions of West Africa to contemporary artistic expression - and evaluate the ways it has been studied and displayed. Students trace historical relationships among regions and the impact of trade networks, empires, and colonialism on art and culture. Art historical methodologies are used to analyze and interpret works of art within their cultural contexts. Students also examine how art reflects and informs the human experience, paying particular attention to themes such as power, identity, religion, and the passage from life into death.

*Note:* Credit will be granted for only one prefix: ARTH or AAS.

**General Studies:** Arts and Humanities, Global Diversity

**Cross Listed Course(s):** ARTH 3310

## AAS 3330 - Egyptian Art

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course examines Egyptian art from the beginnings of civilization in Kemet (the Black Land), through Greek, Roman, and Byzantine colonial periods and continuing into the Islamic period.

*Note:* Credit will be granted for only one prefix: AAS or ARTH.

**Cross Listed Course(s):** ARTH 3330

## AAS 3400 - Contemporary Africa

**Credits:** 3

**Description:** This course focuses on the political, social, and economic highlights of post-independence Africa. Africa's relations with the outside world and the question of South Africa are also examined in this course.

*Note:* Credit will be granted for only one prefix: AAS or PSC.

**Cross Listed Course(s):** PSC 3400

## AAS 3405 - Human Trafficking: Public Health Response

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** Students explore human trafficking utilizing global public health frameworks to examine the interprofessional nature of community response in Colorado. A review of multidisciplinary perspectives on labor and sex trafficking provides a comprehensive understanding of this human rights issue. Further, students examine the tactics used by traffickers to recruit and control victims and the effects of abuse on survivors. Students will be presented with an overview of the United Nations, U.S. federal and Colorado state laws to curb trafficking. Finally, students evaluate global and local efforts of the current anti-trafficking movement, including ways to be involved.

*Note:* Credit may be granted for only one prefix.

**Cross Listed Course(s):** CJC 3650, GWS 3400, HSP 3405, SWK 3405, PUB 3400

## AAS 3440 - American Slavery

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor.

**Description:** Students in this class explore the origins of slavery in the early modern Atlantic world and trace its history until the age of emancipation. Although the primary focus is on African slavery in British North America and the United States, the course integrates the Atlantic and imperial contexts and includes comparative units on slavery in other empires, as well as enslavement of Native Americans. Students analyze the political and economic consequences of slavery, and they examine the slave cultures themselves, including religion, resistance, and family life.

*Note:* Credit will be granted for only one prefix: AAS or HIS.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** HIS 3440

## AAS 3550 - The Black Family

**Credits:** 3

**Prerequisite(s):** AAS 1010 or SOC 1010, and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This course provides an in-depth exploration of the Black family as a social institution, emphasizing the historical roots of the Black family and how the African influence is enmeshed in the functioning of the family in modern society. It examines the factors responsible for the ability of the Black family to meet the challenge of a changing society.

*Note:* Credit will be granted for only one prefix: AAS or SOC.

**Cross Listed Course(s):** SOC 3440

## AAS 3570 - African American History I

**Credits:** 3

**Prerequisite(s):** ENG 1010 or ENG 1009 or equivalent with a grade of D or better, or permission of instructor

**Description:** Students in this course learn about the early history of African Americans in the United States, beginning with their ancestry in West and West-Central Africa and culminating with the Civil

War. Students analyze the cultural, social, economic, and political transformation of African Americans in the colonial and national history of the United States. Topics include the Atlantic Slave Trade, colonial identity, plantation slavery, slave communities, resistance, the Constitution and race, demographics of freedom, abolitionism, the Civil War and its aftermath.

*Note:* Credit will be granted for only one prefix: AAS or HIS.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** HIS 3570

## AAS 3580 - African American History II

**Credits:** 3

**Prerequisite(s):** ENG 1010 or ENG 1009 or equivalent with a grade of D or better, or permission of instructor

**Description:** Students in this course focus on the collective experience of African Americans in American history, thought, and culture from Reconstruction to the present. Students learn about the process of freedom and citizenship for African Americans through an examination of the major political, economic, and social themes of the 19th and 20th centuries. Particular attention is paid to the agency of African Americans in community-building, migration, protest, and patriotism.

*Note:* Credit will be granted for only one prefix: AAS or HIS.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** HIS 3580

## AAS 3610 - Caribbean History and Culture

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course examines the evolution of Caribbean societies from the consolidation of slavery in the seventeenth century to the emergence of independent multi-ethnic nations in the twentieth century, and emphasizes the central role of the Caribbean in the Atlantic world.

*Note:* Credit will be granted for only one prefix: AAS or HIS.

**Cross Listed Course(s):** HIS 3711

## AAS 3630 - The African Diaspora

**Credits:** 3

**Prerequisite(s):** AAS 1010

**Description:** The course examines the aftermath of the Transatlantic Slave Trade's dispersal of Africans in the Americas, by exploring battles waged against enslavement, distinct cultural identities, and manifestations of returning to Africa.

## AAS 3700 - Psychology of Group Prejudice

**Credits:** 3

**Prerequisite(s):** PSY 1001 or AAS 1010 or GWS 1001

**Description:** This course covers psychological theory and research that examines causes, effects, expressions, and reduction of group

prejudice. Various types of group prejudice are addressed, most notably prejudice against cultural and ethnic minorities in the United States (i.e., Native Americans, African Americans, Hispanic Americans, and Asian Americans). Sexism and heterosexism also are discussed.

*Note:* Credit will be granted for only one prefix: AAS, GWS, or PSY.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** GWS 3700, PSY 3700

## AAS 3910 - African Politics and Government

**Credits:** 3

**Prerequisite(s):** AAS 1130, AAS 2300, or Permission of instructor

**Description:** This course surveys present-day political systems in Africa and examines internal and external factors that have contributed to their emergence.

*Note:* Credit will be granted for only one prefix: AAS or PSC.

**Cross Listed Course(s):** PSC 3910

## AAS 3920 - Hip-Hop Culture and Rap Music

**Credits:** 3

**Prerequisite(s):** AAS 1010 or ENG 1020

**Description:** This course seeks to examine the long-standing cultural warfare that exists among core elements of Hip-Hop culture and the impact such challenges have on gender and social identities. Students will think critically about Hip-Hop music beyond the scope of entertainment through the examination of literature, films, and music that provide interdisciplinary discourse on Hip-Hop in our society.

**Cross Listed Course(s):** HIS 3920, MUS 3895, SOC 3250

## AAS 3930 - African Authors

**Credits:** 3

**Prerequisite(s):** AAS 1010 or ENG 1020

**Description:** African Authors examines the lives and classic works of writers born on the African continent. The literature of the authors selected for close study speaks to life in countries that traverse the continent, representing multiple perspectives that reflect pre-colonial to post-colonial realities. English language texts are utilized, as well as works translated from French, Arabic, and Kikuyu. The overall content of the course emphasizes the impact of colonialism on African nations and the continuation of the African oral tradition in literary works. Supplemental aspects of the course engage critical thought on the place of Egypt in the African world and the politics of language choice on an African text.

**General Studies:** Arts and Humanities, Global Diversity

## AAS 3980 - Internship in Africana Studies

**Credits:** 1-15

**Prerequisite(s):** AAS 1010

**Description:** This internship places students in corporate, private non-profit, and/or community-based agencies that serve Black and African Diaspora communities. A written contract between the student, site supervisor, the Classroom to Career (C2) Hub, and



department chair is required. Internship activities may include developing skills in problem solving, program development, grant writing and group leadership.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## **AAS 4010 - Education of African American Children**

**Credits:** 3

**Prerequisite(s):** AAS 1010

**Description:** This course analyzes the historical and contemporary factors that influence the education of African American children in the United States. Focus is on the knowledge, skills, and dispositions required by educational institutions, educators, and parents to provide an effective and equitable education for African American children. Practical application is integrated with theoretical research and conceptual information. Students who successfully complete this course will receive introductory skills and experiences as effective practitioners, reflective decision makers, and resources for the community.

*Note:* Credit will be granted for only one prefix: AAS or EDU.

**Cross Listed Course(s):** EDU 4010

## **AAS 4160 - Human Trafficking**

**Credits:** 3

**Prerequisite(s):** GWS 1001, or AAS 1010, or CJC 1010, or HSP 1010, or SWK 1010; upper-division standing; or permission of instructor

**Description:** This course explores human trafficking on international and local levels. A review of multidisciplinary perspectives on labor and sex trafficking provides comprehensive understanding of this human rights issue. Students examine the tactics used by traffickers to recruit and control victims and the effects of abuse on victims. This course provides an overview of U.S. federal and local laws to curb trafficking, including federal Trafficking Victims Protection Act. Finally, students evaluate global and local efforts of the current anti-trafficking movement, including ways to be involved.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** CJC 4160, GWS 4160, HSP 4160, SWK 4160

## **AAS 4490 - Contemporary Issues in Africana Studies**

**Credits:** 3

**Prerequisite(s):** AAS 1010

**Description:** This course provides an in-depth study of selected issues that significantly impact Black people throughout the global African world.

*Note:* Topics vary, and the course may be repeated for credit with the permission of the department chair.

## **AAS 4850 - Research Seminar in Africana Studies**

**Credits:** 3

**Prerequisite(s):** Six credits of upper-division courses in AAS

**Description:** This course provides a capstone opportunity for refining research skills and engaging in graduate school-style seminar sessions. The course is required to complete the AAS major.

**University Requirement(s):** Senior Experience

## **Aging Services Leadership**

### **AGE 1010 - Introduction to Aging and Long-Term Care Services**

**Credits:** 3

**Prerequisite(s):** ENG1010 or (ENG 1008 and ENG 1009)

**Description:** In this course, students explore support systems, services, and policy considerations designed to meet the diverse social, behavioral, and healthcare needs of older adults. Emphasis is placed on understanding the social determinants of health, cultural influences, and behavioral patterns that affect aging populations. Students will recognize the various interactions among individuals and groups that cause inequalities, stereotypes, biases, and myths surrounding aging and ageism. This course encourages critical thinking about the intersection of aging and public policy, healthcare systems, and community services. Students will explore strategies for creating inclusive environments that respect the dignity and autonomy of older adults while addressing the systemic challenges they face. By investigating common health disparities, evaluating programs and services, and exploring workforce development and career options in gerontology and elder care fields, students will discover innovative practices and actions to understand how society can better support aging populations. By the end of the course, students will be equipped to advocate for improved care models, contribute to policy reform, and engage in careers that promote the well-being and quality of life for aging individuals across diverse communities.

**General Studies:** Social and Behavioral Sciences

### **AGE 2020 - Ageism and Ableism in Society**

**Credits:** 3

**Prerequisite(s):** ENG 1010 or (ENG 1008 and ENG 1009)

**Description:** Ageism is learned and developed during early childhood and continued throughout adulthood. Ableism is seen every day in the way society treats those with disabilities. This class provides an exploration of ageism and ableism pertaining to older adults. Students learn about the intersection of age and ability through investigations of the root causes of inequities perpetuating stereotypes and biases pertaining to a person's ability to age well. This class prepares students to recognize the importance of both concepts and advocate for positive systemic, environmental, and policy change. Embedded in the student learning objectives, students earn a certificate in Ageism First Aid offered through the Gerontological Society of America.

## **AGE 3030 - Aging Services: Current Topics, Trends, and Future Considerations**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 and Sophomore or higher standing

**Description:** This course is designed to introduce students to topics, trends and future considerations connected to the emerging and rapidly growing aging services and long-term care profession. By evaluating evidence and investigating current cultural, environmental, societal and political issues, students gain a heightened understanding of the needs of the older adult population and those who provide care.

## **AGE 3800 - Long-Term Care: Managing Across the Continuum**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 and Sophomore or higher standing

**Description:** This course defines the critical issues and adaptive strategies facing post-acute and long-term care management. This course addresses the continuum of long-term care and the variety of providers of care. The impact of regulatory, legal, ethical, payment sources, quality, information technology, operations, and market forces are covered. This course acquaints students with future issues and likely changes in the continuum of care.

## **Air Force ROTC**

### **AFR 1010 - Heritage and Values I**

**Credits:** 1

**Description:** This course provides an introduction to the Air Force, encourages students to pursue an AF career or seek additional information to be better informed about the role of the USAF. The course allows students to examine general aspects of the Department of the Air Force, AF Leadership, Air Force benefits, and opportunities for AF officers. The course also lays the foundation for becoming an Airman by outlining our heritage and values.

### **AFR 1020 - Heritage and Values II**

**Credits:** 1

**Prerequisite(s):** AFR 1010

**Description:** A continuation of AFR 1010. This course provides a historical perspective including lessons on war and the US military, AF operations, principles of war, and airpower. This course also provides students with an understanding for the employment of air and space power, from an institutional, doctrinal, and historical perspective. The students are introduced to the Air Force way of life and gain knowledge on what it means to be an Airman.

### **AFR 2010 - Team and Leadership Fundamentals I**

**Credits:** 1

**Prerequisite(s):** AFR 1020

**Description:** This course is designed to provide a fundamental understanding of both leadership and team building. This course teaches students that there are many layers to leadership, including aspects that are not always obvious. Such things include listening, understanding themselves, being a good follower, and problem solving efficiently.

### **AFR 2020 - Team and Leadership Fundamentals II**

**Credits:** 1

**Prerequisite(s):** AFR 2010

**Description:** A continuation of AFR 2010. This course is designed to discuss different leadership perspectives when completing team building activities and discussing things like conflict management. This course also provides students with the ability of demonstrating their basic verbal and written communication skills. Active cadets will apply these lessons at Field Training, which follows the AS200 level.

### **AFR 3010 - Leading People and Effective Communication I**

**Credits:** 3

**Prerequisite(s):** AFR 2020

**Description:** This course is designed to build on the leadership fundamentals taught in the AS200 level. The cadets will have the opportunity to utilize their skills as they begin a broader leadership role in the detachment. The goal is for cadets and students to have a more in-depth understanding of how to effectively lead people and provide them with the tools to use throughout their detachment leadership roles.

### **AFR 3020 - Leading People and Effective Communication II**

**Credits:** 3

**Prerequisite(s):** AFR 3010

**Description:** This course is designed to help cadets hone their writing and briefing skills. The course continues into advanced skills and ethics training that will prepare them for becoming an officer and a supervisor.

### **AFR 4010 - National Security, Leadership Responsibilities/Commissioning Preparation I**

**Credits:** 3

**Prerequisite(s):** AFR 3020

**Description:** This course is designed to address the basic elements of national security policy and process. The cadet will comprehend the air and space power operations as well as understand selected roles of the military in society and current domestic and international issues affecting the military profession.

## **AFR 4020 - National Security, Leadership Responsibilities/Commissioning Preparation II**

**Credits:** 3

**Prerequisite(s):** AFR 4010

**Description:** In two 1 1/2-hour seminars and one 1 1/2 hour lab per week, this course is a continuation of AFR 4010. Special themes include defense strategy and conflict management, formulation/implementation of U.S. defense policy, and organizational factors and case studies in policy making, military law, uniform code of military justice, and communicative skills.

## **Alternative Licensure Program**

### **ALP 2200 - Diversity and Multicultural Education**

**Credits:** 3

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Description:** This course is designed to increase student awareness of the values and beliefs, traditions, identifiers, and contributions of African Americans, Asian Americans, Hispanic Americans, and Native Americans. Historical, cultural, and individual variations, including socio-economic status, gender, sexual orientation, language background and disabilities will be investigated to help develop respect for all students, parents, and educators in school settings. Students will discover how personal attitudes may affect expectations and decisions in the elementary, secondary, and special education school settings.

### **ALP 3600 - Exceptional Learners in the Classroom**

**Credits:** 3

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Description:** ALP 3600 was designed to introduce students to exceptionality in the classroom from an educational decision-making perspective. Information regarding disabilities and giftedness is presented in a manner to familiarize students with the many instructional decisions they must be prepared to make on the basis of the diversity of the classroom population. The case study method is the approach that will be used in this course. Students will be expected to apply course content to solve various problems that are presented within the context of case studies. These case studies will be specific to the student's level of teacher licensure and will provide exposure to relevant issues pertaining to early childhood, elementary, or secondary education.

## **ALP 3650 - Individualized Education and Curriculum**

**Credits:** 3

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Description:** This course focuses on Individualized Education Plans (IEP) and transition plans for purposes of preparing special educators for teaching curricula within the context of special and general education classrooms. An overview of the philosophical, historical, and sociological foundations of education will be addressed.

### **ALP 3675 - Transition Planning and Instruction**

**Credits:** 3

**Prerequisite(s):** ALP 3650

**Description:** This course provides an in-depth understanding of transition services for students with exceptionalities from childhood to adulthood. Course content focuses on an in-depth investigation of the provision of transition services in the context of comprehensive, secondary education services. Topics in this course include transition-focused IEP development, self-determination and self-advocacy, inter-agency collaboration, transition assessment, and career, vocational, and post-secondary education strategies. Teacher candidates gain the knowledge base and skills necessary to successfully manage the transition services of their future students.

### **ALP 3700 - Educational and Medical Aspects of Disabilities**

**Credits:** 3

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Description:** This course provides an overview of the multidisciplinary needs of students with physical, communicative, cognitive, and sensory disabilities. Emphasis is placed on explaining the impact of medical needs on educational experiences. Principles of Universal Design for Learning (UDL) will be addressed. Teacher candidates must complete a 15-hour field experience in an assigned public school that provides services for students with severe disabilities.

### **ALP 3750 - Assessment, Methods, and Assistive Technology for Severe Disabilities**

**Credits:** 3

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure

requirements under the Alternative Licensure legislation, SB 09-160.

**Description:** This course is designed to introduce pre-service teachers to assessment, curriculum and instruction for students with severe disabilities. Focus will be given to including students in their neighborhood schools, homework, and community. The course also emphasizes the selection and efficacy of assistive device technologies. A minimum 45-hour, field-based experience is required.

### **ALP 3820 - Elements of Literacy Instruction for Students with Disabilities**

**Credits:** 3

**Prerequisite(s):** Must hold a Baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Corequisite(s):** SED 3821

**Prerequisite(s) or Corequisite(s):** ALP 3600, ALP 3650

**Description:** Within this course, students will learn about the components of literacy with a focus on phonemic awareness, phonics, fluency, vocabulary, and comprehension as taught in elementary classrooms. Assessment data is used to design lesson plans and apply scientifically-based interventions to address the needs of students with literacy challenges, including dyslexia. A direct-instruction teaching approach based on best practices is a focus. The course has a co-requisite of a field-based class which will include a 45-hour field-based experience with elementary level students.

**Cross Listed Course(s):** SED 3820

### **ALP 3950 - Mathematics Instruction for Students with Disabilities**

**Credits:** 3

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Description:** This course is designed to introduce effective classroom methods and strategies for teaching, assessing, and monitoring the mathematical performance of students with disabilities within diverse classroom settings. An emphasis is placed on practical classroom techniques to facilitate, maintain, retain, and generalize skill acquisition. Computation and problem-solving techniques are covered. This class requires a 15-hour, project-based field experience.

### **ALP 4050 - Assessment and Instructional Planning**

**Credits:** 3

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure

requirements under the Alternative Licensure legislation, SB 09-160.

**Description:** This course is designed to increase student awareness of the values and beliefs, traditions, identifiers, and contributions of African Americans, Asian Americans, Hispanic Americans, and Native Americans. Historical, cultural, and individual variations, including socio-economic status, gender, sexual orientation, language background and disabilities will be investigated to help develop respect for all students, parents, and educators in school settings. Students will discover how personal attitudes may affect expectations and decisions in the elementary, secondary, and special education school settings.

### **ALP 4200 - Reading Disabilities and Content Instruction**

**Credits:** 3

**Prerequisite(s):** Must hold a Baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Prerequisite(s) or Corequisite(s):** ALP 3600, ALP 3650, ALP 3820

**Description:** This course explores the nature of dyslexia including etiological, sociological, and psychological perspectives, as well as treatment methods. Special emphasis is devoted to reading disabilities in reference to the demands of content instruction at the secondary school level. Critical thinking, study skills, cooperative learning, and Universal Design for Learning (UDL) will be addressed within the context of improving reading and writing achievement of students with disabilities.

### **ALP 4250 - Effective Behavioral Support Systems**

**Credits:** 3

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Description:** Students in this course are introduced to the principles of applied behavior analysis and behavior modification. The use of systematic behavioral assessments, functional behavior assessment plans, behavior intervention plans, and classroom intervention strategies are emphasized. Teacher candidates are prepared to apply Universal Design for Learning (UDL) principles in diverse contexts that include both general and special education classes. This course includes a 15-hour field experience.

**Cross Listed Course(s):** SED 3250

### **ALP 4300 - Assessment and Methods for Emotional and Behavioral Disorders**

**Credits:** 3

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which

the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Description:** This course is designed for teacher candidates to learn how to select, adapt, and use instructional interventions and strategies with students with emotional and behavioral disorders in a variety of settings. Theoretical approaches, identification, educational placement, and evaluation issues will be addressed. In addition, specific categories of disordered behavior, such as bipolar, depression, anxiety, oppositional defiant disorders, schizophrenia, and childhood psychosis, will be discussed. Students are required to apply knowledge and skills in a 30-hour field-based experience.

### **ALP 4400 - Special Education Student Teaching and Seminar: Elementary**

**Credits:** 12

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Description:** This course is a full-time special education student teaching experience in an accredited elementary public or private school that provides teacher candidates responsibility for teaching an identified group of learners with exceptionalities. A minimum of 16 weeks is required for 12 credits. College supervisors provide regularly scheduled observations and seminars and guidance on the development of the teacher work sample.

### **ALP 4430 - Instruction and Collaboration Practicum: Elementary**

**Credits:** 3

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Description:** This practicum is a culminating experience that provides teacher candidates with a structured, supervised secondary level practicum in a special education setting for adolescents. A strong emphasis is placed on transition planning and process for the middle and/or high school student in special education. The seminars are designed to address assigned topics and activities that are linked to the teaching responsibilities of the practicum.

### **ALP 4440 - K-12 Practicum in Special Education**

**Credits:** 3

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160. ALP 2200, ALP 3600, ALP 3650, ALP 3820, ALP 3950, ALP 4050, or permission of instructor.

**Description:** This practicum is a culminating experience that provides teacher candidates with a structured, supervised elementary and/or secondary level practicum in a special education setting for children with disabilities. A strong emphasis is placed on the importance of decision making in diverse contexts including numerous assessment and instructional situations using a case-based approach that will encourage integration of theory and application. The seminars are designed to address assigned topics and activities that are linked to the teaching responsibilities of the practicum.

### **ALP 4490 - Special Education Student Teaching and Seminar**

**Credits:** 12

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Description:** This course is a full-time special education student teaching experience in an accredited elementary public or private school that provides teacher candidates responsibility for teaching an identified group of learners with exceptionalities. College supervisors provide regularly scheduled observations and seminars and guidance on the development of the teacher work sample.

### **ALP 4491 - Alternative Licensure Program I**

**Credits:** 10

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Description:** The Alternative Licensing Program 1 course (ALP 1) is a course in which candidates learn appropriate educational practices in discipline, management of the learning environment, short/long range planning, assessment and pedagogy to meet the Colorado Teacher Quality Standards. Candidates will apply content knowledge assigned classrooms to facilitate learning and improve student achievement. ALP candidates will address the needs of diverse learners (gender, ethnicity, second language learners, handicapping conditions) in different contexts as reflected in daily decision-making and as evidenced by direct observation and selected artifacts. Seminar includes required readings, articles, field-based examples, student-centered instructional tasks, classroom interaction and analysis to meet proficient level of performance in the Colorado Teacher Quality Standards. Candidates will learn about and practice selected theories and programs in discipline, management, and pedagogy. Coaching and feedback as strategies are used to support the development of ALP candidates in the classroom.

### **ALP 4492 - Alternative Licensure Program II**

**Credits:** 15

**Description:** The Alternative Licensing Program 2 course (ALP 2) is a course in which candidates put educational theory into practice as a classroom teacher and in the field to meet the Colorado Teacher Quality Standards. Candidates will apply content knowledge and pedagogical strategies with appropriate discipline and management practices in assigned classrooms to facilitate learning and improve student achievement. ALP candidates will address the needs of diverse learners (gender, ethnicity, second language learners, handicapping conditions) in different contexts as reflected in daily decision-making and as evidenced by direct observation and selected artifacts. Field experiences include application of methodology introduced at weekly seminars to meet proficient level of performance in the Colorado Teacher Quality Standards. Candidates will model and practice selected theories and programs in discipline, management, and pedagogy. Coaching and feedback as strategies are used to support the development of ALP candidates in the classroom.

### ALP 4493 - Educational Theory and Methods

**Credits:** 10

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Corequisite(s):** ALP 4494

**Description:** Alternative Licensure Program candidates learn appropriate educational practices in management of the learning environment, short/long range planning, assessment and pedagogy to meet the Colorado Teacher Quality Standards and licensure requirements. Candidates will apply content knowledge and pedagogical strategies with appropriate discipline and management practices in assigned classrooms to facilitate learning and improve student achievement in the advanced field experience ALP 4494. ALP candidates will address the needs of diverse learners (gender, ethnicity, English language learners, exceptional learners, socioeconomic differences, etc.) in different contexts as reflected in daily decision-making and documented by direct observation and selected artifacts. Instruction includes required readings, articles, field-based examples, student-centered instructional tasks, classroom interaction and analysis to meet proficient level of performance in the Colorado Teacher Quality Standards. Candidates will learn about and practice selected theories and programs in discipline, management, and pedagogy. Coaching and feedback as strategies are used to support the development of ALP candidates in the classroom.

### ALP 4494 - Advanced Field Experience

**Credits:** 20

**Prerequisite(s):** Course participants must hold a baccalaureate degree from a regionally accredited institution and have been hired by a Metro-area school or school district to teach in an area for which the candidate can meet grade level and content licensure requirements under the Alternative Licensure legislation, SB 09-160.

**Corequisite(s):** ALP 4493

**Description:** Alternative Licensure Program candidates put

educational theory into practice as a classroom teacher in the field to meet the Colorado Teacher Quality Standards and licensure requirements. This course is the advanced field experience for ALP 4493. Candidates will apply content knowledge and pedagogical strategies with appropriate discipline and management practices in assigned classrooms to facilitate learning and increase student achievement. ALP candidates will address the needs of diverse learners (gender, ethnicity, English language learners, exceptional learners, socioeconomic differences, etc.) in different contexts, as reflected in daily decision-making, and will be assessed by direct observation and selected artifacts. Field experiences include application of methodology introduced in ALP 4493 to meet proficient level of performance in the Colorado Teacher Quality Standards. Candidates will model and practice selected theories and programs in discipline, management, and pedagogy.

## American Sign Language

### ASL 1010 - American Sign Language I

**Credits:** 3

**Description:** This course provides students with a basic understanding of American Sign Language including conversational skills and linguistic structures. Students are also introduced to Deaf culture.

*Note:* Credit will only be granted for one prefix: ASL or SLHS

**Cross Listed Course(s):** SLHS 1610

### ASL 1020 - American Sign Language II

**Credits:** 3

**Prerequisite(s):** ASL 1010 or SLHS 1610 or permission of instructor

**Description:** This course is a continuation of ASL 1010 emphasizing expressive language as well as increasing competence with receptive language skills. The course continues to build vocabulary and familiarity with the complex grammar (morphology and syntax) of this visual language. The deaf experience and culture is integrated throughout.

*Note:* Credit will be granted for only one prefix: ASL or SLHS.

**General Studies:** Oral Communication

**Cross Listed Course(s):** SLHS 1620

### ASL 1021 - Bridging Cultures on the Job

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** ASL1010, ASL 1020, or instructor's permission

**Description:** This one-credit course complements the existing ASL 1020 - American Sign Language II or its equivalent. It adds a professional dimension to the study of American Sign Language, with two main objectives: enhancing students' ability to communicate in specific, career-relevant situations in ASL, and developing intercultural expertise for effective communication with individuals from diverse cultural backgrounds.

**General Studies:** Arts and Humanities

## ASL 1030 - American Sign Language III

**Credits:** 3

**Prerequisite(s):** ASL 1020 or permission from the instructor

**Description:** In this course, students continue to build their foundation of signing skills and knowledge acquired in American Sign Language (ASL) I and II. Students learn more vocabulary signs and more complex grammatical features using classifiers through narratives and dialogues. In addition to improving their signing skills, students learn more about Deaf culture in class and from reading assignments. Learning about Deaf culture helps students understand the particular cultural norms, behaviors, and formative shared experiences distinct to those who approach the world from a visual perspective and use ASL.

## ASL 2100 - Introduction to Deaf Culture

**Credits:** 3

**Description:** Through this course students will acquire comprehensive understanding of the vibrant culture of the Deaf community. Through exploring the history, social dynamics, values, and traditions of Deaf culture, students gain insights into the unique experiences and perspectives of Deaf individuals. The course also covers the significance of American Sign Language (ASL) and its role within the community, as well as the impact of societal attitudes and technological advancements on Deaf people's lives. Students engage in discussions, readings, and activities that promote cultural competence and respect for Deaf culture. No prior knowledge of ASL is required for this course.

## Anthropology

### ANT 1010 - Introduction to Biological Anthropology

**Credits:** 3

**Description:** This course is an introduction to the science of biological anthropology, the study of biological evolution and variation among humans and our closest living relatives, the primates. Students learn about evolutionary theory, human genetics, human and primate skeletal anatomy, bioarchaeology and forensic anthropology, primate taxonomy and geographic distribution, primate and human evolution, and human variation and adaptation. The laboratory sections embedded within the course provide practical experience in the following areas: DNA analysis, population genetics and evolutionary forces, human and primate skeletal anatomy, bioarchaeology, fossil hominin anatomy, and modern human variation.

**General Studies:** Natural and Physical Sciences, Global Diversity

**Guaranteed Transfer:** GT-SC1

### ANT 1300 - Asia in Global Perspective

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** This course is an overview of Asia's diverse

geographies, peoples, histories, and contemporary developments from an interdisciplinary perspective. Throughout the course, students investigate the intersection between domestic and global factors in shaping contemporary Asian experiences. Topics include Asia's dynamic cultures, rich philosophical, religious, and linguistic traditions, vibrant economies, and various types of political systems. Students also reflect on how issues such as colonization, nation-building, gender, and migration shape contemporary Asia and its many representations.

*Note:* Credit will be granted for only one prefix (SOC, ANT, GWS, HIS, LANG, or PSC).

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Guaranteed Transfer:** GT-SS3

**Cross Listed Course(s):** GWS 1300, HIS 1260, LANG 1260, PSC 1300, SOC 1300

### ANT 1310 - Introduction to Cultural Anthropology

**Credits:** 3

**Description:** This course is an exploration of the diversity that defines human experience. Students learn about the field of anthropology and its approach to examining other cultures with a focus on holism and cultural relativism. Students are introduced to fieldwork methods in anthropology and the importance of participant-observation in cultural anthropology. Course content introduces students to various aspects of cultures across the globe, such as subsistence strategies, political organization, social identities and hierarchies, marriage, family and kinship systems, religious behavior, health, language, creative and artistic expressions, and issues of power in relation to colonialism, socio-economic discrimination, and global inequalities.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Guaranteed Transfer:** GT-SS3

### ANT 1400 - Introduction to Folklore

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** In this textual studies course, students explore how people use informal and traditional culture, called folklore, to sustain their cultural identities and resist or reinforce social norms. Since folklore has existed throughout history and across cultures around the world, students may study a wide-range of folklore, including but not limited to: storytelling, folk poetry, jokes, memes, conspiracy theories, slang, proverbs, folk song, prayers and blessings, customary behaviors, performances, and folk art.

*Note:* Credit will be granted for only one prefix.

**General Studies:** Arts and Humanities, Global Diversity

**Guaranteed Transfer:** GT-AH2

**Cross Listed Course(s):** ENG 1150

### ANT 1650 - Ancient Civilizations

**Credits:** 3

**Description:** This course introduces students to the development of ancient civilizations from a broad, comparative framework. These

civilizations are studied from religious, economic, intellectual, political, cultural, and social perspectives.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

**Cross Listed Course(s):** HIS 1005

### ANT 2330 - Cross-Cultural Communication

**Credits:** 3

**Description:** In this course, students explore anthropological approaches to cross-cultural communication. Emphasizing an applied approach, students focus on how language and language use vary from culture to culture, and how knowledge of these differences can lead to understanding of difference and dominance relations between groups within the United States, specifically African-American, Asian, Hispanic American, and Native American, and internationally. Topics include the relationship between language and culture, sociolinguistic variation, politeness, multilingualism, and language politics.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

**University Requirement(s):** Ethnic Studies & Social Justice

### ANT 2350 - African Peoples and Cultures

**Credits:** 3

**Description:** This course examines traditional cultures of African peoples and gives added understanding of culture and people in relation to human problems and experiences.

*Note:* Credit will be granted for only one prefix: ANT or AAS.

**Cross Listed Course(s):** AAS 2300

### ANT 2360 - Living Culture and Language of the Mexican and Chicano

**Credits:** 3

**Prerequisite(s):** CHS 1000 or CHS 1020

**Description:** This course traces the fusion of cultures and dialects of the Spanish-speaking Southwest into elements that characterize Chicano intracultural and intercultural diversity.

*Note:* Credit will be granted for only one prefix: ANT or CHS.

**Cross Listed Course(s):** CHS 2000

### ANT 2400 - Women's Folklore and Folklife

**Credits:** 3

**Prerequisite(s):** ENG 1020

**Description:** This course provides an exploration of folklore in everyday life, folk narrative, and other verbal genres, cultural forms, and manifestations of traditional expressive behaviors as they pertain to reinforcing and resisting gender norms and practices within diverse cultures. It offers a critical examination of how women creatively use folklore to affirm and subvert their roles within sexist, racist, classist, and heterosexist cultural systems.

*Note:* Credit will be granted for one prefix only: ANT or GWS.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH1

**Cross Listed Course(s):** GWS 2400

### ANT 2500 - Anthropology of Language

**Credits:** 3

**Prerequisite(s):** Preassessment Placement Tests: Reading and Writing (minimum performance standard scores)

**Description:** This course provides an introduction to the concepts and methods of linguistic anthropology. Topics include language and culture, language structure, the origins of language, linguistic diversity, and language ideologies. The course also provides opportunities to observe and record speech and other communicative behaviors; identify the sequential organization of talk; and determine how language reflects and creates social identities, relationships, and realities.

### ANT 2640 - Archaeology

**Credits:** 3

**Description:** This course will be an examination of how archaeologists discover and interpret the material remains of human behavior from the past.

### ANT 2700 - Museum Studies

**Credits:** 3

**Description:** Students examine the basic elements, missions, and the characteristics of museums. They will examine important key professional activities such as: curation, exhibit design, conservation, management, and community engagement. They will also compare these practices across a variety of museum types and contexts in order to gain an appreciation of the range of skills and knowledge required for succeeding in the museum profession.

*Note:* Credit will only be granted for one prefix, and the ARTH version of this course cannot fulfill the Upper Division Art History Elective requirement of the Art Major, B.F.A. program.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

**Cross Listed Course(s):** ARTH 2700

### ANT 2710 - Archaeological Field Research

**Credits:** 3

**Description:** This course is an introduction to the methods used to collect and analyze archaeological data in a hands-on field setting. Students are introduced to surface survey, excavations, and data recording to discover and describe archaeological features and artifacts. This course may be repeated for up to a maximum of six hours. No more than three credit hours may be applied toward a major or minor in anthropology.

### ANT 3000 - Quantitative Methods in Anthropology

**Credits:** 3

**Prerequisite(s):** ANT 1010, or ANT 1310, or ANT 2500, or ANT



2640, or MTH 1210, or permission of instructor

**Description:** This course is an introduction to quantitative data analysis for all four subfields of anthropology. A variety of statistical methods are covered with an emphasis on anthropological datasets. Students learn descriptive statistics, univariate methods, and select multivariate methods that are commonly used in the anthropological literature. Presentation of data and results is also highlighted. No previous statistical knowledge is required for the class, but a prior introductory statistics course is preferred.

## ANT 3100 - Human Evolution

**Credits:** 3

**Prerequisite(s):** ANT 1010 or permission of instructor

**Description:** This course is an overview of the evolutionary history of our species, *Homo sapiens*, and our extinct ancestors, the hominins. Taking a largely chronological approach, students learn the anatomical features of each hominin species through lectures, readings, and hands-on analysis of hominin fossil casts. Students also learn aspects of hominin ecology and behavior, as inferred from their morphology and associated archaeological and faunal remains. Additional topics include an introduction to evolutionary theory, taxonomy and systematics, primate evolution, and human skeletal biology.

## ANT 3110 - Race and Human Variation

**Credits:** 3

**Description:** This course explores the history of the race concept in biological anthropology and evaluates human biological variation from a biocultural perspective. The first half of the course includes a critical history of the race concept in biological context, focusing on the development of this concept and the social consequences of its adoption. The second half of the course addresses human biological variation from a biocultural perspective. This perspective evaluates biological variation within the context of environment and culture, and views the interaction of these contexts as essential in understanding human phenotypic variation.

## ANT 3122 - The Neanderthal Enigma

**Credits:** 3

**Prerequisite(s):** ANT 1010 or Permission of instructor

**Description:** This course is an in-depth look at our closest evolutionary cousins, the Neanderthals. Neanderthals have been studied for over 150 years, and many early incorrect interpretations of them still persist in society today. As such, the class begins with a thorough look at the history of the study of Neanderthals before moving on to modern perspectives on Neanderthal biology, culture, and why they are no longer around.

## ANT 3170 - Primate Adaptation and Evolution

**Credits:** 3

**Prerequisite(s):** ANT 1010 or permission of instructor

**Description:** This course addresses adaptation in the Order Primates.

It includes a discussion of the primary forces of evolution and a detailed examination of how one of these forces, natural selection, has shaped the anatomy of living and fossil primate species. Students assess the diagnostic anatomical features of living and fossil primate groups and learn how to use these features to predict diet, locomotion, and social structure. Students also examine the evolutionary relationships of living primates and assess how fossil primates contribute to our understanding of these relationships.

## ANT 3190 - Mammalian Paleontology

**Credits:** 3

**Prerequisite(s):** ANT 1010 or (BIO 1081 and BIO 1091)

**Description:** This course is an overview of the mammalian fossil record. The course begins with an overview of major components of paleontology, including evolutionary biology, taxonomy and systematics, taphonomy, and geologic time. Students then learn about modern mammalian groups and mammalian anatomy before taking a detailed look into current fossil evidence for the evolution of major mammalian groups.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** BIO 3190

## ANT 3300 - Exploring World Cultures: Variable Topics

**Credits:** 3

**Prerequisite(s):** ANT 1310 or Permission of instructor

**Description:** The focus of study will be an exploration of selected non-Western cultures. Using films and various ethnographic procedures, the student learns how culture-and by extension, human culture-is a living thing shaped by the people who carry it.

*Note:* The course may be repeated under different topics.

## ANT 3310 - Ethnography of North American Indians

**Credits:** 3

**Prerequisite(s):** ANT 1310 or Permission of instructor

**Description:** This course studies the nature and consequences of distinctive Indian cultures that occupied North America at the time of European contact. Includes a close analysis of the many different aspects of social organization and environment that contribute to the unique cultures we call American Indian.

## ANT 3320 - Anthropology of Japan

**Credits:** 3

**Prerequisite(s):** ANT 1310 or permission of instructor

**Description:** This course provides a comprehensive introduction to the anthropological study of contemporary Japanese culture and society, with attention to historical, ethnographic and media interpretations. Major themes include historical background of contemporary Japanese society, language and communication, changing social patterns and institutions, demographic transition, popular culture, citizens' movements, and globalization.

## **ANT 3330 - Japan: Culture, Communication, and Identity**

**Credits:** 3-6

**Prerequisite(s):** Permission of instructor

**Description:** This study abroad course explores Japanese culture, communication, and identity through lecture, experiential learning, and ethnographic fieldwork in Japan. Pre-departure instruction focuses on geography, history, social organization, political-economy, patterns of social interaction, and ethnographic field methods. Week-long stays in distinct regions of Japan enable students to observe and experience how social-political, regional, and linguistic differences shape majority and minority identities, despite the belief that Japan is culturally homogenous.

## **ANT 3335 - Asian American Experiences**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** This course critically reviews Asian American history and examines its relevance to contemporary issues in the U.S. It employs an interdisciplinary approach to examine the intersectionality of power, race, class, gender, and internal marginalization in shaping Asian American experiences. Topics include: racial formation of Asian American ethnic identities; historical roots of discrimination and anti-Asian violence (with special topics on Asian American women and Asian Americans in Colorado); negotiation of Asian American identities and culturally distinctive coping strategies; the myth and consequences of "Model Minority"; the relevance of the "Sojourner Hypothesis" in the 21st century; and generations of Asian American social movements aiming at achieving equality and justice for all.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** SOC 3200

## **ANT 3340 - Native Americans in Historical Perspective**

**Credits:** 3

**Prerequisite(s):** ANT 1310 or Permission of instructor

**Description:** This course is a survey of the response of Native American societies to the overrunning social, economic, and political structures of Euro-America. Broad areas of cultural change are covered, and the fundamental issues of land, economic development, and cultural integrity are looked at.

## **ANT 3361 - Gender and Disaster**

**Credits:** 3

**Description:** This course analyzes gender's shaping global development and disaster vulnerability by focusing on the experiences of girls and women before, during, and after disastrous events. It examines intersecting patterns of vulnerability and response based on gender, class, race/ethnicity, age, nationality and other factors. Students examine gender-focused case studies from developed and developing societies and investigate the practical

implications of gender-sensitive sociology of disaster.

*Note:* Credit will be granted for only one prefix: ANT, GWS, or SOC

**Cross Listed Course(s):** GWS 3780, SOC 3780

## **ANT 3365 - Structural Violence, Poverty and Human Rights**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** In this course, students apply a structural violence framework to make visible the power inequalities that result in producing and reproducing injustices and violations of socioeconomic rights. The use of ethnographic case studies allows students to explore a human rights-based approach to collective actions for justice. Through group discussion, analysis, and workshops, students learn to take political responsibility for injustices beyond those we individually witness or experience.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** GWS 3365, PSC 3365

## **ANT 3375 - Food and Culture**

**Credits:** 3

**Description:** This course is an exploration of how food procurement, dietary practices, ideologies of consumption, and food celebrations across cultures are related to varying environments, subsistence strategies, moral sensibilities, socioeconomic and political conditions, social identities, and social hierarchies. Using an anthropological approach, students examine how the ideological, emotional, symbolic, aesthetic, and social value of food and its marketing varies across cultures. In addition, course materials introduce students to the politics and social movements revolving around ethical food procurement and food as a human right.

*Note:* Credit will be granted for only one prefix: ANT or NUT.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Cross Listed Course(s):** NUT 3375

## **ANT 3379 - Middle Eastern Cultures**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ANT 1310 or PSC 1020

**Description:** This course introduces students to various aspects of Middle Eastern cultures, including family life, marriage, kinship, religious practices, communal, ethnic, class, and gender identities. Using anthropological approaches of holism and cultural relativism to studying cultures, the course highlights the region's diverse ethnic, religious, linguistic and economic groups, its visual, popular, national, gender, and social cultures, and how colonial history and foreign powers have influenced it using ethnographic case studies and cultural histories from Afghanistan, Bahrain, Egypt, Iran, Israel, Israel, Jordan, Kuwait, Lebanon, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, and Yemen.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Cross Listed Course(s):** PSC 3379

## **ANT 3380 - Exploring Folklore**

**Credits:** 3

**Prerequisite(s):** ANT 1310 or CHS 1000; or Permission of the instructor

**Description:** This course will help the student to analyze the various elements of folklore from verbal to non-verbal classifications, survivals, revivals, and the implications for modern society. Folklore will be studied in a historical and contemporary context. The student will gain an understanding of both the universality and variability of folklore through many global examples compared and contrasted with a regional focus on the folklore of the American Southwest.

**Cross Listed Course(s):** CHS 3880

### **ANT 3386 - Religious Narratives and Culture**

**Credits:** 3

**Prerequisite(s):** ANT 1310 or PHI 1010 or PHI 1040 or PHI 1050 or at least 6 General Education credits or instructor permission

**Description:** This course is an anthropological examination of how the supernatural cosmos and entities are conceptualized in religious texts and narratives diversely across cultures and how they relate to socio-economic, political and artistic aspects of life. Topics include creation narratives, myths, legends and folklore, rituals and rites of passage, magic and witchcraft, ritual mediation, taboos, religious symbols, and religious movements.

**General Studies:** Arts and Humanities

### **ANT 3391 - Approaching Culture: Past and Present**

**Credits:** 3

**Prerequisite(s):** ANT 1310 or permission of instructor

**Description:** The study of human behavior and cultures has always fascinated and puzzled social scientists. In this course, we will examine the historical and social dimensions of the study of cultures from the 19th century to the present and related conceptual paradigms. In addition, we will examine how increased awareness of issues of differential power, observer/observed subjectivities, culturally constructed identities and fieldwork ethics have influenced how we understand the human condition.

*Note:* Students cannot earn credit for both ANT 3390 and ANT 3391.

### **ANT 3395 - Transnational Genders and Sexualities**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or GWS 1200 or ANT 1310 or ANT 2500 or ENG 1020 or ENG 1021

**Description:** This course explores the transnational production of gender and sexualities. It examines how people, ideas and capital moving across borders play a role in the development of gender and sexual identities, practices, and communities. Through this focus, the course engages transnational phenomena such as tourism, migration, global LGBT communities, colonization and human rights.

*Note:* Credit will be granted for only one prefix: ANT or GWS

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Cross Listed Course(s):** GWS 3395

### **ANT 3397 - Culture and Economy**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ANT 1310 or ANT 2330 or ECO 2010 or ECO 2020

**Description:** In this course, students are introduced to the relationship between culture and economic behavior. Using production, consumerism, and social exchange as a point of departure, students examine the dynamics of community perceptions, cultural trends and social identities built around economic enterprise. The topics students review include public choice, non-market decisions, economics of globalization, colonial and local systems of economy and challenges, cultural norms of economic relations, sharing, exchange and consumerism, informal economy, economy of tourism, and economic movements, among others.

*Note:* The course is crosslisted. Credit will be granted for only one prefix, ANT or ECO.

**Cross Listed Course(s):** ECO 3397

### **ANT 3420 - Applied Anthropology**

**Credits:** 3

**Prerequisite(s):** ANT 1310 and 3 credit hours of upper-division anthropology coursework

**Description:** Often regarded as the fifth field of anthropology, applied anthropology is an aspiration, necessity and reality for contemporary anthropologists. This course explores how anthropological knowledge can be applied to solve problems and meet the needs of communities and organizations in pursuit of human rights, peace and social egalitarianism. Different facets of applied anthropology, from public anthropology to community-based anthropology to activist anthropology and others will be examined using examples from the field to highlight ways in which anthropologists apply anthropological theory, ethics, fieldwork methodology and data to initiate solutions to real-life problems of the communities and organizations which they study. Furthermore, students will learn about the career trajectories that involve applying anthropological insights to community betterment.

### **ANT 3480 - Cultural Diversity in Health and Illness**

**Credits:** 3

**Prerequisite(s):** Completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy, and permission of instructor.

**Description:** This course prepares students to understand the many different viewpoints and concepts related to health and illness in other cultures and emphasizes the need and means to provide culturally appropriate health care.

### **ANT 3490 - Globalization and Culture**

**Credits:** 3

**Prerequisite(s):** ANT 1310 or permission of instructor

**Description:** This course explores anthropological approaches to globalization, with an emphasis on understanding transnational movements of capital, commodities, persons and ideas through the analysis of ethnographic case studies. Students examine the impact of

globalization on how anthropologists theorize culture and conduct ethnographic fieldwork.

### ANT 3520 - Analyzing Talk and Interaction

**Credits:** 3

**Description:** Face-to-face interaction is a defining feature of human behavior. It is where language, bodily movement, and other modalities of expression become socially enacted as talk. Through this course, students collect and prepare data to examine this special site of human existence, focusing on how people coordinate and situate their language and bodies within a richly structured social, cultural, and material world.

**Cross Listed Course(s):** COMM 3120, SOC 3360

### ANT 3530 - Writing Systems and Scribal Traditions

**Credits:** 3

**Description:** From columns of Classic Mayan glyphs and Chinese characters to strings of Greek letters and Viking runes, the world's writing systems and scribal traditions are vast and diverse. In exploring this topic, the course examines how sounds, words, social meanings, and other properties of human languages are graphically adapted and culturally transformed into writing systems. Specific areas of focus include the historical development of writing systems, epigraphy and the decipherment of ancient languages, scribal artistry and craft, and the relationship between writing and sociopolitical power. Although surveying several writing systems and associated phenomena, the course also features an in-depth exploration of Classic Mayan writing (or another visually complex system).

**General Studies:** Arts and Humanities, Global Diversity

**Cross Listed Course(s):** LING 3090

### ANT 3540 - Women in the Developing World

**Credits:** 3

**Prerequisite(s):** GWS 1001 or PSC 1020 or ANT 1310

**Description:** This course presents a cross-cultural study of women's lives in the developing world by examining two main issues: the influence of culture on women's issues and politics' impact on women. By the end of this course students will not only learn about the lives of women in the developing world but also become familiar with how women across the globe articulate the desire for equality.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** GWS 3540, PSC 3540

### ANT 3600 - Archaeology of Eurasia and Africa

**Credits:** 3

**Prerequisite(s):** ANT 1650 or equivalent, or permission of the instructor

**Description:** This course examines important archaeological discoveries relevant to the archaeology of Eurasia and Africa. Students critically analyze archaeological evidence to understand early human migrations, the domestication of plants and animals, the

rise of civilizations, and intercultural or interregional contacts from the Paleolithic to the Iron Age.

### ANT 3610 - Colorado Archaeology

**Credits:** 3

**Prerequisite(s):** ANT 1650 or equivalent, or permission of the instructor

**Description:** This course examines important discoveries relevant to the archaeology of Colorado. Students critically analyze archaeological evidence, as well as historic and contemporary scholarship, to understand human adaptation to environmental diversity, Native American lifeways, and later intercultural and interregional contacts.

### ANT 3630 - Archaeology of Ancient Egypt

**Credits:** 3

**Description:** This course examines a set of timeless historical and anthropological issues as experienced by ancient Egyptians. Students critically analyze the classic Egyptian discoveries and review the latest archaeological research.

**Cross Listed Course(s):** HIS 3707

### ANT 3640 - Holy Land Archaeology

**Credits:** 3

**Description:** This course examines important archaeological discoveries relevant to Holy Land historical contexts and interpretation. Students critically analyze both material and literary evidence, as well as historic and contemporary scholarship, to understand the benefits and challenges of correlating ancient literary sources, biblical narratives, and the archaeological record.

*Note:* Credit will be granted for only one prefix.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Cross Listed Course(s):** HIS 3706

### ANT 3650 - 100,000 Years of War

**Credits:** 3

**Description:** This course uses a broad comparative framework to introduce students to the economic, intellectual, political, and cultural impact that warfare has had from prehistory to modern times. One of every 150 people die violently in the world today. One of every 100 people died in this fashion a century ago, and one of every fifty people approximately 1,000 years ago. An astonishing one out of ten people died violently 10,000 years ago. Students will explore this contingent shift away from violence over time.

*Note:* Credit will be granted for only one prefix: ANT or HIS.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Cross Listed Course(s):** HIS 3705

### ANT 3660 - Archaeology of the Americas

**Credits:** 3

**Prerequisite(s):** ANT 1650 or equivalent, or permission of the

instructor

**Description:** This course examines important archaeological discoveries relevant to the archaeology of the Americas. Students critically analyze archaeological evidence, as well as historic and contemporary scholarship, to understand the populating of the Americas, domestication of plants and animals, the rise of civilizations, and intercultural and interregional contacts.

### ANT 3790 - Human Osteology

**Credits:** 3

**Prerequisite(s):** ANT 1010 or permission of instructor

**Description:** This course instructs students in human osteology from an anthropological perspective. Instruction covers bone as a living tissue and how it grows and develops, as well as the manner in which it responds to stress. Students receive instruction in the identifying features of each bone, including major muscle attachment sites, and they learn how to create a biological profile by analyzing human skeletal remains, including estimating biological sex, age at death, stature, and population affinity. They are also instructed in the identification of specific bones, the side from which they came, and the sex and age where appropriate for fragmented remains. Students have the opportunity to work with human bone casts and human bones, including bone fragments, which form part of the MSU Denver Anthropology program collection. This course counts toward the Anthropology major's practical requirement.

### ANT 3800 - Forensic Anthropology

**Credits:** 3

**Prerequisite(s):** ANT 1010 or permission of instructor

**Description:** This course offers instruction in the foundational concepts, theories, and methodologies used in the field of forensic anthropology. Students receive instruction in human osteology; human skeletal analysis; statistical analysis; scene location, recovery and analysis; chain of evidence preservation; medicolegal aspects of trial testimony; and professional avenues for forensic anthropologists within the broader forensic sciences. Students engage critically with theory and current methods via hands-on lab activities, discussion, and written assignments. This course counts towards the Anthropology major's practical requirement.

### ANT 3820 - Forensic Archaeology

**Credits:** 3

**Prerequisite(s):** ANT 2640 or permission of instructor

**Description:** This course examines the role of forensic archaeology within the specialty field of forensic anthropology. It includes a discussion of the role of the forensic anthropologist in the United States. The importance of traditional archaeological techniques and how they may be adapted within a medico-legal context are addressed. Methods for the search and location of forensic sites, and the excavation and recovery of human remains and associated evidence are discussed in detail.

### ANT 3840 - Introduction to Bioarchaeology

**Credits:** 3

**Prerequisite(s):** ANT 1010

**Description:** This course is an introduction to bioarchaeology; the study of human skeletal remains contextualized in the larger archaeological and historic record. Bioarchaeology, as a specialization in anthropology, is the integration of theory and methods from biological anthropology and archaeology. In this course the human body is understood from a biocultural perspective. A wide range of topics including mortuary archaeology, paleopathology, trauma and violence, paleodemography, population genetics, and use of the body as material culture is covered. This course also emphasizes ethical and legal considerations for bioarchaeological research and its impacts on living cultures, as well as the practitioner.

### ANT 3860 - Paleopathology

**Credits:** 3

**Prerequisite(s):** ANT 1010 or permission of instructor

**Description:** This course is an examination of how anthropologists utilize current techniques and information in the analysis and discovery of disease, diet and injury on fossil and human skeletal material. Analysis of archaeological techniques and impact of mortuary practices are reviewed. Students practice various methods for analysis of skeletal pathology and demography.

### ANT 4100 - Biological Anthropology Research Design

**Credits:** 3

**Prerequisite(s):** ANT 1010 and a minimum of six hours of upper-division anthropology coursework or permission of instructor

**Description:** This course addresses research design and methods used in biological anthropology. The majority of these methods involve measurement and analysis of human anatomical variation. Students practice anthropometric and osteometric measurement techniques. Students study human osteology with a specific focus on estimation of age, sex, stature, and ancestry. Additional research methods including microscopy, photography, and computer-based imaging modalities are also addressed. Students review basic univariate and multivariate statistics and their role in biological anthropology research. Literature reviews, data collection protocols, and dissemination of results are also covered. Students use knowledge gained in this course to design and conduct a research project.

**University Requirement(s):** Senior Experience

### ANT 4251 - Advanced Ethnographic Field Experience

**Credits:** 3

**Prerequisite(s):** Senior Standing

**Description:** This course covers key issues in ethnographic field design, including ethics, participant and observer identities and voices, data collection methods and analysis, and the value of the holistic perspective in anthropology. Course content, class

discussions, and research experience prepare students in conducting their own ethnographic projects.

**University Requirement(s):** Senior Experience

### **ANT 4400 - Current Issues in Anthropology: Variable Topics**

**Credits:** 1-6

**Prerequisite(s):** Permission of instructor

**Description:** This course is an examination of current issues in one or more sub-fields of anthropology. Each section covers a different area of anthropology. The course may be repeated under different topics for up to 6 credit hours.

**Note:** Variable Credit This course is repeatable for a maximum of six semester hours.

### **ANT 4610 - Archaeological Laboratory Methods**

**Credits:** 3

**Prerequisite(s):** ANT 1650 or ANT 2640, or permission of the instructor

**Description:** Students in this course receive advanced training in common laboratory methods used by archaeologists in artifact processing, artifact handling, and archaeological interpretation following fieldwork. Through hands-on activities, students gain practical experience in classifying and analyzing a variety of archaeological materials. [This course can be counted toward the practical requirement for the Anthropology Major.]

### **ANT 4710 - Advanced Archaeological Research**

**Credits:** 3

**Prerequisite(s):** Senior Standing and ANT 1650 or ANT 2710 or permission of instructor

**Description:** This course addresses research design and methods used in archaeology. Students practice hands-on methods such as surface survey, excavation, and/or lab methods including bone, ceramic, lithic, and archival analysis. This course may be repeated for up to a maximum of six hours. No more than three credit hours may be applied toward a major or minor in anthropology.

**Field Trips:** Potential trips include archaeological sites and museums. Personal field equipment may be required (tape measures, gloves, etc.).

**University Requirement(s):** Senior Experience

## **Architecture**

### **ARCH 2001 - Introduction to Architecture**

**Credits:** 3

**Prerequisite(s):** CET 1215 with a grade of "C" or better

**Description:** In this course, students will recognize the complexity and beauty of architecture, and develop a specialized area of interest within the field of architecture. The course provides a foundation in

the culture of architecture, which students will pursue through affiliated courses on the subject.

### **ARCH 2002 - Architectural Design-Studio 1**

**Credits:** 3

**Prerequisite(s):** CET 1215 with a grade of "C" or better

**Description:** In this course, students will focus on a practical, residential building design. The small-scale dwelling design will include the overall planning process from creating a basic building concept to its finished plan and documentation.

### **ARCH 2003 - Building Structures**

**Credits:** 3

**Prerequisite(s):** CET 1215 or IND 1450 or MET 1200 or permission of instructor

**Description:** In this course students learn building structural components and details and architectural modeling through integrated class projects. The students are also introduced to Building Information Modeling (BIM) and to the importance of collaboration between related fields in the building industry.

**Cross Listed Course(s):** CET 2003

### **ARCH 3001 - Architectural Interior Design**

**Credits:** 3

**Prerequisite(s):** ARCH 2002 with a grade of "C" or better

**Description:** In this course, students will focus on the dual nature of interior design and architecture. One part will reveal how interior design is an integral part of complex architecture; the other part will show how interior design is independent. The main goal is for students to gain experience in interior design and the exciting world of object design.

### **ARCH 3002 - Architectural Design-Studio 2**

**Credits:** 3

**Prerequisite(s):** ARCH 2002 with a grade of "C" or better

**Description:** This course provides a knowledge base in the theory and practice of architecture and urban design, focusing on complex architectural issues. Students will explore the relationship of public building design and urbanism. Students will gain insight into the connections between architectural projects and urban design, and overview urban planning history from its beginnings to the present. Students learn to create large-scale, urban-development projects through case studies that demonstrate design precedents, to procedure, to implementation.

### **ARCH 3003 - Digital Presentations in Architecture**

**Credits:** 3

**Prerequisite(s):** CET 1215 with a grade of "C" or better or permission of instructor

**Description:** The course introduces students to traditional and contemporary presentation techniques that could be applied to the

architecture profession. The goal of the course is to enable students to self-manage their professional life and creatively use different media platforms.

## Art

### ART 1101 - Art Studio: 2D

**Credits:** 3

**Description:** Students in this course are introduced to a broad range of two-dimensional art and design techniques, material practices, and concepts. Students work hands on with these fundamentals in a supportive environment of experimentation and discovery. Emphasis is placed on critical thinking and creative problem solving through investigations of form and content in two-dimensional space. Students move from divergent modes of thinking and working to convergent culminating activities, resulting in a series or body of work appropriate for the Foundations level.

### ART 1141 - Art Studio: Drawing

**Credits:** 3

**Description:** Students in this course are introduced to drawing as the common denominator for all art-making media. Students practice fundamental drawing skills, employing a variety of drawing media and techniques through art elements and design principles. Coursework emphasizes critical thinking and creative problem solving through technical and conceptual exploration, visual or thematic research, and visual or perceptual invention. No previous art skills are needed for this course.

**General Studies:** Arts and Humanities

### ART 1212 - Non-Majors Ceramics: Handbuilding

**Credits:** 3

**Description:** This course introduces students to the basic hand-building techniques and technical knowledge required to work and fire ceramics. Students develop both a conceptual understanding and practical knowledge of the ways in which three-dimensional ceramic form functions. Lectures and visual presentations explore historical and contemporary approaches to ceramics. This course is restricted to non-Art majors.

### ART 1213 - Non-Majors Ceramics: Wheelthrowing

**Credits:** 3

**Description:** This ceramics course focuses on wheel throwing as an expressive tool with which students develop their ceramic techniques of thrown and altered forms. Students investigate traditional vessel making, as well as thrown and altered sculptural and functional objects. Topics of study include contemporary and historical wheel-thrown objects and an introduction to high-fire, atmospheric firing. This course is restricted to non-Art majors.

### ART 1251 - Jewelry and Metals for Non-Art Majors

**Credits:** 3

**Description:** Restriction: Course restricted to non-Art majors  
This course explores traditional and contemporary approaches to the creation of handcrafted jewelry and precious or semiprecious metal objects. The course will introduce basic casting and fabricating techniques such as hollow construction and surface embellishment. **This course is restricted to non-Art majors.**

### ART 1261 - Painting for Non-Art Majors

**Credits:** 3

**Description:** Restriction: Course restricted to non-Art majors  
This course explores acrylic painting techniques and materials. Students study composition, the use of color, and design elements and principles. **This course is restricted to non-Art majors.**

### ART 1271 - Film Photography for Non-Majors

**Credits:** 3

**Description:** This course introduces basic photographic problem-solving focused on technical and aesthetic concerns while addressing the history of photography. Students learn black and white film exposure, development and printing. This course is restricted to non-art majors.

### ART 1273 - Digital Photography for Non-Art Majors

**Credits:** 3

**Description:** This course introduces basic digital photographic strategies for image making focused on technical and aesthetic concerns while addressing how photographic images function in visual culture. Students learn image capture, fundamentals of basic camera functions, processing, manipulation and printing of digital image files, and maintenance and archiving of a digital archive. Contemporary photography topics are integrated into the curriculum through assignments and related independent research. This course is restricted to non-art majors.

### ART 1291 - Sculpture for Non-Art Majors

**Credits:** 3

**Description:** Students in this course examine fundamental principles, procedures, and techniques in producing art using a variety of sculptural tools and materials. Emphasis is placed on critical and creative thinking and multi-modal expression through investigations of physical form, process, context, and studio practices. This course is restricted to non-art majors.

### ART 1300 - Woods: Materials and Fabrication

**Credits:** 3

**Description:** An introductory course designed to give the student basic information about wood material properties, species selection criteria, practical design applications, and ordering and specifying protocol. The design process is presented and applied in the development of a furniture design and fabrication plan, which is

utilized to construct design.. The course also provides instruction for basic skill development in the use of wood working tools, machines, and processes. Wood finishing materials and processes are also studied and utilized in student projects.

*Note:* Credit will be granted for only one prefix: ART or IND.

**Cross Listed Course(s):** IND 1010

### **ART 1501 - Art Studio: 3D**

**Credits:** 3

**Description:** Students in this course are introduced to a broad range of three-dimensional art and design techniques, material practices, and concepts. Students work hands on with these fundamentals in a supportive environment of experimentation and discovery. Emphasis is placed on critical thinking and creative problem solving through investigations of form and content in three-dimensional space. Students move from divergent modes of thinking and working to convergent culminating activities, resulting in a series or body of work appropriate for the Foundations level.

### **ART 1505 - The Visual Journal**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** None

**Description:** Students in this course focus on developing a series of thematic concepts within the visual journal. These thematic assignments function as points of departure for students to research and develop their subject matter. Students generate journals that serve as vehicles for growth as well as experimentation with non-traditional media.

### **ART 1531 - Art Studio: 4D**

**Credits:** 3

**Description:** This course introduces the fundamental principles of four-dimensional art and design through a survey of concepts, techniques, and technological practices. Emphasis is placed on critical thinking and creative problem solving through investigations particularly relevant to four-dimensional art and design; that is, form and innovation in technological environments, time and motion, ephemerality, and four-dimensional studio practices.

### **ART 2221 - Doing Theory**

**Credits:** 3

**Prerequisite(s):** ART 1101 and ART 1501 and ART 1531 and (ENG 1020 or ENG 1021) with "C-" or better, or permission of the department

**Description:** This course introduces concepts and tools for analyzing theoretical frameworks in visual art, conducting creative research through art making, and investigating contemporary artworks with such theoretical and research orientations. Students examine images, read primary and secondary source texts, discuss concepts, translate their understanding through artistic forms of research, and exchange their research and ideas with fellow students. The concepts and tools introduced in this course will then be

developed further in the students' upper-level coursework and utilized in their professional practices as artists.

### **ART 2611 - Beginning Ceramics: Handbuilding**

**Credits:** 3

**Prerequisite(s):** (ARTH 1600 or ARTH 1700 or ARTH 1800) and (ART 1531 or ART 1101) and ART 1501 with C- or better in each; or permission of the department.

**Description:** Students in this course are introduced to the basic hand-building techniques and technical knowledge required to work and fire ceramics. Students develop both a conceptual understanding and practical knowledge of the ways in which three-dimensional ceramic form functions.

### **ART 2613 - Beginning Ceramics: Wheelthrowing**

**Credits:** 3

**Prerequisite(s):** (ARTH 1600 or ARTH 1700 or ARTH 1800) and (ART 1531 or ART 1101) and ART 1501 with C- or better in each; or permission of the department.

**Description:** Students in this course focus on the potter's wheel to investigate conceptual and utilitarian ideas associated with vessel and sculpture making. Students investigate both traditional and contemporary approaches to working with ceramics. In addition to building skill on the potter's wheel, topics of study include contemporary and historical uses of the potter's wheel and an introduction to high fire atmospheric firing. Assigned projects are given in sequence with the underlying goal of building toward fluid proficiency with use of the potter's wheel and of ceramic materials.

### **ART 2631 - Beginning Digital and Emerging Art Practices**

**Credits:** 3

**Prerequisite(s):** (ARTH 1600 or ARTH 1700 or ART 1800) and (ART 1101 or ART 1501) and ART 1531 with a C- or better, or permission of the department

**Description:** Students in this course explore digital tools and emergent technology in art and incorporate them into their creative practices. This course covers various techniques, including projection mapping, immersive media, interactive design, and AI tools in media art. Throughout the course, students bring their unique visions into personal projects through diverse storytelling methods with digital technology. This course provides students with technical aspects, underlying theories, and creative processes that shape emerging art.

### **ART 2641 - Color Drawing: Wet and Dry**

**Credits:** 3

**Prerequisite(s):** (ARTH 1600 or ARTH 1700 or ARTH 1800), ART 1101 and ART 1531 with "C-" or better in each; or permission of the department.

**Prerequisite(s) or Corequisite(s):** ART 1501 or permission of instructor

**Description:** Students in this course are introduced to color theory



and various techniques employing colored pencil, water-media, and pastel while expanding upon graphite skills. Coursework emphasizes conceptual and technical abilities, as well as visual perception and problem solving.

### **ART 2643 - Figure Drawing: Wet and Dry**

**Credits:** 3

**Prerequisite(s):** (ARTH 1600 or ARTH 1700 or ARTH 1800), ART 1101 and ART 1531 with "C-" or better in each; or permission of the department.

**Prerequisite(s) or Corequisite(s):** ART 1501 or permission of the department

**Description:** Students in this course focus on the human form through observational rendering from live models. Students examine human anatomy, both structural and muscular systems, through both in-class exercises and assigned homework. Both wet and dry applications are investigated; as are black and white media, color media, and conceptual development. Historic and contemporary artists and themes are reviewed and inspected through lectures, critiques and outside assignments.

### **ART 2651 - Beginning Jewelry and Metalsmithing**

**Credits:** 3

**Prerequisite(s):** ARTH 1600 or ARTH 1700 or ARTH 1800 and ART 1101 or ART 1531 and ART 1501 with a C- or better, or permission of the department

**Description:** Students in this course are introduced to jewelry and metalsmithing materials and processes. Basic fabrication and casting techniques including surface embellishment, forming, soldering, stone setting and wax carving are introduced. Through the creation of thematic projects, students explore traditional and contemporary approaches to metalsmithing and designing artworks for the body.

### **ART 2661 - Beginning Painting**

**Credits:** 3

**Prerequisite(s):** (ARTH 1600 or ARTH 1700 or ARTH 1800) and (ART 1101 or ART 1141) and (ART 1501 or ART 1531) with a C- or better, or permission of the department

**Description:** This course introduces basic water- and oil-based painting techniques and processes. Through the creation of thematic projects, students explore traditional and contemporary approaches to painting. Students develop both a conceptual understanding and practical knowledge through material investigation and experimentation.

### **ART 2671 - Beginning Photography**

**Credits:** 3

**Prerequisite(s):** (ARTH 1600 or ARTH 1700 or ARTH 1800) and ART 1101 with C- or better in each, or permission of the department.

**Prerequisite(s) or Corequisite(s):** ART 1501 and ART 1531 or permission of the department

**Description:** Students in this course are introduced to analog and digital photography. Processes and techniques include basic camera functions, processing of black and white film, processing digital files, and printing techniques. Through the creation of thematic projects, students explore historical and contemporary approaches to photography.

### **ART 2682 - Beginning Printmaking**

**Credits:** 3

**Prerequisite(s):** (ARTH 1600 or ARTH 1700 or ARTH 1800) and ART 1101 with C- or better in each, or permission of the department.

**Prerequisite(s) or Corequisite(s):** ART 1501 and ART 1531 or permission of the department

**Description:** Students in this course develop knowledge and skills of traditional and contemporary fine art processes of screen printing, also known as silkscreen, and relief printmaking, such as linoleum print and woodcut. Students gain skill in using various methods of layering and image generation in order to explore artistic challenges. Emphasis is placed on technical, aesthetic, and conceptual development through readings, lectures, demonstrations, critique, and material experimentation.

### **ART 2691 - Beginning Sculpture**

**Credits:** 3

**Prerequisite(s):** (ARTH 1600 or ARTH 1700 or ARTH 1800) and (ART 1101 or ART 1531) and ART 1501 with a C- or better, or permission of the department

**Description:** Students in this course explore a variety of historical and contemporary sculptural processes and apply them towards the production of different thematic projects. Fabrications utilize techniques in woodworking, cold metalworking, welding, mold making, casting, computer modeling, plaster sculpting and plastic-manipulating. The inextricable link between materials and ideas is critically examined.

### **ART 2781 - Lithography**

**Credits:** 3

**Prerequisite(s):** ARTH 1600, ART 1101, and ART 1141 with C- or better in each; or permission of department

**Prerequisite(s) or Corequisite(s):** ART 1501, ART 1531, and ARTH 1700; or permission of department

**Description:** Students develop knowledge and skills of traditional and contemporary fine art lithography printmaking processes through a series of thematic projects that address invention, problem solving, medium experimentation, technical skills, research, and criticism. Through projects, students are provided a working understanding of the principles of stone, plate, and the photo lithography process, including multi-matrix color printing. Students gain knowledge through readings, lectures, and demonstrations, including the examination of historical and contemporary lithographic prints and the commercial and fine art application of the media.

### **ART 3101 - Professional Practices I**

**Credits:** 1

**Prerequisite(s):** ART 1101 or ART 1531 or ART 1501 with C- or better; or permission of department

**Prerequisite(s) or Corequisite(s):** ARTH 1600 or ARTH 1700 or ARTH 1800 with C- or better, or permission of department

**Description:** Students in this course are introduced to options, expectations, and preparations for an art career. This course combines guest speakers, site visits, and studio reflection. Students learn to explore, write, and think about their artwork in a career-building context.

## ART 3235 - Video Art

**Credits:** 3

**Prerequisite(s):** JMP 2430 and JMP 1000; or ART 1101, ART 1501, (ARTH 1500 or ARTH 1600 or ARTH 1700 or ARTH 1800) and (ART 1531 or IND 2100) and (ART 2691 or ART 2693 or ART 2651 or ART 2611 or ART 2613 or ART 2631 or ART 2682 or ART 2671 or ART 2661 or ART 2641 or ART 2643) with C- or better in each; or permission of the department

**Description:** Students in this course combine video production with a critical examination of experimental video and time-based media as an art form, cultural tool, and social practice. Through studio practice, screenings, readings, and critiques, students examine the diverse languages and practices of video and time-based media within a contemporary context. Students experiment with monitors, projectors, and other media while addressing concerns of site and scale, and issues of narrative, identity, reception, audience, and private/public space. Students learn the technical and conceptual aspects of production and develop individual aesthetic, analytic, and critical skills. This is an integrated media course.

## ART 3236 - Experimental Animation

**Credits:** 3

**Prerequisite(s):** ART 1531 with C- or better; or permission of the department

**Description:** Students in this course learn experimental concepts and techniques to create 2D and 3D digital animations. They focus on the intellectual investigation of animation themes and forms, emphasizing innovative concepts and processes to expand the scope of animation possibilities within the discipline of studio art. This is an integrated media course.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** CDES 3236

## ART 3237 - Art of the International Film Poster

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021 with D- or better

**Description:** Students in this course examine international film posters and cinematic movements from diverse cultures around the world. By utilizing art-making concepts and techniques, students create a series of film posters that visually and conceptually connect to significant movements within art and global cinema. In addition to analyzing the convergence of art and film, this course emphasizes the

relationship of the art film poster to broader cultural, social, and theoretical contexts. No previous art skills are needed for this course.

**General Studies:** Arts and Humanities, Global Diversity

## ART 3244 - Advanced Figure Drawing

**Credits:** 3

**Prerequisite(s):** ART 2643 with a "C-" or better or permission of the department

**Description:** This course requires the student to apply knowledge of human anatomy to drawing the human figure. Students extend conceptualization skills and expand use of varied media and techniques.

*Note:* This course may be repeated once for a maximum of six semester hours.

## ART 3266 - Community Painting: The Mural

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, ART 1531, (ARTH 1600 or ARTH 1700), ARTH 1800; and ART 2661 with C- or better in each; or permission of department.

**Description:** Students in this course briefly survey the history of murals and the mural movement. A site is located at an agency or business in the Denver metro community where a mural is to be painted. A series of designs and concepts are then researched and proposed by the students for approval by the site agency or business. Students work as a team and collaborate to complete the approved mural concept.

*Note:* This course is repeatable once for a maximum of six semester hours.

## ART 3301 - The Artist's Book

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, (ARTH 1500 or ARTH 1600 or ARTH 1700 or ARTH 1800), and (ART 1531 or IND 2100) and (ART 2691 or ART 2693 or ART 2651 or ART 2611 or ART 2613 or ART 2631 or ART 2682 or ART 2671 or ART 2661 or ART 2641 or ART 2643 or CDES 2222) with C- or better in each; or permission of the department

**Description:** Students in this course work with the book as an art object, emphasizing structure, craft, and conceptual ideas. Students build various traditional and non-traditional book types and provide display methods for books in an exhibition context. This is an integrated media course.

## ART 3391 - Fiber Structures

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, (ARTH 1500 or ARTH 1600 or ARTH 1700 or ARTH 1800), and (ART 1531 or IND 2100) and (ART 2691 or ART 2693 or ART 2651 or ART 2611 or ART 2613 or ART 2631 or ART 2682 or ART 2671 or ART 2661 or ART 2641 or ART 2643 or CDES 2222) with C- or better in each; or permission of the department.

**Description:** Students in this course investigate fiber techniques, such as crocheting, netting, weaving, lashing, felting, and papermaking, with an emphasis on their role in a contemporary art and design practice. Lectures demonstrate these techniques using a variety of traditional and non-traditional materials and strategies while highlighting contemporary artists and theory. This is an Integrated Media course.

### ART 3393 - Electronics and Experimental Systems

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, (ARTH 1500 or ARTH 1600 or ARTH 1700 or ARTH 1800), and (ART 1531 or IND 2100) and (ART 2691 or ART 2693 or ART 2651 or ART 2611 or ART 2613 or ART 2631 or ART 2682 or ART 2671 or ART 2661 or ART 2641 or ART 2643 or CDES 2222) with C- or better in each; or permission of the department.

**Description:** Students in this course are introduced to basic electronics, mechanics, open-source hardware, and simple software coding for the creation of artwork. The history and theory of experimental systems within a contemporary art and design context are discussed. Projects address movement, light, sound, space, context, behavior, agency, and interactivity. This is an integrated media course.

### ART 3500 - Variable Topics: Site Specific Studies in Studio Art

**Credits:** 3

**Prerequisite(s):** ART 1101 or ART 1501 or ART 1531; or permission of department

**Description:** Students in the course travel to a city or a region in order to experience art and creative making in response to the location. Emphasis is placed upon the contemporary, historical, geographical, and philosophical context of the exhibition spaces, cultural sites, public spaces, and other works of art visited or viewed. Variable topics; may be repeated for up to 9 credits under different topics.

*Note:* Variable topics; may be repeated for up to 9 credits under different topics.

### ART 3591 - Digital Fabrication

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, (ARTH 1500 or ARTH 1600 or ARTH 1700 or ARTH 1800), and (ART 1531 or IND 2100) and (ART 2691 or ART 2693 or ART 2651 or ART 2611 or ART 2613 or ART 2631 or ART 2682 or ART 2671 or ART 2661 or ART 2641 or ART 2643 or CDES 2222) with C- or better in each; or permission of the department.

**Description:** Students in this course are introduced to the spatial and contextual application of digital, three-dimensional modeling and rapid prototyping technologies for the creation of artwork. Data acquisition, modeling, and visualization are explored through the artistic application of 3D scanning, computer modeling, and laser cut or solid free form fabrication. This is an integrated media course.

### ART 3612 - Intermediate Ceramics

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, ART 1531, (ARTH 1600 or ARTH 1700), ARTH 1800, and (ART 2611 or ART 2613) with C- or better in each prerequisite; or permission of department.

**Description:** Students in this course address the broad range of perspectives found in historical and contemporary ceramic art including sculpture, vessel making, and pottery. Emphasis is on the full integration of creative works within the complex array of studio choices such as clay, glaze, and firing temperatures. Students become fully independent in the ceramics studio through an exploration of firing theory, clay, and glaze chemistry, as well as the conceptual and theoretical development of a creative works.

*Note:* This course is repeatable twice for a maximum of nine semester hours.

### ART 3613 - Pattern Networks

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, (ARTH 1500 or ARTH 1600 or ARTH 1700 or ARTH 1800), and (ART 1531 or IND 2100) and (ART 2691 or ART 2693 or ART 2651 or ART 2611 or ART 2613 or ART 2631 or ART 2682 or ART 2671 or ART 2661 or ART 2641 or ART 2643 or CDES 2222) with C- or better in each; or permission of the department.

**Description:** Students in this course are introduced to traditional texts on ornamentation and pattern theory, as well as seminal texts on networks and city planning, as the basis for making artwork. Employing a research-based practice, students make creative work of varying media that shares an exploration of patterning, ornamentation, and additional organizational structures. The course examines and demonstrates traditional strategies and the role of this subject in contemporary art, craft and design practice. This is an integrated media course.

### ART 3614 - Variable Topics in Intermediate Ceramics

**Credits:** 3

**Prerequisite(s):** ART 2611 or ART 2613

**Description:** Students in this course are introduced to specialized materials and processes in ceramics. Emphasis is on developing focused skills in a specific topic related to both historical and contemporary ceramic art. Topics may include mold making and slip casting, atmospheric firing, digital fabrication, or contemporary issues in ceramics.

*Note:* This course may be repeated up to 3 times under different topics.

### ART 3625 - Animation Practices

**Credits:** 3

**Prerequisite(s):** ART 1531; or MKT 3000; with "C-" or better in each; or permission of department.

**Description:** In this course, students learn to animate by examining

movement and timing, exploring different techniques, and studying historical and contemporary animation practices. With an emphasis on storytelling, students produce a series of 2D animations, which begin with storyboard development and character designs. This course emphasizes research and conceptual thinking while incorporating art and design methods. This is an Integrated Media course.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** CDES 3625

## **ART 3632 - Intermediate Digital and Emerging Art Practices**

**Credits:** 3

**Prerequisite(s):** ART 1101 and ART 1501 and ART 1531 and (ARTH 1600 or ARTH 1700) and ARTH 1800 and ART 2631 with C- or better in each; or permission of department.

**Description:** Students in this course expand their knowledge using advanced technology to create emerging art. Students develop skills to create immersive art, including 2D and 3D game design, creative coding, sound recording, performance, and multimedia installation. Additionally, participants engage in critical thinking to understand the impact of emerging artworks on contemporary art. This course incorporates art and technology, preparing students to develop impactful and transformative immersive projects.

*Note:* This course may be repeated up to three times for a maximum of 9 semester hours.

## **ART 3637 - Socially Engaged Art**

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, (ARTH 1500 or ARTH 1600 or ARTH 1700 or ARTH 1800), (ART 1531 or IND 2100) and (ART 2691 or ART 2693 or ART 2651 or ART 2611 or ART 2613 or ART 2631 or ART 2682 or ART 2671 or ART 2661 or ART 2641 or ART 2643 or CDES 2222) with C- or better in each; or permission of the department.

**Description:** Students in this course are introduced to the field of socially engaged art through an emphasis on conversations, communities, situations, participation, places, aesthetics, and activism. Course content demonstrates the increasing use of relational and dialogical aesthetics informing conceptual and formal structures in contemporary art and design. Socially Engaged Art adopts a field-based model for its curriculum that is designed to provide students with opportunities to work contextually in a variety of public spheres. This is an Integrated Media course.

## **ART 3639 - Performance Art**

**Credits:** 3

**Prerequisite(s):** THE 2210 or MUS 2130; or ART 1101, ART 1501, (ARTH 1500 or ARTH 1600 or ARTH 1700 or ARTH 1800), and (ART 1531 or IND 2100) and (ART 2691 or ART 2693 or ART 2651 or ART 2611 or ART 2613 or ART 2631 or ART 2682 or ART 2671 or ART 2661 or ART 2641 or ART 2643 or CDES 2222) with C- or better in each; or permission of the department

**Description:** Students in this course explore performance as a major paradigm informing the methods and languages of contemporary practices in art and design. Emphasis is placed on border crossings, porous disciplines, and contingent identities as a central component in performance-based studio practice. Lectures and discussions engage the historically shifting nature of embodiment in contemporary art and design. This is an Integrated Media course.

## **ART 3640 - Installation Art**

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, (ARTH 1500 or ARTH 1600 or ARTH 1700 or ARTH 1800) and (ART 1531 or IND 2100) and (ART 2691 or ART 2693 or ART 2651 or ART 2611 or ART 2613 or ART 2631 or ART 2682 or ART 2671 or ART 2661 or ART 2641 or ART 2643 or CDES 2222) with C- or better in each; or permission of the department.

**Prerequisite(s) or Corequisite(s):** ARTH 2080 or permission of department

**Description:** Students in this course are introduced to large-scale artwork that creates a multi-sensory experience. Students will create environments featuring sensory experiences that go beyond the visual, extend into time, and incorporate a range of materials and media. This is an Integrated Media course.

## **ART 3642 - Intermediate Drawing**

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, ART 1531, (ARTH 1600 or ARTH 1700), ARTH 1800, and (ART 2641 or ART 2643) with C- or better in all prerequisites; or permission of the department.

**Description:** Students in this course explore the expanded field of contemporary drawing through experimentation with nontraditional materials, as well as readings and discussions. Emphasis is on creating artwork based on thematic projects and serial production. Students critically assess their material selection and how it supports the artwork content.

*Note:* This course is repeatable twice for a maximum of 9 semester hours.

## **ART 3652 - Intermediate Jewelry and Metalsmithing**

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, ART 1531, (ARTH 1600 or ARTH 1700), ARTH 1800, and ART 2651, or permission of department.

**Description:** Students in this course develop skills in jewelry design and metalsmithing while addressing a broad range of related formats, themes, and topics. Students generate functional, sculptural and/or wearable works through the application of intermediate and advanced level techniques, such as fabrication, chasing, die forming, raising, and stone setting. Emphasis is placed on individual research, conceptual inquiry, compositional development and critical analysis.

*Note:* This course is repeatable twice for a maximum of nine semester hours.

## ART 3653 - Miniature Casting Methods

**Credits:** 3

**Prerequisite(s):** One of the following: ART 1251, ART 2651, ART 2611, ART 2613, ART 2691, IND 1250, or IND 2450; or permission of department

**Description:** Students in this course are introduced to historical and contemporary practices of small-scale casting techniques. Processes such as lost-wax casting processes, alternative direct casting methods and mold making are applied to the creation of individualized projects. Emphasis is placed on individual research, conceptual inquiry, compositional development and critical analysis.

## ART 3654 - Variable Topics in Intermediate Jewelry

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, ART 1531, (ARTH 1600 or ARTH 1700), ARTH 1800, and ART 2651, or permission of department.

**Description:** Students in this course are provided a thematic forum to develop critical skills as they relate to contemporary practices in the field of jewelry and metalsmithing. Students refine their critical and technical proficiency using innovative, interdisciplinary methods and techniques.

*Note:* This course may be repeated under different topics for up to 9 credits total.

## ART 3662 - Intermediate Painting

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, ART 1531 (ARTH 1600 or ARTH 1700), ARTH 1800, and ART 2661 with C- or better in each; or permission of department.

**Description:** Students in this course further explore the concepts and techniques in painting, emphasizing the individuation of students' pictorial language, including various approaches from representational to abstract painting. Development of individual themes, through independent studio practice, allows for creative problem solving through the pictorial representation of ideas. Thematic discussions pertaining to topics in historical and contemporary painting inform studio artwork production.

*Note:* This course is repeatable for a maximum of 9 semester hours.

## ART 3663 - Painting and New Contexts

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1141, ART 1501, ART 1531, ARTH 1600, ARTH 1700 and ART 2661 with C- or better in each; or permission of department.

**Description:** Students in this course explore innovative and emergent approaches to painting within the context of contemporary art practices. Emphasis is on nontraditional approaches to painting through an exploration of materials and techniques. Students learn to question assumptions about the practice of painting, creating works that allow them to explore the use of alternative approaches to paint media through the implementation of various tools and technologies.

## ART 3664 - Variable Topics in Intermediate Painting

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, ART 1531 (ARTH 1600 or ARTH 1700), ARTH 1800, and ART 2661 with C- or better in all prerequisites; or permission of the department

**Description:** Students in this course are provided a thematic forum to develop critical skills as they relate to contemporary practices in the field of painting. Students refine their critical and technical proficiency using innovative, interdisciplinary methods and techniques.

*Note:* This course may be repeated under different topics for up to 9 credits total.

## ART 3672 - Intermediate Photography

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, ART 1531 (ARTH 1600 or ARTH 1700), ARTH 1800, and ART 2671 with C- or better in all prerequisites; or permission of the department.

**Description:** Students in this course are provided with a thematic forum to develop critical skills as they relate to contemporary practices in the field of photography and lens-based media. Students refine their technical and critical proficiency using methods and processes relevant to image-making. Engaged in an innovative learning environment, students connect research and theory to their creative projects.

*Note:* This course is repeatable for a maximum of nine semester hours of credit.

## ART 3677 - Experimental Photography

**Credits:** 3

**Prerequisite(s):** ARTH 1600, ARTH 1700, ART 1101, ART 1141, ART 1501, ART 1531, and ART 2671 with "C-" or better in each; or permission of department

**Description:** Students in this course learn alternative photographic techniques utilizing historical, non-silver and silver-based processes. The term alternative process is generally used to describe 19th century approaches to photographic printmaking; contemporary photography is experiencing a renaissance in the use of traditional methods applied in hybrid and/or interdisciplinary practices. This course includes the use of low-tech and handmade cameras, the production and integration of digital negatives, and combining wet and digital lab processes. Students go beyond technical knowledge to critically assess the reasons for using alternative processes conceptually in their creative practice. Slide lectures, technical demonstrations and hands-on labs as well as readings, discussions and regular critiques all contribute to a practice that is conceptually and theoretically rich.

## ART 3678 - Environmental Art

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, (ARTH 1600 or ARTH 1700 or ARTH 1800), and (ART 1531 or IND 2100) and (ART 2691 or

ART 2693 or ART 2651 or ART 2611 or ART 2613 or ART 2631 or ART 2682 or ART 2671 or ART 2673 or ART 2661 or ART 2641 or ART 2643 or CDES 2222) with C- or better in each; or permission of the department.

**Description:** Students in this course, through engagement in artistic research, explore their relationship with the natural world by investigating the environment around them. Through project development, students utilize multiple conceptual lenses, including political, sociological, ecological, and philosophical frameworks. Students research ways in which contemporary artists have sought to intervene in, engage with, and bring attention to a changing environment. In a collaborative setting, students synthesize research and creative exploration through the production of artwork using a variety of media. This is an Integrated Media course.

## ART 3682 - Intermediate Printmaking

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, ART 1531 (ARTH 1600 or ARTH 1700), ARTH 1800, and ART 2682; or permission of department

**Description:** Students in this course develop knowledge and skills of traditional and contemporary fine art printmaking processes with an emphasis on building skills in relief and screen printing, and an introduction to lithography. Students explore and expand technical and conceptual skills through thematic projects while learning various historical and contemporary techniques. Emphasis is on an advanced level of technical and conceptual proficiencies through thematic projects while becoming more independent in the studio. Further exploration with traditional and alternative printmaking outcomes lead to initial developments towards an independent body of work.

*Note:* This course is repeatable for a maximum of 9 total semester hours of credit.

## ART 3692 - Intermediate Sculpture

**Credits:** 3

**Prerequisite(s):** ART 1101 and ART 1501 and ART 1531 and ARTH 1600 or ARTH 1700 and ARTH 1800 and ART 2691 with C- or better in each; or permission of department.

**Description:** Students in this course focus on further honing technical skills while developing individual studio works that respond to themes most relevant to contemporary art theory and practice. Students explore the materials and techniques most appropriate to their needs while working toward the development of a cohesive body of work. Students are encouraged to explore work that is ambitious, experimental, and challenging: work that pushes both technical and conceptual boundaries. Topics include: artwork in context; the role of new materials in contemporary art; the document as primary object; systems in art; and issues of temporality and ephemera.

*Note:* This course is repeatable for a maximum of nine semester hours of credit.

## ART 3701 - Professional Practices II

**Credits:** 2

**Prerequisite(s):** (ARTH 1600 or ARTH 1700 or ARTH 1800), ART 1101, ART 1501 and ART 1531; or permission of department.

**Prerequisite(s) or Corequisite(s):** ART 3101 and (ART 2611 or ART 2613 or ART 2641 or ART 2631 or ART 2643 or ART 2651 or ART 2661 or ART 2671 or ART 2682 or ART 2691) with a C- or better; or permission of department.

**Description:** Students in this course investigate studio professional practice through a series of studio visits, guest lectures from visiting artists and studio based explorations; students discuss and further develop career building in the arts. Emphasis is placed on research, execution, and refinement of studio-based practices in an interdisciplinary learning environment. Students begin the process of interweaving studio-based practices with academic research, establishing an outline for future professional practice.

## ART 3920 - Variable Topics in Integrated Media

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501 (ARTH 1500 or ARTH 1600 or ARTH 1700 or ARTH 1800) and (ART 1531 or IND 2100) and (ART 2691 or ART 2631 or ART 2651 or ART 2611 or ART 2613 or ART 2682 or ART 2671 or ART 2661 or ART 2641 or ART 2643 or CDES 2222) with C- or better in each; or permission of the department.

**Description:** This course provides students with a thematic forum to develop critical skills fundamental to the expanded fields of contemporary art. Students refine their critical and technical proficiency using interdisciplinary methods and techniques related to art, design, and visual studies. This course introduces innovative, creative, and theoretical techniques within a cross-disciplinary and hybrid studio environment. This is an Integrated Media course.

*Note:* This course may be repeated under different topics for up to 6 credits total.

## ART 3980 - Internship in Art

**Credits:** 1-15

**Prerequisite(s):** Major in art; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## ART 4101 - Advanced Interdisciplinary Studio

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, ART 1531, ARTH 1800, and (ART 3612 or ART 3614 or ART 3632 or ART 3642 or ART

3652 or ART 3654 or ART 3662 or ART 3682 or ART 3672 or ART 3692) or permission of department

**Prerequisite(s) or Corequisite(s):** ARTH 1600 and ARTH 1700

**Description:** Students in this course develop their advanced-level arts practice within an interdisciplinary context. Students implement skills acquired through intermediate courses by preparing a mature, cohesive body of work for exhibition, graduate school application, or professional practice. The course emphasizes the relationship of the artist to broader cultural, social, and theoretical contexts. Students investigate artwork employing various methods of critique as it informs the artistic practice.

*Note:* This course is repeatable once for a maximum of six semester hours.

## **ART 4701 - Studio Art Senior Experience: Exhibition and Thesis**

**Credits:** 3

**Prerequisite(s):** Completion of all General Studies requirements; BFA in Art or BFA in Art Education major with senior standing; ART 4101 and ARTH 4480 with "C-" or better in each; and permission of department.

**Description:** This course is a required senior experience for the Bachelor of Fine Arts in Art and the Bachelor of Fine Arts in Art Education. Students taking this course complete professional practices at an advanced level. Students synthesize content from coursework throughout their academic career by articulating their aesthetic style, connecting their artwork to theories and movements in art, and finding links to conceptual and philosophical frameworks of historic and contemporary artists. Emphasis is placed on students working collaboratively in the organization and installation of their artwork produced specifically for a public thesis exhibition.

**University Requirement(s):** Senior Experience

## **ART 4703 - Student Teaching and Seminar: Elementary K-6**

**Credits:** 6

**Prerequisite(s):** Successful completion of all requirements of the concentration in art education including ART 4201, elementary licensure program, and General Studies content courses; successful completion of Gateway requirements for each level (I-IV) of the elementary licensure program, including initial evaluation and sign-off of the program requirements; (e.g., teacher work sample/portfolio) by the education advisor

**Description:** This is a supervised, full-time field experience in an accredited public or private elementary school, providing increasing responsibility for the teaching, supervision and assessment of learners (grades K-6). Five hours of seminar is part of the field experience requirement. To pass this course, teacher-candidates must be minimally rated as proficient in all Performance -Based Standards for Colorado Teachers to receive MSU Denver's recommendation for teacher licensure. Each student teacher is required to present a completed teacher work sample to the college supervisor and peers at a student-teaching seminar.

**University Requirement(s):** Senior Experience

## **ART 4704 - Student Teaching and Seminar: Secondary 7-12**

**Credits:** 6

**Prerequisite(s):** Successful completion of all requirements of the concentration in art education including ART 4201 and the Secondary Education Program; initial sign off on program requirements (e.g., teacher work sample/portfolio) by faculty advisor

**Prerequisite(s) or Corequisite(s):** ART 4703

**Description:** This course is a supervised, full-time, eight-week, student-teaching experience in an accredited public or private secondary school, providing increasing responsibility for the instruction, assessment, and supervision of an identified group of learners, 7-12 grade levels. Regularly scheduled observations and five hours of seminar conducted by an appointed college supervisor are part of the student teaching requirement. Teacher candidates must complete a teacher work sample and be rated as proficient in all Performance-Based Standards for Colorado Teachers to receive MSU Denver's recommendation for teacher licensure.

**University Requirement(s):** Senior Experience

## **ART 4710 - Art Senior Experience**

**Credits:** 3

**Prerequisite(s):** Satisfaction of Written Communication, Oral Communication, and Quantitative Literacy course requirements. Art major with senior standing; (ART 2221 or ARTH 2600) and ART 4101 with "C-" or better in each; at least 6 additional credits of upper-division ART courses; and permission of department.

**Prerequisite(s) or Corequisite(s):** 3 additional credits of upper-division ART courses

**Description:** Students in this course find a problem or question to investigate within their studio art practice. Using academic methods and resources to support research, students externalize the integration of these concepts through their visual art, a research paper, and a public presentation. This is a Senior Experience course.

**University Requirement(s):** Senior Experience

## **ART 4801 - Studio Assistantship**

**Credits:** 1-4

**Prerequisite(s):** Permission of instructor

**Description:** This studio course allows the advanced student to put into use the studio skills learned in previous courses to assist faculty and other students through demonstrating and critiquing. Students will learn to run laboratories, maintain tools and equipment, mix chemicals (if appropriate), and handle and stock supplies in an appropriate manner. They will demonstrate techniques and assist other students with technical and creative questions.

*Note:* (Variable credit: course may be repeated once for a maximum of six hours of credit in a different studio area or with significantly different duties.)

## **ART 4841 - Directed Studies in Studio Art**

**Credits:** 1-4

**Prerequisite(s):** ART 4101 or permission of the department

**Description:** Students in the course produce advanced, independent studio work with emphasis on the production of finished work. The students integrate techniques, materials, and skills learned in previous courses to develop an individual style and create a coherent body of work.

*Note:* Variable credit

## **ART 4842 - Directed Studies in Communication Design**

**Credits:** 1-4

**Prerequisite(s):** ART 4241 or ART 4244 with "C-" or better; and permission of department

**Description:** This course provides advanced, independent studio work in communication design with emphasis on the production of finished work in preparation for the senior exhibition. The student will integrate techniques and skills learned in previous courses to develop an individual voice and create a coherent body of work.

*Note:* Variable credit: this course may be repeated once for a maximum of six semester hours total credit.

## **ART 4873 - Photography Assistantship**

**Credits:** 3

**Prerequisite(s):** ART 2671 and ART 3271 with "C-" or better in each; and permission of department

**Description:** This studio course allows the advanced photography student to serve as teaching assistant to a member of the faculty. The student learns to handle and stock supplies in an appropriate manner and demonstrates techniques and assists other students with technical and creative questions.

## **CDES 3263 - Digital Illustration**

**Credits:** 3

**Prerequisite(s):** ART 1141 or ART 1531

**Description:** This course invites students to develop their digital illustration skills through immersive projects focused on character design, concept art, and sequential art. By exploring storytelling and problem-solving, students gain hands-on experience in digital illustration. The course also investigates the connections between illustration and related fields such as animation, graphic design, and digital art.

## **Art Education**

### **ARTE 2060 - The Arts and Creative Thinking**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 with C- or better; or permission of department

**Description:** This course introduces contemporary ideas and strategies exploring creative thinking informed by the visual arts.

Students are exposed to the interconnectedness of creative and critical thinking and develop strategies for thinking that embrace the habits of creativity, dispelling the myth that people are born creative or uncreative. Using the visual arts as an entry point for the development of creative and critical-thinking skills, students learn how to approach problems in novel ways.

**General Studies:** Arts and Humanities

### **ARTE 3601 - Introduction to Art Education: History and Philosophy**

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1501, ART 1531, and two of the following: ARTH 1600, ARTH 1700, or ARTH 1800 with "C-" or better in each; or permission of department

**Description:** Students in this course study the historical, philosophical, social, political, legal, psychological, and educational concepts that have influenced the development of art education in the United States. The current status of advocacy for the arts and art education within the context of general education is explored.

### **ARTE 3605 - Creating an Inclusive Art Classroom: Curriculum and Instruction**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ARTE 3601 or permission of department

**Description:** Students in this lecture/field experience course address the necessary steps needed to create and implement effective curriculum in an inclusive or mainstreamed art classroom. Students learn about various exceptionalities of pre k-12 students, ranging from mild to severe. The challenge to meet the individualized needs of a diverse student population through effective instruction is explored in the classroom and in the field. During the semester students complete 8 hours of field observations working directly with students, putting into practice the theories discussed in-class. Pre-service art education students develop effective techniques for fostering student engagement, individualization strategies, problem solving, and classroom management techniques while working in an inclusive learning environment.

### **ARTE 4130 - Elementary Art Education: Curriculum and Instruction**

**Credits:** 3

**Prerequisite(s):** ARTE 3601 with "C-" or better; or permission of department

**Corequisite(s):** ARTE 4140 or permission of department

**Description:** Students in this lecture/studio course develop age-appropriate curriculum and instructional methodologies for teaching that will foster fluency, flexibility and ingenuity in the elementary art classroom. Students draw connections between concepts developed in class, studio practices, and discussions based on observations made in the concurrent field experience, ARTE 4140 - Field Experience: Art Education Elementary. Using these skills, students explore, analyze,



and formulate pedagogical strategies necessary to become informed practitioners and advocates within the field of art education.

### **ARTE 4140 - Field Experience: Art Education Elementary**

**Credits:** 1

**Prerequisite(s):** ARTE 3601, EDS 3130, and EDS 3140; with "C-" or better in each; or permission of department

**Corequisite(s):** ARTE 4130; or permission of department

**Description:** Students take this field experience course concurrently with ARTE 4130 - Elementary Art Education: Curriculum and Instruction. During the fifty-hour field experience, preservice art education students work directly with a mentor teacher in the classroom fostering an understanding of the intellectual and artistic growth of elementary school children. In an immersive field experience, application of practical issues such as classroom management, budgeting, and community engagement are experienced by the student, building an informed understanding of pedagogical practices needed for a professional career at the elementary school level. Successful completion of the field experience is in accordance with Teacher Quality Standards and Colorado Academic Standards: Visual Arts.

*Note:* This course requires students to attend three hours of seminar during the semester.

### **ARTE 4230 - Secondary Art Education: Curriculum and Instruction**

**Credits:** 3

**Prerequisite(s):** ARTE 3601 with "C-" or better; or permission of department

**Corequisite(s):** ARTE 4240 or permission of department

**Description:** Students in this course develop age-appropriate curriculum and instructional methodologies for teaching art that foster fluency, flexibility and ingenuity for grades 6-12. Students generate connections between concepts developed in class, studio practices, and discussions based on observations made in the concurrent field experience. Using these skills, students explore, analyze, and formulate pedagogical strategies necessary to become informed practitioners and advocates within the field of art education.

### **ARTE 4240 - Field Experience: Art Education Secondary**

**Credits:** 1

**Prerequisite(s):** ARTE 3601, EDS 3130, and EDS 3140 with "C-" or better in each; or permission of department

**Corequisite(s):** ARTE 4230 or permission of department

**Description:** Students take this field experience concurrently with ARTE 4230 - Secondary Art Education: Curriculum and Instruction. During the fifty-hour field experience, preservice art education students work directly with a mentor teacher in the classroom fostering an understanding of the intellectual and artistic growth of children at the secondary level. In an immersive field experience, application of practical issues such as classroom management,

budgeting, and community engagement are observed by the student, building an informed understanding of pedagogical practices needed for a professional career at the secondary school level. Successful completion of the field experience is in accordance with the Teacher Quality Standards and the Colorado Academic Standards: Visual Arts.

*Note:* This course requires students to attend three hours of seminar during the semester.

### **ARTE 4701 - Student Teaching and Seminar: Art Education K-12**

**Credits:** 12

**Prerequisite(s):** ART 4701, ARTE 4130, and ARTE 4230 with "C-" or better in each; ARTE 4140 and ARTE 4240; and permission of department

**Description:** Students in this course complete supervised, full-time, sixteen-week, student teaching experience in an accredited public or private elementary and secondary school. During the student teaching experience students take responsibility for the instruction, assessment, and supervision of an identified group of learners at K-12 grade levels. Regularly scheduled observations at both eight-week placements, and ten hours of seminar conducted by an appointed university supervisor are part of the student teaching requirement. Teacher candidates must complete a Teacher Work Sample and be rated as proficient in all Teacher Quality Standards for Colorado teachers to receive MSU Denver's recommendation for licensure.

### **ARTE 4715 - Professional Practicum in Art Education**

**Credits:** 3

**Prerequisite(s):** ARTE 3601 with "C-" or better and permission of department

**Description:** This elective course addresses the needs of individual, advanced, senior-level students completing the Art Education concentration who want to pursue a focused study of a pedagogical problem. Students reflect upon their prior learning in art education and their studio art concentrations, identifying the interdisciplinary learning connections that they have made through courses that have influenced their professional knowledge in the field of teaching. Evidence of these influential learning connections is documented and presented in a professional portfolio. Students plan, instruct and assess a one-week studio workshop for students in grades K-12.

### **ARTE 4850 - Directed Studies for Art Educators**

**Credits:** 1-4

**Prerequisite(s):** ARTE 3601 with "C-" or better; and permission of department

**Description:** This course is an interdisciplinary studio art class that addresses the need for art education students and K-12 Art Licensure candidates to link their professional practice as artists with their practice as educators. Students will create a portfolio of work that is conceptually driven, and seek out a variety of materials that will best express their vision. Students will be responsible for scheduling,

preparing and presenting their portfolio of work in a professional format as a visiting artist in a K-12 art classroom.

*Note:* This course is variable credit and may be repeated once for a maximum of six semester hours total credit.

## Art History, Theory, and Criticism

### ARTH 1500 - Art and Visual Literacy

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or permission of department

**Description:** This course is a general introduction to the tools and methods used to analyze and interpret works of art in a variety of contexts. Students learn how to effectively communicate how visual forms work in conjunction with cultural beliefs both in the past and present. Analytical tools appropriate to the disciplines of art criticism and art history, including the use of research, are used by the student to support interpretations. A variety of artistic traditions, including materials and techniques from across the globe and throughout time, are introduced so that students are prepared to identify and interpret historical and contemporary examples of visual art and design. By developing an awareness of the relationship between visual forms and the messages they convey, students increase their ability to respond critically to their own increasingly complex, visual environment. This course is designed for the non-major and recommended for the General Studies requirement in Arts and Humanities.

*Note:* This course is restricted to students who are not majoring in Art, Art Education, Communication Design, or Art History, Theory and Criticism.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH1

### ARTH 1600 - Art of the Ancient World

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or permission of department

**Description:** From the cave paintings of Paleolithic peoples to the pyramids of the Egyptian and Nubian kingdoms, the temples of ancient Greek and Maya city-states, and the imperial arts of ancient Rome and China, students in this course survey the major works of art, architecture, and design from the beginning of human history to the 6th century CE. Students are also introduced to the discipline of art history and the tools used to analyze and interpret works of art within their cultural contexts. Students examine how art reflected and informed the human experience of the ancient world, paying particular attention to themes such as power, identity, religion, and the passage from life into death. This course provides the introductory foundations in art history for students in art, art history, and communication design majors and is recommended for non-majors to meet General Studies requirements in Arts and Humanities and/or Global Diversity.

**General Studies:** Arts and Humanities, Global Diversity

### ARTH 1700 - Art of the Medieval and Early Modern World

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010; or permission of department

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** Students in this course are introduced to art, design, and architecture created around the world during the medieval and early modern periods. Students learn to research, analyze, and interpret works from Gothic cathedrals to Michelangelo's Sistine Chapel frescos, from Machu Picchu to the Forbidden City. Students also explore the impact of historical attitudes about gender, power, and identity on artists and their artworks, as well as the influence of global exchanges through networks of trade, religious conversion, and colonization. This course is required for students majoring or minoring in art, art history, and communication design and is recommended for non-majors to meet the General Studies requirements in Arts and Humanities and/or Global Diversity.

**General Studies:** Arts and Humanities, Global Diversity

### ARTH 1800 - Art of the Modern and Contemporary World

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 or permission of department

**Description:** Students in this course analyze art and architecture created around the world in the context of industrialization, modernization, avant-gardism, colonialism and postcolonialism, Civil Rights movements, Postmodernism, contemporary globalism and more. Covering art from approximately the mid-18th century to the present, they explore the impact of historical attitudes about gender, power, and identity on artists and their artworks as well as the role of art in societies undergoing monumental change. Movements and genres covered in the course include Romanticism, Impressionism, ukiyo-e prints from Japan, Harlem Renaissance, Surrealism, West African Masquerades, Diné weaving, Activist art, contemporary environmental art, and new technologies. This course is required for students majoring or minoring in art, art education, art history, and communication design and is recommended for non-majors to meet the General Studies requirements in Art and Humanities and/or Global Diversity.

**General Studies:** Arts and Humanities, Global Diversity

### ARTH 2600 - Reading and Writing Visual Culture

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021; or permission of department

**Description:** Students in this course learn to approach artwork critically in order to construct meaningful interpretations of visual images. Students use models of critical thinking to analyze and critique visual culture, including artworks, images in mass media, websites, etc. Students practice writing effectively about visual culture, developing skills in locating appropriate sources, critically

reading scholarly and theoretical writing, and deploying interpretive and rhetorical strategies to construct a persuasive argument.

**General Studies:** Written Communication

**Guaranteed Transfer:** GT-CO3

## ARTH 2700 - Museum Studies

**Credits:** 3

**Description:** Students examine the basic elements, missions, and the characteristics of museums. They will examine important key professional activities such as: curation, exhibit design, conservation, management, and community engagement. They will also compare these practices across a variety of museum types and contexts in order to gain an appreciation of the range of skills and knowledge required for succeeding in the museum profession.

*Note:* Credit will only be granted for one prefix, and the ARTH version of this course cannot fulfill the Upper Division Art History Elective requirement of the Art Major, B.F.A. program.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

**Cross Listed Course(s):** ANT 2700

## ARTH 3060 - Art and Music for Elementary Teachers

**Credits:** 3

**Prerequisite(s):** ENG 1020 and at least junior standing; or permission of instructor

**Description:** This course enables students to develop awareness and knowledge of philosophical and aesthetic foundations of the arts with a specific focus on art and music. Appropriate methods of teaching art and music in the elementary curriculum, including the integration of literacy and mathematics, will be explored. Students will use creative and critical thinking skills to develop artistic sensibility.

*Note:* Credit will be granted for only one prefix: ARTH or MUS.

**Cross Listed Course(s):** MUS 3060

## ARTH 3210 - Variable Topics: Site Specific Studies in Art History

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 and ARTH 1500 or ARTH 1600 or ARTH 1700 or ARTH 1800 with a "C-" or better

**Description:** This course consists of student travel to a city or a region in order to experience art and architecture in their intended location. Emphasis is placed upon the historical, geographical, and philosophical context of the monuments, buildings, and other art works visited.

*Note:* This course may be repeated for up to 9 credits under different topics.

## ARTH 3310 - Arts of Africa

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021; or permission of department

**Description:** In this course, students examine the art of the continent of Africa - from the pyramids of Giza to the rich masking traditions of West Africa to contemporary artistic expression - and evaluate the ways it has been studied and displayed. Students trace historical relationships among regions and the impact of trade networks, empires, and colonialism on art and culture. Art historical methodologies are used to analyze and interpret works of art within their cultural contexts. Students also examine how art reflects and informs the human experience, paying particular attention to themes such as power, identity, religion, and the passage from life into death.

*Note:* Credit will be granted for only one prefix: ARTH or AAS.

**General Studies:** Arts and Humanities, Global Diversity

**Cross Listed Course(s):** AAS 3310

## ARTH 3330 - Egyptian Art

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021; or permission of department

**Description:** This course examines Egyptian art from the beginning of civilization in Kemet (the Black Land) through Greek, Roman, and Byzantine periods, and continuing into the Islamic period.

*Note:* Credit will be granted for only one prefix: AAS or ARTH.

**Cross Listed Course(s):** AAS 3330

## ARTH 3340 - Asian Art

**Credits:** 3

**Prerequisite(s):** ARTH 1600 and ARTH 1700 with "C-" or better; or permission of department

**Description:** This course is a survey of the art of India, China, and Japan. It includes a study of the cultural, historical, and religious factors that have influenced the development of visual cultures in these three particular civilizations. A key theme is the interaction among cultural traditions not only within India, China, and Japan but also through international processes of trade, colonialism, and nationalism. Special attention is placed on works found in the Denver Art Museum.

## ARTH 3360 - Contemporary Chicana/o Art

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021; or permission of department

**Description:** This course is a survey of contemporary Chicana/o art. The historical, religious, social and political contexts of the artworks are studied. Students examine recurrent themes, icons, imagery, and forms within the historical timeline. This course may not be used as the sole art history elective for art studio majors.

*Note:* Credit will be granted for only one prefix: ARTH or CHS.

**Cross Listed Course(s):** CHS 3025

## ARTH 3385 - Feminist Art Since 1960

**Credits:** 3

**Prerequisite(s):** ARTH 1800 or GWS 1001 with "C-" or better or permission of department

**Description:** Students in this course examine the various intersections between art and feminism beginning with the rise of second-wave feminist politics and continuing to the present. Work by artists who self-consciously identified as feminist or work that has been meaningfully read through feminist theories, including queer and trans theories, is the focus. Students learn competing and diverse definitions of feminism and analyze the ways race, class and gender are intertwined and represented by artists globally. Through their assignments and discussions, students evaluate art's relationship to changing social, political, and philosophical conditions throughout the period.

*Note:* Credit will be granted for only one prefix: ARTH or GWS.

**Cross Listed Course(s):** GWS 3960

### **ARTH 3401 - Art of Mesoamerica: from Olmec to Aztec**

**Credits:** 3

**Prerequisite(s):** ARTH 1600 with C- or better or CHS 1000 with D- or better; or permission of department.

**Description:** Students in this course explore the rich and varied visual cultures of Mesoamerica, from the colossal heads of the Olmec and the painted city of Teotihuacan to the courtly arts of the Classic Maya and the great temples of the Aztec. Using artworks and writings from both pre- and post-contact with Europeans, students engage with the indigenous systems of scientific knowledge, political and spiritual power, and complex mythologies. Students also investigate the materials and processes employed by Mesoamerican sculptors, painters, potters and scribes, from lustrous jade and brilliant cochineal to the precious pigment known as "Maya blue".

*Note:* Credit will be granted for only one prefix: ARTH or CHS.

**Cross Listed Course(s):** CHS 3401

### **ARTH 3402 - Art of the Inca and their Ancestors**

**Credits:** 3

**Prerequisite(s):** ARTH 1600 or permission of department

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** Students in this course explore the indigenous arts and architecture of the central Andes from the periods before and immediately following Spanish contact. From Inca temples and Nasca geoglyphs to the goldwork of Moche tombs, students investigate the intersections of indigenous engineering, aesthetics, and power. Students also engage with the materials and processes employed by indigenous Andean weavers, metalworkers, potters, and sculptors, from garments of brightly colored feathers to portraits modeled in clay and textiles fit for an Inca emperor.

### **ARTH 3405 - Native American Art**

**Credits:** 3

**Prerequisite(s):** NAS 1000 or ARTH 1500 or ARTH 1600 or ARTH

1700 or ARTH 1800

**Description:** Students in this course explore the rich history and continuing legacy of arts among the First Nations in the United States and Canada. Through lectures, class discussions, and guest visits students engage with the legacy of colonialism, forced assimilation, and appropriation that has impacted these communities and their arts, while also recognizing how these objects and practices of making represent a powerful form of survivance. Tracing a line from the ancient and medieval periods to the present, students investigate the ways that Native artists have consistently innovated to address contemporary audiences and how they continue to use their work today to address pressing issues such as identity, sovereignty, and environmental devastation.

*Note:* Credit will be granted for only one prefix: ARTH or NAS.

**Cross Listed Course(s):** NAS 309A

### **ARTH 3412 - Art of Ancient Greece**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 with C- or better or permission of department

**Prerequisite(s) or Corequisite(s):** ARTH 1600

**Description:** Students in this course examine the artistic and cultural production of the ancient Greek world from approximately 3000 to 30 BCE, including architecture, sculpture, pottery, mosaics, painting, and city planning. Periods studied will include the Minoan, Mycenaean, and Cycladic cultures of the Bronze Age; the influence of trade on the early development of Greek art and culture; the Archaic and Classical periods; the rise of Alexander the Great; and the Hellenistic period. Students identify and discuss theoretical frameworks, problems, and scholarly approaches to the study of Greek art. Students also consider the impact of myth, epic, philosophy, trade, and colonization on the art, architecture, and identities of ancient Greece.

### **ARTH 3414 - Ancient Roman Art**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 with C- or better

**Prerequisite(s) or Corequisite(s):** ARTH 1600

**Description:** Students in this course examine the art and culture of ancient Italy and the Roman Empire from approximately 900 BCE to 400 CE, including architecture, sculpture, painting, mosaics, luxury goods, coins, and city planning. Topics include Etruscans and their influence on Roman art; the formation of Roman identity; growth and expansion in the Republic; the spread of visual ideology under the empire; and the rise of Christianity. Students identify and discuss theoretical frameworks, problems, and scholarly approaches to the study of Roman art. Students also consider the impact of religion, trade, and colonization on the art and architecture of ancient Rome.

### **ARTH 3421 - Icons, Mosques, and Cathedrals: Art around the Medieval Mediterranean**

**Credits:** 3

**Prerequisite(s):** ARTH 1700 with a C- or better or permission of the

department.

**Description:** Students in this course will explore visual art from the 4<sup>th</sup> to the 14<sup>th</sup> centuries in Europe, Africa, and West Asia. They will study works such as the Hagia Sophia, the Great Mosque of Córdoba, and Notre Dame in order to consider how these artworks relate to religious beliefs, political systems, economic structures, and artistic traditions. Students will also examine how cultural contexts impacted the style, iconography, materials, and use of objects ranging from sculpture and book arts to textiles and metalwork.

### **ARTH 3433 - Bosch, Dürer, and the Art of the Northern Renaissance**

**Credits:** 3

**Prerequisite(s):** ARTH 1700 with a "C-" or better; or permission of department

**Description:** Students in this course explore the evolving artistic practices of artists active in the fifteenth and sixteenth centuries in Northern Europe, including Jan van Eyck, Hieronymus Bosch, and Albrecht Dürer. They will learn primarily about the paintings, sculptures, and prints produced in German and the Dutch speaking lands during this period, but also encounter artists and artworks from France, Spain, and England. Students also explore the profound religious, social, scientific, and political transformations that greatly impacted artistic production during this period, such as the Reformation and iconoclasm, shifting patterns of patronage, the rise of print media, the invention of the idea of "art," and global trade through European colonialism.

### **ARTH 3434 - Michelangelo, Leonardo, and the Art of Renaissance Italy**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021; or permission of the department.

**Description:** Students in this course study the art and architecture created by Michelangelo, Leonardo da Vinci, Titian, Sofonisba Anguissola, and many others from Italy during the 13<sup>th</sup> through 16<sup>th</sup> centuries. They will learn to research, analyze and interpret these artworks within a larger social history tied to the changing values of the church, the aristocracy, and mercantile elites. Students also examine the impact of historical attitudes about gender, power, and identity on the artists and their artworks while engaging with topics such as the invention of "art" and the influence of Humanism. This course is recommended for students majoring or minoring in art history and for non-majors to meet the General Studies requirements in Arts and Humanities.

**General Studies:** Arts and Humanities

### **ARTH 3441 - Caravaggio, Bernini, Velázquez: Baroque Art in Italy and Spain**

**Credits:** 3

**Prerequisite(s):** ARTH 1700 with a "C-" or better or permission of department.

**Description:** Students in this course explore the artistic creations

produced during the 17<sup>th</sup> century in Italy and Spain, including Caravaggio, Bernini, Velázquez, and Murillo. They will also study the religious, social, scientific, and political transformations that greatly impacted the kinds of art desired and produced. Cultural changes, such as the Counter-Reformation, changing patterns of patronage, the creation of art collections by the elite, and global colonial projects impacted the production of paintings, sculptures, prints, and architectural spaces during this period will also be examined.

### **ARTH 3443 - Rubens, Rembrandt, and Versailles: Baroque Art in Northern Europe**

**Credits:** 3

**Prerequisite(s):** ARTH 1700 with a "C-" or better or permission of department

**Description:** Students in this course explore the artistic creations produced during the 17<sup>th</sup> century in the Netherlands, France, England, and Germany, including the paintings of Peter Paul Rubens, Rembrandt van Rijn, Johannes Vermeer, and the artistic spaces at the palace of Versailles. They also will study the religious, social, scientific, political, and economic transformations that greatly impacted the kinds of art created and collected in this period. Students will consider how evolving notions of domesticity, subjectivity, gender and the expanding colonial empires impacted painting, sculpture, printmaking, and architectural spaces.

### **ARTH 3445 - Colonial Latin American Art**

**Credits:** 3

**Prerequisite(s):** ARTH 1700 with a "C-" or better or permission of the department

**Description:** Students in this course examine the art and visual culture of Latin America during the colonial period. While focused primarily on Mexico during the 17<sup>th</sup> and 18<sup>th</sup> centuries, students also explore paintings, prints, sculptures, and architectural spaces in the Caribbean, South America, and portions of North America from the Spanish conquest to the independence movements of the early 1800s. Students use the tools of art history to consider issues of religious belief, race and ethnicity, gender, local identity, cultural hybridity, and globalization through the complex artistic interactions of this period.

### **ARTH 3481 - Latin American Moderns: from Rivera to Botero**

**Credits:** 3

**Prerequisite(s):** ARTH 1800 with C- or better or CHS 1000; or permission of department

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** Students in this course are introduced to the artistic developments of modernism and postmodernism in Latin American history from the wars of independence in the 19<sup>th</sup> century to the political upheavals of the 1970s and '80s. During this period many artists gained international reputations, from Diego Rivera and Frida Kahlo to Roberto Matta and Fernando Botero, bringing greater

visibility to Latin America. Students examine these and other artists of differing periods and nationalities within a unifying thematic framework. These themes include: responses to the colonial past; nationalism and public art; indigenismo; folk/ popular arts; and relations with the European avant-garde. The ways that artists of varying nationalities and artistic philosophies approached these themes created the many distinct but intersecting manifestations of modernism within 20th century Latin America.

*Note:* Credit will be granted for only one prefix: ARTH or CHS.

**Cross Listed Course(s):** CHS 3481

### **ARTH 3500 - Variable Topics: Art of the Americas**

**Credits:** 3

**Prerequisite(s):** ARTH 1600 or ARTH 1700 or ARTH 1800 with "C-" or better; or permission of department

**Description:** Students in this course study artistic traditions of the Western Hemisphere in a particular time and place. The cultural contexts that informed themes, content, techniques, processes, function, and display of the artwork will provide fundamental interpretive frameworks. Students identify historical problems in the field of study and examine variations in scholarly interpretations of the works of art. Specific topics may broadly survey all of a region, such as the Art of the Caribbean or a particular time and place, such as Art and Politics in Mexico since 1910.

*Note:* This course may be repeated under different topics for up to 9 credits.

### **ARTH 3510 - Variable Topics in Ancient Art**

**Credits:** 3

**Prerequisite(s):** ENG 1020, ARTH 1600 with C- or better or permission of department

**Description:** Students in this course are introduced to specific themes in the art of the ancient world. Students identify historical problems in the study of ancient art and examine and assess scholarly interpretations of artworks and material culture. Specific topics may include a broad survey of a region, such as the ancient Mediterranean; a culture, such as the Etruscans; a medium, such as painting; and/or a theme, such as cities of the ancient Roman world.

*Note:* This course may be repeated under different topics up to 9 semester credit hours.

### **ARTH 3520 - Medieval Art: Variable Topics**

**Credits:** 3

**Prerequisite(s):** ARTH 1700 with "C-" or better; or permission of department

**Description:** Students in this course study a particular artist, group of artists, region or issue as it relates to Medieval art during the fourth to fourteenth centuries. Stylistic development, patronage, iconography, and cultural context of the Middle Ages are explored in addition to considerations of materials, techniques and aesthetic theories of the period. The course focuses on artists such as Gislebertus, Villard de Honnecourt, Jean Pucelle, Giotto, Duccio, and may include the arts of sculpture, metalwork, manuscript illumination, tapestry, stained glass, painting or architecture. Alternatively, the course may be

framed under regional, stylistic, or cultural themes such as Byzantine Art or French Manuscripts.

*Note:* May be repeated for up to 9 semester hours credit under different topics.

### **ARTH 3530 - Renaissance Art: Variable Topics**

**Credits:** 3

**Prerequisite(s):** ARTH 1700 with "C-" or better; or permission of department

**Description:** Students in this course study a particular artist, group of artists, region or issue as it relates to art during the period known as the Renaissance, which covers roughly the 15th and 16th centuries. Stylistic development, patronage, iconography, and cultural context are explored in addition to considerations of materials, techniques, and aesthetic theories of the Renaissance. The course focuses on artists such as Van Eyck, Bosch, Bruegel, Leonardo, Michelangelo, Durer, or may focus on themes such as Art and Science in the Renaissance, Renaissance Patronage, Venetian Art of the 15th and 16th Centuries, or Northern Renaissance Art and Culture.

*Note:* This course may be repeated for credit under different topics for up to 9 credits.

### **ARTH 3540 - Baroque Art: Variable Topics**

**Credits:** 3

**Prerequisite(s):** ARTH 1700 with "C-" or better; or permission of department

**Description:** Students in this course study a particular artist, group of artists, region or issue as it relates to Baroque art during the seventeenth and eighteenth centuries. Stylistic development, patronage, iconography, and cultural context are explored in addition to considerations of materials, techniques, and aesthetic theories of the period. Major religious and political changes and how these were reflected in the visual arts and debates over the role of art are among the issues covered. The course may focus on specific artists such as Caravaggio, Bernini, Rubens, Rembrandt, thematic issues such as Everyday Life in Dutch Art, or regional topics, such as Flemish Art of the 17th Century.

*Note:* This course may be repeated for up to 9 semester hours credit under different topics.

### **ARTH 3560 - 19th Century Art: Variable Topics**

**Credits:** 3

**Prerequisite(s):** ARTH 1700 with "C-" or better; or permission of department

**Description:** This course studies art of the 19th century in a specific geographic location, or under certain social conditions, or within a specific movement, or by focusing on a single or small group of artists. The cultural contexts that informed themes, content, techniques, processes, function and display of the artwork provide fundamental interpretive frameworks. Students identify historical problems in the field of study and examine variations in scholarly interpretations of the works of art. Specific topics may broadly survey art of a region, such as French 19th century Art or focus on particular movements, such as Symbolist Art, or artists, such as

Courbet and Manet.

*Note:* This course may be repeated for up to 9 semester hours credit under different topics.

## **ARTH 3570 - Art Revolutions in the 19th Century**

**Credits:** 3

**Prerequisite(s):** ENG 1010 or ENG 1009

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** Students in this course encounter the revolutions and reinventions of the 19th century through the study of art in Europe and the United States. From the Neoclassicism of Jacques-Louis David to Post-Impressionist icons such as Vincent van Gogh and Paul Cézanne, students examine and contextualize many of the household names of modern art. Students also explore the social and artistic upheavals that transformed the art world and ushered in the avant-garde movements of the 20th century, including the rise of industrialization and the inventions of photography and film as artistic mediums. Issues of class, gender, and identity are also interrogated through the discussion of such trends as Orientalism and the new World's Fairs.

**General Studies:** Arts and Humanities

## **ARTH 3580 - 20th and 21st Century Art: Variable Topics**

**Credits:** 3

**Prerequisite(s):** ARTH 1800 with a C- or better or permission of department

**Description:** This course studies art of the 20th or 21st centuries in a specific geographic location, or under certain social conditions, or within a specific movement, or by focusing on a single or small group of artists. The cultural contexts that informed themes, content, techniques, processes, function and display of the artwork provide fundamental interpretive frameworks. Students identify historical problems in the field of study and examine variations in scholarly interpretations of the works of art. Specific topics may broadly survey art of a region, such as German Art since World War II, focus on particular movements, such as Minimalism, time periods, such as Art of the 1960s, themes, such as Art and Society or on specific artists, such as Picasso and Matisse.

*Note:* This course may be repeated for up to 9 semester hours credit under different topics.

## **ARTH 3670 - History of Art Between World Wars**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ARTH 1800

**Description:** This course is an in-depth study of art, architecture, and design in the transitional period between World War I and World War II, considering art in Europe and the United States in its cultural context. Students read theoretical material and artists' writings as well as examine political and historical events and analyze how those informed and were represented by artistic practices. A recurring theme throughout the course is art's social and critical functions.

## **ARTH 3680 - Global Contemporary Art Since 1970**

**Credits:** 3

**Prerequisite(s):** ARTH 1800 or ARTH 2080 or permission of department

**Description:** Students in this course explore contemporary art from across the globe in its historical, social, and political contexts. At times chronological, thematic, or geographic in approach, we study a range of techniques from performance, video, installation, and photography to painting and sculpture. Artworks are discussed in relationship to contemporary theoretical frameworks that are used by many of the artists and critics who interpret the work. Many of the artists and artworks propose new relationships to viewers and the world, questioning the isolated nature of the museum, while others have embraced the space of the museum or gallery as a site for spectacle and engagement. Students will come out of the course with new tools for understanding and making contemporary art in a globally interconnected world.

## **ARTH 3780 - Cinema as Visual Art**

**Credits:** 3

**Prerequisite(s):** ARTH 1700 or ENG 2860 with "C-" or better; or permission of department

**Description:** This course examines connections between cinema and visual art throughout the 20<sup>th</sup> and 21<sup>st</sup> centuries. Focus is put on experimental and avant-garde approaches and on films made by artists in other media; however, the division between commercial and experimental cinema is treated critically. Films are considered in their historical contexts and in light of critical writings from the period. Students should be prepared for extensive reading and writing, as well as in-class discussions. Class time includes lab hours during which various films will be screened and analyzed. This is an integrated media course.

## **ARTH 3790 - Photography and Modernism**

**Credits:** 3

**Prerequisite(s):** ARTH 1800 or ARTH 3080 with "C-" or better; or permission of department

**Description:** This course examines relationships between photography, modernity as a social condition, and modernism as an artistic movement. The study is broad in scope, including photographs from the late 19<sup>th</sup> century through the 21<sup>st</sup> century, but takes a thematic approach. Case studies of particular photographs, movements, and exhibitions provide course content, and students relate images to scholarly articles on the social, aesthetic, and political context of modernism and modernity. Critical approaches to modernism, including postmodernism, deconstruction and post-colonialism, are also explored and related to contemporary practices in photographic art.

## **ARTH 3980 - Internship in Art History**

**Credits:** 1-15

**Prerequisite(s):** Major in Art or Art History; junior or senior status;

permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at c2hub@msudenver.edu.*

*Note:* Variable Credit

## **ARTH 4410 - Art History and Its Methods**

**Credits:** 3

**Prerequisite(s):** ARTH 1600, ARTH 1700, and ARTH 1800 with "C-" or better and an additional course in art history; or permission of department

**Description:** This course is a seminar that will allow students to analyze the changing methodology of the discipline of art history over time and to develop a project that will investigate a specific problem found in previous and current scholarship dealing with issues of style, meaning, or interpretation. Students will present the results of the project in the seminar setting and will also submit a written version of those findings with appropriate documentation.

## **ARTH 4480 - Art Theory and Criticism**

**Credits:** 3

**Prerequisite(s):** ARTH 1600, ARTH 1700, and ARTH 1800 or ARTH 2080 with C- or better in each; or permission of department.

**Description:** Students in this seminar read and discuss of Modern and Postmodern critical and theoretical essays about the visual arts. Students are required to make extensive use of the library facilities and to demonstrate their ability to analyze texts both orally and in writing. By the end of the course, students will be able to apply theoretical principles to their own and historical artworks.

## **ARTH 4500 - Variable Topics Seminar in Art History, Theory and Criticism**

**Credits:** 3

**Prerequisite(s):** ARTH 1600, ARTH 1700, AND ARTH 1800 with a "C-" or better in each; or permission of department

**Description:** Students in this advanced, thematic seminar discuss an art historical topic thoroughly and apply information from readings that reflect recent scholarly approaches to the theme. Students examine artwork in critical frameworks that demonstrate the complex intersections between cultural, social, political, and aesthetic contexts. Students research a specific art historical problem and develop an original study using theoretical approaches to the topic.

*Note:* This course may be repeated under different topics for up to 9 semester hours.

## **ARTH 4510 - Exhibiting the Art Object**

**Credits:** 3

**Prerequisite(s):** ARTH 1600, ARTH 1700, and ARTH 1800 with "C-" or better in each; plus at least 9 additional semester hours of art history; or permission of department

**Description:** This course requires the student to plan an exhibition of art works. Exhibition ideas are based upon discussions with curators, conservators, and other museum professionals, as well as research into standard museum and gallery practices.

## **ARTH 4710 - Art History, Theory and Criticism Senior Experience**

**Credits:** 3

**Prerequisite(s):** Satisfaction of Oral, Written, and Quantitative General Studies requirements; senior standing; ARTH 2600 and ARTH 4480 with C- or better in each; and at least 12 additional credits of upper-division ARTH courses; and permission of department.

**Description:** Students in this course synthesize information, theories, and methodologies from coursework throughout their academic career in order to generate an original senior thesis project. Students identify a problem or question to investigate within a subfield of art history and articulate an original argument that effectively connects form, content, and context to historical or contemporary examples of artwork. Using art historical methods and resources to support their research, students externalize the integration of these concepts through a research paper or thoroughly-researched curatorial proposal, and a public presentation.

**University Requirement(s):** Senior Experience

## **Astronomy**

### **AST 1040 - Introduction to Astronomy - Solar System**

**Credits:** 4

**Prerequisite(s):** Minimum performance standard scores on reading, writing, and mathematics preassessment placement tests

**Description:** This course is a brief introduction to general astronomy with an emphasis on solar systems and a survey of physical processes. It includes an introduction to the night sky, planets, moons and life in our and other solar systems. It also includes principles of modern astronomy, summarizing our present knowledge and highlighting the latest discoveries from space.

*Note:* This course may be taught as a lecture, online, and self-paced.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GS-SC1

### **AST 1050 - Introduction to Astronomy - Stars and Galaxies**

**Credits:** 4

**Prerequisite(s):** Minimum performance standard scores on writing and mathematics pre-assessment placement tests

**Description:** This course is a brief introduction to general astronomy



with an emphasis on stars and galaxies and a survey of physical processes. It covers principles of modern astronomy summarizing our present knowledge about the Sun, stars, birth and death of stars, neutron stars, black holes, galaxies, quasars, and the organization and origins of the universe.

*Note:* This course may be taught as a lecture, online, and self-paced.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GS-SC1

## AST 1052 - General Astronomy I

**Credits:** 4

**Prerequisite(s):** High school algebra or equivalent

**Description:** This course introduces the methods and results of modern astronomy (solar system, stars, galaxies, and cosmology) at an elementary level.

## AST 3040 - Modern Cosmology

**Credits:** 3

**Prerequisite(s):** PHY 1000 or AST 1040 or consent of instructor

**Description:** This course is designed for non-majors. It covers the large-scale structure of the universe and such topics as gravitational theories, neutron stars, pulsars, black holes, big bang universe, steady state theory, cosmological tests, dark matter, age of the universe, inflationary models, recent data, and fate of the universe.

**General Studies:** Natural and Physical Sciences

## AST 3050 - General Astronomy II

**Credits:** 3

**Prerequisite(s):** AST 1052 or PHY 2010 or PHY 2311

**Description:** This course is a continuation of AST 1052. The topics covered in this course include stellar evolution, galaxies, and cosmology.

## AST 3141 - Astronomical Techniques I

**Credits:** 3

**Prerequisite(s):** AST 1040 or AST 3040 or equivalent; MTH 2410

**Description:** This course introduces basic observational astronomy techniques via observational exercises, lab experiments, and lectures on relevant statistical techniques. Special emphasis is placed on CCD imaging and radio interferometry.

## Athletic Training

### ATP 3110 - General Medical Topics in Athletic Training

**Credits:** 3

**Prerequisite(s):** BIO 2320 and formal admittance to Athletic Training Program

**Description:** This course is designed to enhance the athletic training major's knowledge of general medical topics that are relevant to

athletic and physically active individuals. This course includes: etiology, pathology, signs, symptoms, treatment and prevention of common medical conditions across the lifespan and/or due to traumatic event. Various medical procedures and diagnostic/laboratory tests will also be introduced.

### ATP 3860 - Therapeutic Interventions for Athletic Trainers I

**Credits:** 3

**Prerequisite(s):** BIO 2310 with "C" grade or better, formal admittance to the Athletic Training Program

**Corequisite(s):** ATP 2861

**Description:** A study of current theory and application in the use of therapeutic interventions for individuals with various injuries, conditions, and illnesses. Emphasis on foundational theory of techniques, program design, and its related concepts. This course introduces the underlying principles and clinical application of thermal, electrical and mechanical modalities.

## Athletics

### ATH 1000 - Varsity Sport

**Credits:** 1-2

**Description:** This course is designed to teach rules, techniques and skills used in playing and understanding of sport.

*Note:* This variable topic course may be repeated under different topics for a maximum of 4 credits.

## Aviation and Aerospace Science

### AES 0345 - Aerobatic and Glider Flight Lab

**Credits:** 0

**Prerequisite(s):** AES 2350

**Description:** The Aerobatic and Glider Course is a continuation of AES 2350 further preparing the students for participation in the International Aerobatic Club (IAC) Collegiate Program national team and individual collegiate events. Aerobatic flight maneuvers, precision, accuracy and timed events are learned. Required for all students who are members of the MSU Denver Aerobatic and Glider Team.

*Note:* Students may repeat this course as needed.

### AES 1010 - Introduction to Aviation and Aerospace Operations

**Credits:** 4

**Description:** The student is introduced to essential aviation and aerospace industry operations and related systems used within or by airports, space ports, airlines, air traffic control and weather observation and reporting services. General meteorology and

weather-related issues that affect airport, space port, airline, and air traffic control operations will also be examined.

## **AES 1040 - Introduction to Unmanned Aircraft Systems**

**Credits:** 3

**Description:** This course gives the student pursuing aviation science an operational knowledge of unmanned aircraft systems (UAS). This includes small, medium, and large aviation vehicles (AV), flight and ground control processes, FAA regulations, UAS applications, mission operations, ethical and human factors concerns, and future considerations.

## **AES 1050 - Introduction to Space**

**Credits:** 3

**Description:** Students are introduced to space systems to provide a basic understanding of space operations and associated scientific principles of space exploration. Abstract concepts are translated to a tangible application through the design, construction, flight, and subsequent analysis of data returned from a working near-space payload. Current space missions are also discussed in the context of the space environment and the broader impact on society.

**General Studies:** Natural and Physical Sciences

## **AES 1100 - Private Pilot Ground**

**Credits:** 4

**Description:** Students participate in basic studies in aircraft operation, performance, aerodynamics, and design. Federal aviation regulations and other flight publications needed for private pilot operations are examined. Weather theory and reports and basic flight physiology in the context of flight safety are examined. Skills of air navigation by pilotage, dead reckoning, and the use of fundamental tools of air navigation including radio navigational aids are explored. *Note:* This course is restricted to those students seeking FAA flight certification at the Private Pilot level within the Professional Flight Officer Concentration, and those students within the Air Traffic Control Concentration.

## **AES 1400 - Aviation Weather**

**Credits:** 3

**Description:** The student is introduced to the earth's atmospheric composition, temperature, pressure, wind, moisture, and weather stability, turbulence, clouds, air masses, fronts, thunderstorms, icing, fog, and other obstructions to vision. Weather observations, reports, forecasts, and prognoses are interpreted and explained, along with methods for disseminating textual and graphic products.

## **AES 1500 - Private Pilot Flight Lab**

**Credits:** 2

**Prerequisite(s):** Instructor Permission

**Description:** The course is designed to enable a student to obtain credit for earning an FAA Private Pilot certificate under either Federal Aviation Regulations Part 61 or Part 141. A minimum of 35 hours of flight time is required. Course credit is contingent on the student obtaining the FAA Private Pilot certificate.

## **AES 1710 - Instrument Flight Simulation I**

**Credits:** 3

**Description:** Students in the course learn basic flight instruments, radio navigation, aviation weather, aircraft performance, weight and balance, and aeronautical decision-making. The fundamentals of instrument attitude flight (scanning, interpreting, and controlling) are practiced in a flight training device utilizing conventional and advanced flight deck systems. Radio navigation is introduced and includes both ground-based and satellite-based systems.

## **AES 1910 - Aerospace Industry Exploration and Analysis**

**Credits:** 3

**Description:** Students will be introduced to the aviation and aerospace industry, including an overview of key organizations and dynamics that shape the industry. Given availability of organizations, students will perform field visits to participate in tours and analyze the types of activities performed. Industry factors such as emerging technology, competition, globalization, and demographic diversification will also be discussed.

## **AES 1920 - Basic Aviation and Aerospace Analysis I**

**Credits:** 1

**Description:** Students are introduced to analytical tools used in aerospace science to quantify performance parameters and properties of systems properties which form the foundation of industry analysis. Additional emphasis is placed on fundamental metrics used during aerospace operations, ranging from aircraft to satellite applications.

## **AES 1930 - Basic Aviation and Aerospace Analysis II**

**Credits:** 1

**Description:** Students are introduced to analytical tools used in aerospace science to determine mission profiles used in industry applications. Additional emphasis is placed on flight trajectories and how they are influenced by aerodynamic forces. Furthermore, students explore how aerospace data is presented and how analytical tools are used to format data.

## **AES 1940 - Basic Aviation and Aerospace Analysis III**

**Credits:** 1

**Description:** Students are introduced to analytical tools used in aerospace science to visually depict mission profiles used in industry applications. Additional emphasis are placed on the visualization of

flight trajectories, vectoring, and radar activities. Furthermore, students calculate aerodynamic maneuvers and parameters for various phases of a mission life cycle.

## **AES 2040 - Unmanned Aircraft Systems Flight and Control**

**Credits:** 4

**Prerequisite(s):** AES 1040

**Description:** Students will be introduced to the principles of flight and control as applied to unmanned aeronautical vehicles (UAVs). Students will receive class lecture plus onsite and field trip learning experiences as applied to the flight and control of UAV vehicles. Topics include principles of flight, mission planning, systems control, and safety of personnel, safety in the operational environment, compliance with regulations and procedures. Human factors analysis with focus on crew resource management is also introduced. Opportunities for applied practicum, including field trip work setting activities are provided.

## **AES 2050 - Aviation and Aerospace History and Development**

**Credits:** 3

**Description:** This course examines how individuals and defining events of the past influenced the development of aviation and aerospace science. From early myths to advents in aerospace science, such as advances in propulsion systems, structural materials, navigation techniques, high altitude flights, weather analysis, UAV/UAS development, and space exploration are considered. We vicariously relive many of the extraordinary experiences of early aviators and space pioneers. The evolution of aviation science in comparison to aerospace science is described. Historical events are analyzed for applicability to embracing future opportunities and career paths in aviation and space science.

## **AES 2120 - Instrument Pilot Ground**

**Credits:** 4

**Prerequisite(s):** AES 1100 or permission of instructor

**Description:** Students participate in a comprehensive exploration of instrument flight, focusing on the principles and techniques required for safe and efficient operations in instrument meteorological conditions (IMC). Students engage in a detailed study of instrument flight control techniques, radio navigation, and instrument flight operations. Students thoroughly analyze federal aviation regulations (FARs) and air traffic control (ATC) procedures related to instrument flight. Additionally, students examine avionics systems and navigational aids essential for instrument operations and review weather information specific to instrument flight.

## **AES 2200 - Fundamentals of Air Traffic Control**

**Credits:** 4

**Prerequisite(s):** AES 1100 or AES 1010 or instructor permission

**Description:** This course is an introduction to air traffic services,

procedures, communications, record keeping, regulations, emergencies, and air space constructions. Basic and advanced ATC (air traffic control) radar topics are introduced with emphasis on hands-on application in the simulator lab. Lab exercises encompass aircraft separation, identification and speed control, flight progress strip usage, emergency procedures, and the elements necessary for the safe operation of the ATC system.

## **AES 2220 - Flight Dispatch and Load Planning**

**Credits:** 3

**Prerequisite(s):** AES 1100 or AES 1010, AES 1400, and Any Approved Quantitative Literacy Course

**Description:** Students are introduced to the topics needed to prepare them to work as a flight dispatcher. Regulations required for operations are a vital area of knowledge and will be covered. Students examine the methods of decision-making, safety, and weather conditions related to dispatch decisions.

## **AES 2330 - Precision Flight and Navigation**

**Credits:** 3

**Prerequisite(s):** AES 1100 or Private Pilot certificate

**Description:** The first Flight Team course prepares students for participation in the National Intercollegiate Flying Association regional and national flying meets. Flight and ground event accuracy and time events are learned. This course is required for students who are new members of the MSU Denver Precision Flight Team.

## **AES 2350 - Fundamentals of Aerobatic and Glider Flight**

**Credits:** 3

**Description:** The first Aerobatic and Glider Course prepares students for participation in the International Aerobatic Club (IAC) Collegiate Program, national team and individual collegiate events. Aerobatic flight maneuvers, precision, accuracy and timed events are learned. Required for all students who are members of the MSU Denver Aerobatic and Glider Team.

## **AES 2500 - Instrument Pilot Flight Lab**

**Credits:** 2

**Prerequisite(s):** AES 1100 and instructor permission

**Description:** This course is designed to enable a student to obtain credit for earning an FAA Instrument rating under either Federal Aviation Regulations Part 61 or Part 141. A minimum of 40 hours of instrument flight time is required and course credit is contingent on the student obtaining the FAA Instrument rating.

## **AES 2607 - Introduction to Aerospace Systems Simulation**

**Credits:** 3

**Description:** This class will provide a fundamental introduction to

Orbital Mechanics and Physics software modeling. The student will learn the interfaces of various Space Mission Modeler and Visualization software products, such as AGI's System Tool Kit (STK) and A.I. Solutions' Freeflyer as applied in Orbital Mechanics. This class will offer a foundation for higher level coursework on Space Mission Modeler and Visualization software with a sophisticated focus on software interface and space mission applications. Students are provided with necessary software licensing with course enrollment.

## **AES 2630 - Spacecraft Mission Operations I**

**Credits:** 3

**Prerequisite(s):** AES 1050

**Corequisite(s):** AES 3600

**Description:** Provides the student with an overview of the real-time skills, techniques, and methods necessary to conduct a space mission as a Spacecraft Operator including generation of the daily planning and successful execution of the real-time portion of a space mission. The differences in ground and space system architectures, mission dynamics (orbit, spacecraft agility, etc.), operations tempo, and the planning timeline inherent in various types of missions are examined. The laboratory includes hands-on exercises in the AES Mission Operations Center to create a daily mission plan, conduct spacecraft real-time command and control, and perform post contact (pass) data analysis. A real-time ops environment is created using an interactive spacecraft simulator. Focus is on learning the skills necessary to operate a space mission.

## **AES 2710 - Instrument Flight Simulation II**

**Credits:** 3

**Prerequisite(s):** AES 1100 and AES 1710 and AES 2120

**Description:** Students participate in instrument flight planning, navigation, and situational awareness during departure, enroute, and arrival phases of flight. Simulated flights involve air traffic control (ATC) clearances and FAA instrument procedures, including departures, enroute operations, holding patterns, arrivals, and precision and non-precision approaches. These flights also include normal and abnormal procedures, practiced in a flight training device utilizing conventional and advanced flight deck systems.

## **AES 3000 - Aircraft Systems and Propulsion**

**Credits:** 3

**Prerequisite(s):** AES 1100 or FAA Private Pilot Certificate, and Any Approved Natural and Physical Science Course, and Junior Standing

**Description:** This course introduces the student to aircraft nomenclature, design, features, systems, and their components. This course covers the theory, components, instrumentation, and operation of internal combustion and turbojet engines. In addition, it covers the fuel, electrical, hydraulic, and pneumatic aircraft systems.

## **AES 3040 - Unmanned Aircraft Systems Data Collection and Analysis**

**Credits:** 4

**Prerequisite(s):** AES 1040

**Description:** This course is an introduction to the techniques and processes that are needed to collect data from unmanned aerial vehicles (UAV). Students will learn how to acquire, process, and analyze data from photographic, multispectral, infrared, and LiDAR sensors. Students will receive class lecture and practical experience with sensors and processing applications. Topics include principles of data acquisition, aircraft and sensor selection, mission planning, data processing and analysis. Opportunities for applied practicum, including field trip work setting activities are provided.

## **AES 3130 - Commercial Pilot Ground**

**Credits:** 3

**Prerequisite(s):** AES 2120 or permission of instructor

**Description:** Students examine aeronautics, regulations, complex aircraft systems, and aeronautical decision-making appropriate to commercial flight operations. Students review and build upon fundamental meteorological principles with particular emphasis on weather factors that affect advanced flight planning.

## **AES 3220 - Aviation and Aerospace Law**

**Credits:** 3

**Prerequisite(s):** AES 1100 and Junior or Senior Standing

**Description:** This course provides an overview of fundamental aviation and space law. Concepts and terminology of constitutional law, administrative law, contract, and tort law as they relate to governmental organization, regulatory and international organizations, the regulatory environment, and regulation enforcement are highlighted. Principles of aviation liability and protections against liability claims are analyzed. Basic principles of space law are presented.

## **AES 3230 - Airline Management**

**Credits:** 3

**Prerequisite(s):** Junior or Senior Standing or Permission of Instructor

**Description:** This course presents airline management issues, including the history and current organization of the airline industry, its economic impact on the society, and major management issues airlines face today. Discussions of the airline industry's unique legal history, airline company organization, labor relations, airline financing, and international aviation are included.

## **AES 3240 - Airline Planning**

**Credits:** 3

**Prerequisite(s):** Junior or Senior Standing, or Permission of Instructor

**Description:** This course presents airline management issues, including the history and current organization of the airline industry, its economic impact on the society, and major management issues airlines face today. Discussions of the airline industry's unique legal

history, airline company organization, labor relations, airline financing, and international aviation are included.

### **AES 3330 - Intermediate Precision Flight and Navigation**

**Credits:** 2

**Prerequisite(s):** AES 2330

**Description:** The second Flight Team course is a continuation of AES 2330, further preparing the students for participation in the National Intercollegiate Flying Association regional and national flying meets. Flight and ground event accuracy and timed events are practiced with emphasis on speed as well as accuracy. Required for students who are second semester members of the MSU Denver Precision Flight Team.

### **AES 3340 - Advanced Precision Flight and Navigation**

**Credits:** 1

**Prerequisite(s):** AES 3330

**Description:** The third Flight Team course is a continuation of AES 3330, further preparing the student for participation in the National Intercollegiate Association regional and national flying meets. Flight and ground event accuracy and timed events are practiced with emphasis on speed as well as accuracy. Students at this level will help teach newer team members. It is required for students who are third semester members of the MSU Denver Precision Flight Team.

### **AES 3520 - Commercial Single-Engine Flight Lab**

**Credits:** 2

**Prerequisite(s):** FAA Private Pilot certificate and Permission of instructor

**Description:** The course is designed to enable a student to obtain credit for earning the FAA Commercial Pilot certificate under either Federal Aviation Regulations Part 61 or Part 141. Course credit is contingent on the student obtaining the FAA Commercial Pilot certificate.

### **AES 3530 - Aerodynamics**

**Credits:** 3

**Prerequisite(s):** MTH 1080 or MTH 1109 or MTH 1110 or MTH 1111 or MTH 1112 or MTH 1210 or MTH 1310 or MTH 1610

**Description:** The student is introduced to the basic principles of aerodynamics, including airfoil shapes and aerodynamic forces, airplane performance, stability and control, strength limitations, and the application of these to specific flight situations. Included in this course are flight performance with air flow in the sub-, trans-, and supersonic envelopes.

*Note:* It is highly recommended that students complete the MSU Denver General Studies Quantitative Literacy requirement prior to taking this course.

### **AES 3570 - Ground Instructor Practicum**

**Credits:** 2

**Prerequisite(s):** FAA Commercial/Instrument certificate, CFI or Advanced or Instrument Ground Instructor certificate, or Permission of instructor

**Description:** This course provides students practice as aviation instructors in advanced single-engine flight simulators. It covers all aspects of flight planning and preparation, setup of simulators, cockpit management, and IFR and VFR flight procedures, and navigation.

### **AES 3600 - Space Flight Operations I**

**Credits:** 3

**Prerequisite(s):** At least Junior standing or permission of instructor

**Description:** Students review the history of space exploration and analyze reasons to explore space. Space weather in the context of the space environment is discussed along with an introduction of associated hazards to space operations. An overview of space policies, treaties, and international laws is presented in the context of their influence on space operations. Additional topics focus on a framework for space mission operations, including an introduction to identifying and understanding space mission applications, orbits, and systems comprising modern space vehicles with an emphasis on getting to space.

### **AES 3607 - Orbital Mechanics and Aerospace Systems Simulations**

**Credits:** 3

**Prerequisite(s):** AES 2607 and Junior Standing, or Permission of Instructor

**Description:** Students will be introduced to orbital analysis using Analytical Graphics Inc (AGI)'s Systems Tool Kit (STK) software. They will integrate this analysis with simulations involving ground systems, ground vehicles, aircraft and ships. Students will use STK to assess, risks, optimize performance, and develop alternatives. The main purpose of the course is to introduce STK software, its interface and capabilities related to orbital mechanics concepts.

### **AES 3610 - Elements of Spacecraft Design I**

**Credits:** 3

**Prerequisite(s):** AES 3600 and Junior Standing or Permission of Instructor

**Description:** Introduces students to spacecraft operational perspectives and system components. This includes a focus on System Engineering and Orbital Mechanics. Additional topics areas discussed with spacecraft design is propulsion, attitude control, power systems, thermal control, command and data system, telecommunication, and structures. The operational aspect of acquiring and monitoring a spacecraft will be covered through lecture and laboratory exercises.

## **AES 3620 - Aerospace Systems Project and Mission Scheduling**

**Credits:** 3

**Prerequisite(s):** AES 3600 and Junior Standing or Permission of Instructor

**Description:** Students in this course develop a basic understanding of project management and how it is used in the aerospace industry by analyzing project management knowledge areas and processes in context of aerospace applications. Previous aerospace projects will be analyzed from a project management perspective so students learn how to utilize project management principles in real world applications.

## **AES 3630 - Spacecraft Mission Operations II**

**Credits:** 3

**Prerequisite(s):** AES 2630

**Description:** The student gains a deeper understanding of the daily mission planning process, the issues involved with Mission Operations management, and the creation and upkeep of operations documentation and procedures for both routine and contingency system situations. The student also learns about the issues involved in managing the daily interaction of Operations with ground and space support teams (both routine and contingency) for the planning and scheduling of space and ground station assets. The laboratory builds on the student's experience in AES 2630 with increased complexity spacecraft real-time command and control real-time exercises including nominal mission execution and response to spacecraft anomalies. Long term trending of spacecraft health and performance data analysis are also explored.

## **AES 3640 - Fundamentals of Aerospace Systems Analysis and Design**

**Credits:** 4

**Prerequisite(s):** AES 1050 or permission of instructor

**Description:** Students are introduced to the aerospace systems life cycle to gain a comprehensive understanding of the design and analysis of aerospace systems. Topics include an overview of life cycle activities which encompass system architecture, assembly and integration, verification and validation, maintenance, and disposal. The concurrent approach of systems analysis and design along with product and project management life cycles is also explored.

## **AES 3650 - Advanced Flight Technologies**

**Credits:** 3

**Prerequisite(s):** AES 2120 and AES 2710 or an instrument rating

**Description:** The course is designed to emphasize advanced instrument procedures, including the use of global positioning system (GPS) and other area navigation (RNAV) systems. Additionally the course will cover pilot systems management concepts applicable to modern, technologically advanced, general aviation aircraft cockpits.

## **AES 3710 - Multi-Engine Flight Simulation I**

**Credits:** 3

**Prerequisite(s):** AES 2710 and AES 3130

**Description:** Students are introduced to the fundamentals of multi-engine aircraft systems and aerodynamics, focusing on the unique characteristics of multi-engine operations. Students explore topics such as engine-out aerodynamics and operations, along with normal and emergency procedures. These concepts are applied in a twin-engine simulator, utilizing conventional and advanced flight deck systems. Students examine real-world multi-engine flight scenarios with an emphasis on aeronautical decision-making and crew resource management (CRM).

## **AES 3850 - Human Factors and Physiology of Flight**

**Credits:** 3

**Description:** At least junior standing Human factors, physiological effects and problems associated with flight are studied in this course. This includes both high- and low-altitude flight environments

## **AES 3870 - Aircraft Accident Investigation**

**Credits:** 3

**Prerequisite(s):** At least junior standing or Permission of instructor

**Description:** This course examines techniques and procedures for investigating aircraft accidents/incidents and report writing. Areas of emphasis are operations, air traffic control, meteorology, witnesses, human factors, cockpit voice recorders, structures, power plants, systems, performance, maintenance records, and flight data recorders.

## **AES 3880 - Aviation Security**

**Credits:** 3

**Prerequisite(s):** Junior Standing, or Permission of Instructor

**Description:** The history, development and strategies of prevention and response to aviation security issues are studied in this course. The role of international and national agencies, including statutes and regulations are detailed, with particular emphasis on Transportation Security Regulations as they apply to airports and aircraft operators. The history of air terrorism is addressed, focusing on terrorist threats and governmental responses before and after 9/11/2001.

*Note:* Credit will be granted for only one prefix: AES or CJC.

**Cross Listed Course(s):** CJC 405M

## **AES 3980 - Internship in Aviation and Aerospace Science**

**Credits:** 1-15

**Prerequisite(s):** Major in aviation management or aviation technology; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be

established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## **AES 4040 - Aircraft Performance**

**Credits:** 3

**Prerequisite(s):** AES 3530, Junior or Senior standing

**Description:** The performance of aircraft from the Normal and Transport categories is examined. Regulations governing the performance requirements of aircraft certification within each category are discussed. Flight profiles are studied, with emphasis on aircraft capabilities and limitations. Required distances, speeds, and power or thrust settings for the various flight conditions are calculated using performance charts.

## **AES 4100 - Advanced Air Traffic Control**

**Credits:** 3

**Prerequisite(s):** AES 2200 and Junior Standing

**Description:** Introduces advanced ATC radar topics, with emphasis on hands-on application in the simulator lab. Covers aircraft separation; identification and speed control; flight progress strip usage; emergency procedures; and the elements necessary for the safe operation of the ATC system.

## **AES 4200 - Airport Planning and Management I**

**Credits:** 3

**Prerequisite(s):** At least junior standing or Permission of instructor

**Description:** This course introduces airport planning, management, and operations concepts. Topics covered include air traffic, forecasting, sources of revenues and expenses, management of revenue-producing facilities, and the U.S. Federal Aviation Administration regulations dealing with airport operations and security. Current problems with environmental impact, land use planning and control, airport capacity and delay, public relations, airport finance, airport privatization, liability, and economic impact are introduced.

## **AES 4210 - Airport Planning and Management II**

**Credits:** 3

**Prerequisite(s):** Senior Standing, AES 4200, or permission of instructor

**Description:** This is an advanced course in airport planning, management, and operation. At the conclusion of the course, students will be able to apply fundamental management theory to airports, determine airport capacity, and assess the potential for delays; evaluate airport environmental impacts; and identify components of the National Airspace System and its relationship to airports. They

will be able to apply financial management and accounting techniques to airport finances, set airport fees, rates, and charges, and understand the process for obtaining capital funding for airport improvements. Evaluation and use of airport master plans, state airport system plans, and airport layout plans are also covered, as well as basic principles of terminal design and operations, applicable Federal Aviation Regulations, airport security, and basic airport emergency response procedures. Successful completion of the course prepares the student for the Certified Member (C.M.) of the American Association of Airport Executives (AAAE) examination.

**University Requirement(s):** Senior Experience

## **AES 4230 - General and Business Aviation Operations**

**Credits:** 3

**Prerequisite(s):** Senior standing or Permission of instructor

**Description:** This course is a study of the general aviation service industry (fixed-base operators and specialized aviation service operators). The course includes lectures on the history and evolution of the general aviation service industry, management functions, marketing, finance, human resources, operations, and safety.

## **AES 4240 - Air Cargo Industry**

**Credits:** 3

**Prerequisite(s):** Junior Standing

**Description:** An overview of the air cargo industry, including the size and scope of the industry, market segmentation, the role of air freight forwarders, economics and pricing of services, air cargo aircraft design and technology, management issues in the industry, and transportation of hazardous materials.

## **AES 4370 - Advanced Navigation Systems**

**Credits:** 3

**Prerequisite(s):** AES 2120 and 60+ credits

**Description:** This course is a follow-up to the navigation portion of AES 1100 and AES 2120. The student explores geographic coordinate systems, short-range and long-range route navigation, and aircraft position determination with systems available in modern aviation. Electronic instrumentation, navigation and flight management systems (FMS), electronic flight instrumentation systems (EFIS), inertial navigation systems (INS) and global positioning systems (GPS) are discussed.

## **AES 4500 - Commercial Multi-Engine Flight Lab**

**Credits:** 2

**Prerequisite(s):** FAA Commercial Pilot certificate and Permission of instructor

**Description:** This course covers multi-engine aircraft operations. A minimum of 10 hours of flight training time are required. The FAA multiengine rating must be obtained to receive credit for this course.

## **AES 4510 - Flight Instructor Flight Lab**

**Credits:** 2

**Prerequisite(s):** FAA Commercial/Instrument Pilot certificate and instructor permission

**Description:** This course provides the basic aeronautical knowledge and flight experience necessary for the FAA Certified Flight Instructor certificate. Fifteen hours of flight training are required and the FAA Certified Flight Instructor certificate must be obtained to receive credit for this course.

## **AES 4520 - Flight Instructor-Instrument**

**Credits:** 1

**Prerequisite(s):** FAA Certified Flight Instructor certificate and Permission of instructor

**Description:** This course provides the basic aeronautical knowledge and experience that the instrument flight instructor must have. Ten hours of flight training are required and the FAA Instrument Instructor rating must be obtained to receive credit for this course.

## **AES 4530 - Flight Instructor-Multi-Engine**

**Credits:** 1

**Prerequisite(s):** CFI, multi-engine rating and Permission of instructor

**Description:** This course provides the basic aeronautical knowledge and experience relative to multiengine flight instruction that the prospective multi-engine flight instructor must have. Fifteen hours of flight training time is required. The FAA Multi-Engine Flight Instructor rating must be obtained to receive credit for this course.

## **AES 4540 - FAA Instructor Certification-Ground School**

**Credits:** 3

**Prerequisite(s):** AES 3130 or FAA Commercial/Instrument Certificate

**Description:** Students in this course are prepared to take the FAA Certified Flight Instructor knowledge examinations. Topic areas include advanced aeronautics, regulations, complex aircraft systems, and aeronautical decision-making concepts. Emphasis is placed on the practical aspects of flight instruction to include the preparation of lesson plans, presentation techniques, and evaluation principles.

## **AES 4550 - Flight Helicopter**

**Credits:** 1

**Prerequisite(s):** Permission of instructor

**Description:** Helicopter systems, aerodynamics, flight characteristics, helicopter operations, and pertinent regulations and procedures are studied in this course. The FAA Commercial Pilot certificate with the Rotorcraft-helicopter rating must be obtained to receive credit for this course.

## **AES 4560 - Crew Resource Management**

**Credits:** 3

**Prerequisite(s):** AES 3130; AES 3710; and Senior Standing

**Description:** Students participate in an advanced exploration of Crew Resource Management (CRM) principles emphasizing leadership, emotional intelligence, crew planning, decision-making and communication, threat and error management (TEM), situational awareness and control, effective use of resources, and critical thinking during normal and abnormal aircraft operations. Students may explore CRM application using an advanced Flight Training Device (FTD).

## **AES 4570 - Airline Transport Pilot**

**Credits:** 1

**Prerequisite(s):** FAA Commercial/Instrument certificate and Permission of instructor

**Description:** Fifteen hundred hours of flight time, including 500 cross-country, 100 hours night flying, and 75 hours of instrument flight are required to complete this course. Students should be close to having completed the required flight hours before enrolling in this course. The course involves knowledge of navigation, weather, FARs, radio communications, weight distribution on aircraft and loading. Course credit is contingent on the student obtaining the FAA Airline Transport Pilot certificate.

## **AES 4580 - Turbojet Flight Engineer or Type Rating**

**Credits:** 4

**Prerequisite(s):** FAA Flight Engineer Knowledge examination and/or Permission of instructor

**Description:** This course is for the student with access to type rating or flight engineer training, such as at an airline, and consists of ground school for B-727, DC-8, or other turbojet airplanes. Approximately 15 hours of second officer or "type" training and a flight check in the airplane or an FAA-approved simulator will be completed at a facility external to the college.

## **AES 4590 - Flight Instructor Practicum**

**Credits:** 2

**Prerequisite(s):** AES 3570, FAA Commercial/Instrument certificate, CFI, Advanced or Instrument Ground Instructor certificate, or Permission of instructor

**Description:** This course provides students practice as a flight instructor in advanced single- and twin-engine flight simulators. It covers all aspects of flight planning and preparation, setup of simulators, cockpit management, IFR flight procedures and navigation, and emergency procedures using the capabilities of the simulator computers.

## **AES 4601 - Space Flight Operations II**

**Credits:** 3

**Prerequisite(s):** AES 3600



**Description:** Students are introduced to comprehensive system life cycle applications in the context of space operations. Advanced concepts related to space operations are investigated, including the integration of mission elements. Topics include payload and spacecraft designs, spacecraft control systems, and launch vehicles. Emphasis is placed on operating in space, including current and proposed space transportation systems, space stations, interplanetary travel, orbital analysis, and planetary exploration. Students apply principles of orbital mechanics and related calculations to the operational management of space vehicles and space stations.

## **AES 4602 - Aerospace Commercialization Operations**

**Credits:** 3

**Prerequisite(s):** AES 4601

**Description:** Students explore past, current, and proposed business ventures focused on creating commercial opportunities in space. A comprehensive review of space policy further provides a foundation for consideration of risk factors associated with conducting space business. The space environment and associated topics in bioastronautics are discussed in the context of impact on commercial space activities. Case study analyses are conducted to understand and conceptualize potential new commercial space opportunities with applications near Earth and in deep space.

## **AES 4603 - Aerospace Operations Systems Analysis and Design**

**Credits:** 3

**Prerequisite(s):** AES 4601

**Description:** Students are introduced to technical concepts related to conceptualizing, designing, and integrating commercial space systems. Emphasis is placed on the space mission life cycle, beginning with mission definition along with assembly, test, launch, and operations phases. Processes and analytical tools related to space operations system-of-systems (SoS) integration, systems analysis, and operational management are discussed. Students learn mathematical techniques for analyzing space operations data, assessing risks, optimization, and design tradeoffs commonly used by commercial operations in the space industry.

## **AES 4610 - Aerodynamic Design**

**Credits:** 3

**Prerequisite(s):** AES 3530, or permission of instructor

**Description:** Students analyze aerodynamics in both the subsonic and supersonic range. Airfoil theory, the calculations of lift and drag, National Advisory Committee for Aeronautics (NACA) derived airfoils, and their applications will be studied. A wind tunnel laboratory is utilized to conduct experimentation with the Bernoulli equation and Reynolds number and to test aerodynamic properties of various structures.

## **AES 4620 - Elements of Spacecraft Design II**

**Credits:** 3

**Prerequisite(s):** AES 3610 and Junior Standing or Permission of Instructor

**Description:** Examines fundamental methodologies and skills utilized in spacecraft manufacturing. An overview of the spacecraft design process, spacecraft manufacturing processes including cleanroom protocols and techniques to prevent space hardware damage and contamination is presented. Classroom lab includes projects that examines skills necessary to build and test space hardware. This includes evaluating and demonstrating precision measurements with emphasis on validity and reliability, data collection and analysis of various spacecraft systems performance.

## **AES 4640 - Aerospace Model-Based Systems Analysis**

**Credits:** 3

**Prerequisite(s):** AES 3640

**Description:** Students are introduced to aerospace system modeling along with associated terminology. Modeling best practices, similar or equivalent to the Systems Modeling Language (SysML), are used to describe aerospace systems and their components. Additional topics include the analysis of system models to improve communication and decision-making throughout a system's lifecycle to promote requirements management and design process efficiency.

## **AES 4650 - Aerospace Software and Mission Visualization Tools**

**Credits:** 3

**Prerequisite(s):** AES 3640

**Description:** Students are introduced to software and mission visualization tools used in the aerospace industry. Application of these resources is explored to solve hypothetical problems in the aerospace domain. Additionally, aerospace industry case studies are reviewed to address how software and mission visualization tools shaped their outcome(s).

## **AES 4860 - Aviation Safety**

**Credits:** 3

**Prerequisite(s):** Junior Standing

**Description:** This course provides an overview of the modern approach to aviation safety. Included are analyses of the framework and operation of safety regulations, the role of the National Transportation Safety Board, key safety definitions and statistics, human factors in safety, air traffic safety issues, aircraft safety systems, airline safety programs, and safety management systems. The focus is on understanding causal and contributing factors to aircraft accidents and incidents and developing risk management, and organizational and regulatory strategies to improve safety.

## **AES 4870 - Aviation Safety Program Management**

**Credits:** 3

**Prerequisite(s):** Completion of all required 3000-level AES courses and Senior standing

**Description:** This course addresses requirements to develop comprehensive safety programs for aviation organizations at aviation facilities. Included are the philosophy of operations and support of air transportation; the dynamics of interpersonal relationships; Quality Assurance (QA) and Quality Control (QC); effective communications techniques; correct procedures for handling FAA, NTSB, and OSHA investigations and reports; and effective proactive management to obtain federal legislation in support of accident prevention, safety, and health programs. Federal Emergency Management Agency (FEMA) emergency planning and Disaster Recovery planning are covered. Emphasis is placed on the management of aviation safety programs.

## **AES 4910 - Aviation and Aerospace Strategic Planning**

**Credits:** 3

**Prerequisite(s):** Aviation and Aerospace Management or Science Major and junior standing or permission of instructor

**Description:** This capstone course requires the student to demonstrate and have critiqued their knowledge, skills, and critical thinking abilities in strategic planning as applied to current topics in aviation and aerospace science. Students must demonstrate analytical and interpretive abilities, along with professional level communications skills. Emphasis is placed on decision making ability applied to the aeronautical or aerospace discipline of choice. Students are mentored in industrial trends, best practices, and regulatory issues that address modern industry challenges. Students are further prepared through a professional development certificate process and must develop a career plan and portfolio for assessment by the instructor.

**University Requirement(s):** Senior Experience

## **AES 4930 - Professional Flight Standards Seminar**

**Credits:** 3

**Prerequisite(s):** Senior status

**Description:** Students in this course focus on the collective experience of African Americans in American history, thought, and culture from Reconstruction to the present. Students learn about the process of freedom and citizenship for African Americans through an examination of the major political, economic, and social themes of the 19th and 20th centuries. Particular attention is paid to the agency of African Americans in community-building, migration, protest, and patriotism.

**University Requirement(s):** Senior Experience

## **AES 4935 - Advanced Commercial Aircraft Systems**

**Credits:** 4

**Prerequisite(s):** AES 3000, AES 3530, AES 4040, and Junior Standing

**Description:** This course gives the air carrier first officer candidate an operational knowledge of modern air carrier aircraft systems. This includes powerplant, fuel, electrical, hydraulic, pneumatic, air conditioning, pressurization, avionics, flight controls, fire protection,

and ice and rain protection systems. It also provides instruction in normal, irregular, and emergency procedures.

## **Beverage Management**

### **BVG 1910 - Introduction to Homebrewing and Fermentation**

**Credits:** 3

**Description:** This course applies homebrewing and professional brewing principles in a laboratory and lecture setting. It is an introduction to the basic principles of fermentation with an emphasis on brewing beers at home. The selection and use of water, grains, hops, fruit, sugar, yeast, and other ingredients will illustrate how beer, wine, cider and mead are made. Class laboratory activities provide practical application of the principles of style selection, ingredient selection, malting, brewing, cooling, fermentation, aging, and packaging of beer. Similar principles for food, wine, mead and cider will apply and be discussed and experimented with. The quality of the ferment and steps needed to understand and improve fermentation will also be explained.

### **BVG 2015 - Beverage Management Principles**

**Credits:** 3

**Description:** Students in this course examine the importance of responsible beverage service in hospitality settings. Practical hands on experience focuses on how to manage the beverage option of a restaurant, hotel, bar, or event. Students investigate the requirements to equip, staff, manage, and market beverage operations. Classroom activities allow for student appraisal and evaluation of the preparation and service of beverages. Course assignments and activities provide a review of the major commercially available beverages of the world to build student awareness of the procurement and selection of quality beverages for sustainable hospitality operations.

### **BVG 2350 - Brewery Mechanics**

**Credits:** 3

**Prerequisite(s):** MTH 1210

**Description:** In this course, students identify the fundamental aspects of safe operation of a brewery. Activities include the basic principles for design and operation of equipment. Students perform basic troubleshooting and services to equipment. A cumulative course project results in student identification and selection of equipment and process of a brewery by type and style. At course completion, students implement their brewery design by brewing their beer on a pilot brewing system.

### **BVG 3010 - Beers of the World**

**Credits:** 3

**Prerequisite(s):** Students must be at least 21 years of age.

**Description:** Students in this course investigate the malting, brewing, fermentation, and aging processes as they are related to historical and

modern beer styles. Students apply an awareness of beer styles to the principles of beer and food pairing. Critical to the course is student practice of the sensory taste experience to map the aspects of beer and how the taste experience relates to beer style and the method served. Students compare the interpretation of historical beer styles to the current United States craft brewing industry.

## **BVG 3220 - Beer and Food**

**Credits:** 3

**Prerequisite(s):** Student must be 21 years of age or older on the first day of class.

**Description:** In this course, students study the proper use of professional kitchen equipment to prepare recipes that emphasize beer as the key ingredient. Kitchen and restaurant laboratory activities emphasize the techniques and principles of cooking that enhance the interaction of beer and food when prepared, served and tasted together. The student is introduced to the various cooking methods of foods and how preparation effects the interaction with beer. Students experience the planning, service, and cost analysis of beer and food pairing menus in a professional restaurant setting.

*Note:* All students must present valid ID in order to be served alcohol. Students will be conducting sensory analysis on three to five types of beer each week in order to complete assignments and projects. Students with concerns about consuming alcohol should contact the instructor for further information.

## **BVG 3250 - Sip the World: A Global Beverage Experience**

**Credits:** 3

**Description:** In this course, students analyze the connection between global beverage styles and service to their representative culture, and their impact upon individual and societal traditions. Students enhance their awareness of global beverage culture through taste and evaluation of beverage styles, tools of service, religious, and social traditions. Students further investigate the complex human, social, political, religious, economic, and geographic influences on beverage culture. In addition to service activities, students investigate the relationship of alcoholic and non-alcoholic beverages to health and safety, and the importance of responsible beverage service.

## **BVG 3350 - Brewery Operations**

**Credits:** 3

**Prerequisite(s):** BVG 2350

**Description:** In this course, students discuss the components of a business plan for a brewery startup. The brewery business plan is applied to the planning and design of brewing and retail spaces to assure the application of World-Class manufacturing principles. Students produce a beer to identify the relationship between the business plan and the scientific and technological requirements of quality manufacturing.

Students formulate plans for managing the key aspects of brewery operations, legal requirements, equipment, supplies, maintenance, and safety of a successful brewery and retail space.

## **BVG 3610 - Wines of the World: Variable Topics**

**Credits:** 1

**Description:** In this course, students examine global wine regions. Students compare and contrast major historical and cultural events that have given shape to these regions and created a strong wine culture. There is a strong emphasis on the growing and harvesting, logistics of location, as well as climate and cultural heritage of significant wine regions. Class discussion is complemented by tasting and sensory analysis of regional wines of the world.

*Note:* All students must present valid ID in order to be served alcohol. Students under the age of 21 years may taste, but not consume alcohol under the State of Colorado "Sip and Spit" law (18-13-122, C.R.S., 12-47-801 C.L.C) and comply with department consumption policies. This course may be repeated under different topics for up to 6 credits.

## **BVG 3613 - Wine Fundamentals**

**Credits:** 3

**Description:** Students in this course engage in the appreciation of the sensory aspects of wine, including aromatics, taste, and the interaction of wine with food. The course is intended for students without prior wine knowledge in order to gain appreciation for how wine contributes to formal and informal gatherings and celebrations around the world. Major topics include an introduction to grape varieties, wine styles, the growing of grapes, the wine making process, wine service, and critical appraisal of wine quality.

## **BVG 3683 - Beer and Spirits**

**Credits:** 3

**Description:** In this course, students observe hands-on exploration of brewing beer and distilling spirits in commercial facilities. Course concepts are grounded in the cultural and historical context of these beverages. Students delve into the sensory, scientific, and technical aspects of the entire production process, including malting, brewing, fermenting, finishing, conditioning, and packaging of beer. The course then extends to the principles of spirit distillation, covering the key stages of distillation and aging. Through sensory analysis of global beer and spirit styles, students will develop an understanding of quality standards and appreciation for their role in hospitality settings and social contexts.

*Note:* All students must present valid ID in order to be served alcohol. Students under the age of 21 years may taste, but not consume alcohol under the State of Colorado "Sip and Spit" law (18-13-122, C.R.S., 12-47-801 C.L.C) and comply with department consumption policies.

## **BVG 3685 - Spirits and Mixology**

**Credits:** 3

**Prerequisite(s):** Students must be 21 years of age

**Description:** Students in this course investigate the primary fermentation and distillation stages for the production of a variety of spirit styles. The process of spirit production is introduced relevant to

the historical and modern production techniques, and recognized styles. Students apply their awareness of spirit styles to the sensory evaluation of spirits to map how the aspects of the spirit ingredients, production, and aging effect the quality of the taste experience. With an improved awareness of spirit styles, students practice the mixology and service of spirit cocktails. Service practice includes the tools, techniques, and means of service for a quality guest experience.

### **BVG 3750 - Alcohol Beverage Law**

**Credits:** 3

**Description:** In this course students are introduced to the concepts and information regarding legally creating and selling alcohol in Colorado and the United States. Students will delve into the complex and ever-changing world of brewery licensing, alcohol distribution laws, city zoning, real estate contracts and proper labeling and selling of beer, spirits and wine. Furthermore, students will learn the basics of creating a corporation or company and becoming legally compliant to sell beer through both a tasting room and through off-premises accounts such as liquor stores and restaurants. This class will focus on Colorado laws, however, all 50 states will be covered so students are prepared to work around the country. Upon completion, students will be able to feel confident in avoiding pitfalls and errors commonly seen with startup breweries.

### **BVG 3810 - Sensory Quality Analysis of Beer**

**Credits:** 3

**Description:** In this course, students illustrate the biological and chemical principles that lead to aromatic, taste, and taste expressions in beer. Students practice procedures for hedonic and analytical sensory evaluation of beer. Students troubleshoot and process trace beer faults to their source in the brewing process.

*Note:* All students must present valid ID in order to be served alcohol. Students under the age of 21 years may taste, but not consume alcohol under the State of Colorado "Sip and Spit" law (18-13-122, C.R.S., 12-47-801 C.L.C) and comply with department consumption policies

### **BVG 4010 - Beer Styles and Service**

**Credits:** 3

**Prerequisite(s):** BVG 3010

**Description:** Students identify the conditions in the brewing process and its components that cause the major flavor characteristics of each individual style. Students execute an in-depth sensory analysis through open and blind tastings. A proper recognition of common beer brewing faults includes production and storage flaws, and aspects of service that enhance and detract from beer quality. Students compare draft systems and their appropriate design, operation. Beer and food pairing is described in detail.

*Note:* All students must present valid ID in order to be served alcohol. Students under the age of 21 years may taste, but not consume alcohol under the State of Colorado "Sip and Spit" law (18-13-122, C.R.S., 12-47-801 C.L.C) and comply with department consumption policies.

### **BVG 4220 - Brewing Fermentation**

**Credits:** 3

**Prerequisite(s):** BIO 2400, BVG 3810

**Description:** Students are introduced to an overview of the modern and traditional brewing fermentation processes. Laboratory activities and assignments complement course activities related to the microbiology of fermentation and brewing with yeast, bacterial and mixed cultures. Students review the process of fermenting with yeast, bacteria, and mixed cultures. In addition to the process of fermentation, students engage in the collection, storage, and handling of yeast to assure both safe handling of microorganisms and the quality and appropriateness of style of the finished beer.

### **BVG 4350 - Brewing Science and Technology**

**Credits:** 3

**Prerequisite(s):** CHE 2100

**Description:** Students structure the foundational knowledge of brewing science and technology principles based on science and engineering technology. The course activities include small and pilot batch brewing of major beer styles. Students monitor the brewing process to develop skills in brewing technology and an awareness of the connection between the art and science of brewing.

### **BVG 4633 - Wine and Food**

**Credits:** 3

**Description:** In this course students practice evaluation of wines and begin to analyze how wines interact with foods. examine specific interaction of food and wine components and how each interacts to create foundations of taste. Critical analysis of food and wine pairing includes the preparation of foods, menu and recipe development with an understanding of flavor of food and wine and how their architecture relates to the dining experience. Practical in restaurant service techniques and hands-on food production will be appraised as well as critical reviews of wine lists and food and wine pairings. A gourmet dinner service activity will provide practical application for food preparation relating wine pairing and service skills.

*Note:* All students must present valid ID in order to be served alcohol. Students under the age of 21 years may taste, but not consume alcohol under the State of Colorado "Sip and Spit" law (18-13-122, C.R.S., 12-47-801 C.L.C) and comply with department consumption policies.

### **BVG 4810 - Brewing Quality Analysis**

**Credits:** 3

**Prerequisite(s):** BVG 4350

**Prerequisite(s) or Corequisite(s):** BVG 4220

**Description:** This course addresses the science of beer quality. The various impacts on the perception of beer quality from raw ingredient selection, handling, processing, packaging, and service of beer are reviewed through detailed class lecture and laboratory experience. The biochemical and hedonistic evaluation of beer quality at all stages of production and service are practiced in laboratory and

service settings in order to manage quality attributes of beer and how they can be delivered to the consumer. The course is vital to brewing production managers who aim to account for the science of beer appearance, flavor, stability and wholesomeness.

## **BVG 4850 - Applied Brewing Operations**

**Credits:** 3

**Prerequisite(s):** BVG 4220, BVG 3950, AAC 3120, HLDR 3200, BVG 4910, BVG 3350

**Description:** This course is an application of both theoretical and practical product development skills in the brewing industry. Students synthesize their knowledge by completing a critical analysis of the operational, promotional, technical, talent management, and sensory aspects of commercial beer production. The principal outcome of the course is a written and oral presentation of a product plan, and a finished beer. Students direct their peers and are evaluated in the large batch production of a beer inclusive of the skillset gained in prior coursework to include the financial, promotional, and operational, and managerial requirements of beer production. Students publicly propose and promote their beer product to demonstrate their mastery the comprehensive aspects of planning and producing a beer for the marketplace.

**University Requirement(s):** Senior Experience

## **BVG 4950 - Enology: The Making of Wine**

**Credits:** 3

**Prerequisite(s):** HTE 3613 or BVG 3613 or Approval of Instructor

**Description:** In this course, students will study winemaking principles, including, harvest, crushing, pressing, wine microorganisms, fermentation, and operations. Topics include wine making in both traditional and nontraditional methods, cap management, yeast and malolactic inoculation, wine microbes, barrel aging, racking, filtration and bottling. Coursework integrates lecture, field visits to vineyards and wineries, and hands-on winemaking.

*Note:* All students must present valid ID in order to be served alcohol. Students under the age of 21 years may taste, but not consume alcohol under the State of Colorado "Sip and Spit" law (18-13-122, C.R.S., 12-47-801 C.L.C) and comply with department consumption policies.

## **Biology**

### **BIO 398A - Internship in Medicine**

**Credits:** 1-12

**Prerequisite(s):** Major in biology; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with The Internship Center.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

### **BIO 1000 - Human Biology for Non-Majors**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading, writing, and mathematics preassessment placement tests

**Description:** This one-semester course familiarizes the student with the principles of the living world, the basic form and function of the human body, and how these two relate to each other. Basic variations of life forms, and the interrelationships of the human body to the surrounding world are the main thrusts of the course.

*Note:* This course does not apply toward a biology major or minor.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC2

### **BIO 1030 - General Biology for Non-Majors**

**Credits:** 4

**Description:** This one-semester course familiarizes the student with the principles of the living world at all levels ranging from molecules to ecosystems. Basic similarities and differences in cellular mechanisms, organismal organization, and ecological processes are identified, with focus placed on the evolutionary principles that interconnect all forms of life including humans.

*Note:* This course does not apply toward a biology major or minor.

**General Studies:** Natural and Physical Sciences

### **BIO 1080 - General Biology I**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading, writing and mathematics preassessment placement tests

**Corequisite(s):** BIO 1090

**Description:** This introductory course serves as the foundation for all other biology courses. Emphasis is placed on cellular and molecular biology, biochemical pathways, and genetics.

*Note:* Credit will be granted for only one prefix: BIO or HON.

**General Studies:** Natural and Physical Sciences

**Cross Listed Course(s):** HON 1080

### **BIO 1081 - General Biology II**

**Credits:** 3

**Prerequisite(s):** BIO 1080 and BIO 1090; or permission of instructor

**Corequisite(s):** BIO 1091

**Description:** This course is a continuation of General Biology I (BIO 1080). Coursework emphasis is placed on evolution, ecology, and the classification, diversity, and structure of plants and animals.

**General Studies:** Natural and Physical Sciences

### **BIO 1090 - General Biology Laboratory I**

**Credits:** 1

**Prerequisite(s):** Minimum performance standard scores on reading, writing and mathematics preassessment placement tests

**Corequisite(s):** BIO 1080

**Description:** This mandatory laboratory accompanies BIO 1080. This course introduces biology laboratory techniques, specifically exploring the scientific method.

*Note:* Credit will be granted for only one prefix: BIO or HON. The Biology Department requires students who do not attend the first week of scheduled laboratory sessions to drop that course. Those students who do not drop the course will not be permitted to attend labs the rest of the semester, will receive an F in the course, and will be responsible for all tuition and fees incurred.

**General Studies:** Natural and Physical Sciences

**Cross Listed Course(s):** HON 1090

## BIO 1091 - General Biology Laboratory II

**Credits:** 1

**Prerequisite(s):** BIO 1080 and BIO 1090; or permission of instructor

**Corequisite(s):** BIO 1081

**Description:** This mandatory laboratory accompanies BIO 1081.

This course will explore and reinforce concepts introduced in BIO 1081 through laboratory and field exercises in ecology, evolution and diversity.

*Note:* The Biology Department requires students who do not attend the first week of scheduled laboratory sessions to drop that course. Those students who do not drop the course will not be permitted to attend labs the rest of the semester, will receive an F in the course, and will be responsible for all tuition and fees incurred.

**General Studies:** Natural and Physical Sciences

## BIO 2000 - Introductory Microbiology for Nursing

**Credits:** 4

**Prerequisite(s):** BIO 1080 and BIO 1090 and one semester of chemistry (CHE 1800 or CHE 1100) or permission of instructor

**Description:** This course is a non-majors introductory microbiology course specifically for pre-nursing. It will not count toward a biology major or minor. This course emphasizes the interplay between microorganisms and humans including infectious diseases and the immune system and has an emphasis on the control of microbial growth, spread of microorganisms, and their ability to cause disease and circumvent the immune system and antimicrobials. The course is accompanied by a laboratory that introduces the ubiquity and diversity of microbes, basic microscopy, identification of microbes, physical and chemical control of microorganisms to enable nursing to learn how to avoid the spread of microorganisms in clinical settings.

*Note:* The Biology Department requires students who do not attend the first week of scheduled laboratory sessions to drop that course. Those students who do not drop the course will not be permitted to attend labs the rest of the semester, will receive an F in the course, and will be responsible for all tuition and fees incurred.

## BIO 2100 - General Botany

**Credits:** 5

**Prerequisite(s):** BIO 1080 and BIO 1090, BIO 1081 and BIO 1091, or Permission of instructor

**Description:** This is a one-semester introductory survey of photosynthetic life with emphasis on key events in the evolution and diversification of cyanobacteria, algae, and land plants, evolutionary relationships among major taxa, the chemistry of photosynthetic processes, and an introduction to the life cycles, anatomy, and morphology in major groups of cyanobacteria and photosynthetic eukaryotes.

*Note:* The Biology Department requires students who do not attend the first week of scheduled laboratory sessions to drop that course. Those students who do not drop the course will not be permitted to attend labs the rest of the semester, will receive an F in the course, and will be responsible for all tuition and fees incurred.

## BIO 2310 - Human Anatomy and Physiology I

**Credits:** 4

**Prerequisite(s):** BIO 1080 and BIO 1090 or Permission of instructor

**Description:** This is the first of two courses addressing the structure and function of the human body. Topics include tissues, and the anatomy and physiology of the musculoskeletal, nervous, and sensory systems.

## BIO 2320 - Human Anatomy and Physiology II

**Credits:** 4

**Prerequisite(s):** BIO 2310 or Permission of instructor

**Description:** This is the second of two courses addressing the structure and function of the human body. Topics include endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive systems.

## BIO 2400 - General Microbiology

**Credits:** 5

**Prerequisite(s):** BIO 1080 and BIO 1090, BIO 1081 and BIO 1091, one semester of college chemistry, or Permission of instructor

**Description:** This course is an introduction to the microbial sciences, including the various members of the microbial world and their metabolic, genetic, clinical, and ecological mechanisms.

*Note:* The Biology Department requires students who do not attend the first week of scheduled laboratory sessions to drop that course. Those students who do not drop the course will not be permitted to attend labs the rest of the semester, will receive an F in the course, and will be responsible for all tuition and fees incurred.

## BIO 3000 - Advances in Biology

**Credits:** 3

**Prerequisite(s):** BIO 1080 and BIO 1090 and CHE 1800 or Permission of instructor

**Description:** The course examines the impact of modern science and technology on the future development of biological science. Topics include space and diving physiology, the impact of the information

revolution (computers and the Internet), the science of exobiology, new techniques to study biology, directions in modern medicine, and nanotechnology.

## BIO 3020 - Laboratory Techniques

**Credits:** 2

**Prerequisite(s):** BIO 1080, BIO 1081, BIO 1090, BIO 1091 or permission of instructor

**Prerequisite(s) or Corequisite(s):** CHE 1800

**Description:** This laboratory course provides experience performing laboratory techniques in molecular biology. Topics include a review of basic laboratory skills, preparation of buffers, use of instrumentation and advanced techniques such as cell fractionation, electrophoresis, and PCR.

## BIO 3050 - Cell Biology

**Credits:** 4

**Prerequisite(s):** CHE 1810 or CHE 2100, and BIO 3600 or BIO 3610; or CHE 3090 or CHE 3110, and CHE 4310 (Students may also opt to complete CHE 4310 as a co-requisite)

**Description:** This course is an intensive study of the eukaryotic cell, cellular structure, and organization. Emphasis is placed on the molecular mechanisms underlying cell functions, including intracellular transport and transport across membranes, cytoskeletal proteins and cellular motility, metabolic pathways and energy production, photosynthesis, cell cycle and cellular growth, cell signaling pathways, and stem cells.

## BIO 3120 - Economic Botany

**Credits:** 4

**Prerequisite(s):** BIO 2100; or permission of instructor

**Description:** This course investigates the diversity of plants and their relationships with man as food, fibers, chemicals, and medicines. Consideration will be given to plants useful or harmful to humans: their origins and history; botanical relationships; economically important chemical constituents; and their roles in prehistoric and modern cultures and civilizations.

## BIO 3140 - Plant Physiology

**Credits:** 5

**Prerequisite(s):** BIO 2100 or Permission of instructor

**Description:** This course is a comprehensive survey of the internal chemical changes within plants and how these changes control growth and development. Discussions include water relations, transpiration, food transport, ion uptake, photosynthesis, respiration, plant movements, flowering, dormancy, and senescence.

## BIO 3160 - Plant Anatomy and Morphology

**Credits:** 4

**Prerequisite(s):** BIO 2100 or Permission of instructor

**Description:** This course is a survey of cell types, tissue systems, and

the anatomical structure of stems, roots, and leaves of vascular plants. The development and evolutionary history of vascular plants will be discussed.

## BIO 3170 - Paleobotany

**Credits:** 4

**Prerequisite(s):** BIO 2100

**Description:** This course examines the history of plant form and function as shown in the fossil record. The investigation of evolutionary relationships of modern plant groups unifies the course. Students consider the process of fossilization and techniques of reconstructing whole plants from fragmentary remains. A synthesis of biological and geological perspectives provides insights into the paleoecological relationships of the ancient communities in which these organisms lived. An introduction to the use of plant fossils in biostratigraphy and their roles in coal, oil and gas formation are considered. Class sessions include demonstrations, as well as frequent hands-on interaction with fossil plant specimens.

## BIO 3180 - Vascular Plant Taxonomy

**Credits:** 4

**Prerequisite(s):** BIO 2100 or Permission of instructor

**Description:** This course is a survey of vascular plant identification and taxonomic classification with an emphasis on Colorado flora. Lecture content includes plant terminology, systematics methods, phylogenetic relationships and characteristics of major vascular plant families. Laboratories cover plant identification using keys in the field and on herbarium specimens, basic systematics methods, and standard herbarium practices. Students are required to prepare an herbarium collection of Colorado vascular plant specimens collected in the field.

## BIO 3190 - Mammalian Paleontology

**Credits:** 3

**Prerequisite(s):** ANT 1010 or (BIO 1081 and BIO 1091)

**Description:** This course is an overview of the mammalian fossil record. The course begins with an overview of major components of paleontology, including evolutionary biology, taxonomy and systematics, taphonomy, and geologic time. Students then learn about modern mammalian groups and mammalian anatomy before taking a detailed look into current fossil evidence for the evolution of major mammalian groups.

*Note:* Credit will be granted for only one prefix

**Cross Listed Course(s):** ANT 3190

## BIO 3200 - Invertebrate Zoology

**Credits:** 4

**Prerequisite(s):** BIO 1080 and BIO 1090, BIO 1081 and BIO 1091, or Permission of instructor

**Description:** In this course, students examine the phylogeny, structure, function, development, and conservation of invertebrate animals in classroom, laboratory and field settings. Topics range

from the molecular to the ecological level with an emphasis on diversity, evolutionary changes, and adaptation to the environment.

### **BIO 3210 - Histology**

**Credits:** 4

**Prerequisite(s):** BIO 1080 and BIO 1090, and BIO 1081 and BIO 1091, or BIO 2310, or BIO 2320, or Permission of instructor

**Description:** A comprehensive study of the microscopic structure and appearance of body tissues and of the tissue composition of body organs, mainly as seen in mammals. Emphasis is placed on the laboratory. Correlations are drawn between structure and function. Laboratory drawings and digital images are required.

### **BIO 3220 - Comparative Vertebrate Anatomy**

**Credits:** 5

**Prerequisite(s):** BIO 1080 and BIO 1090, BIO 1081 and BIO 1091, or Permission of instructor

**Description:** A comprehensive study is made of the evolution of structure and function of vertebrates. The laboratory portion of the course is emphasized and will consist of detailed dissections of vertebrates representing several classes.

### **BIO 3230 - Principles of Human Anatomy and Physiology for Secondary Education**

**Credits:** 5

**Prerequisite(s):** BIO 1080/BIO 1090 or Permission of instructor

**Description:** This course addresses the structure and function of the human body. Topics include homeostasis, tissues, the musculoskeletal system, neurophysiology, endocrinology, circulation, and respiratory, digestive, urinary, and reproductive systems. Course content and class level are designed only for students who are biology majors seeking licensure in secondary science education.

*Note:* This course will not count for biology credit for any other biology majors and will not substitute for BIO 2310 and BIO 2320.

### **BIO 3240 - Animal Behavior**

**Credits:** 4

**Prerequisite(s):** BIO 1080, BIO 1081, BIO 1090, and BIO 1091

**Description:** This course serves as an in-depth and current account of the interdisciplinary science of Animal Behavior. Beginning with a review of both historical and modern approaches, behavioral psychology and behavioral ecology will be comprehensively examined with an emphasis on evolution. The accompanying laboratory will highlight scientific methodology by incorporating both descriptive and experimental studies of Animal Behavior in laboratory and field settings.

### **BIO 3260 - Vertebrate Zoology**

**Credits:** 4

**Prerequisite(s):** BIO 1080 and BIO 1090, BIO 1081 and BIO 1091

or Permission of instructor

**Description:** This course examines the origin, evolution, classification, morphology and adaptation of the vertebrates.

### **BIO 3280 - Field Ornithology**

**Credits:** 2

**Prerequisite(s):** BIO 1080, BIO 1090, BIO 1081, BIO 1091, and permission of instructor

**Description:** This is a comprehensive course on the field aspects of ornithology. Students will learn proper identification techniques and methods for conducting independent research in the area of avian behavior, conservation and ecology.

### **BIO 3320 - Advanced Human Physiology**

**Credits:** 4

**Prerequisite(s):** BIO 1080 and BIO 1090, BIO 2310, BIO 2320, one year of chemistry

**Description:** This in-depth physiology course covers the function of the human body as it relates to homeostasis. This course emphasizes membrane transport, fluid compartments, acid-base balance, cardiovascular and respiratory physiology, and neurotransmission.

### **BIO 3330 - Advanced Human Cadaver Anatomy**

**Credits:** 5

**Prerequisite(s):** BIO 1080, BIO 1090, BIO 2310, and upper-division standing

**Prerequisite(s) or Corequisite(s):** BIO 2320

**Description:** This course presents human gross anatomy from a regional perspective, utilizing cadaver dissection and clinical application as a foundation for anatomical understanding. Designed for biology majors entering professional and graduate programs.

### **BIO 3340 - Endocrinology**

**Credits:** 3

**Prerequisite(s):** BIO 1080 and BIO 1090, and two additional semesters of biology; CHE 3100 recommended; or Permission of instructor.

**Description:** This course is a survey of the major human endocrine organs and their hormones. Topics include normal anatomy and physiology of each gland, cellular mechanisms of hormone action, and endocrinopathies.

### **BIO 3350 - Immunology**

**Credits:** 3

**Prerequisite(s):** BIO 1080 and BIO 1090, BIO 2400, BIO 3600 or BIO 3610, and junior or senior standing, or permission of instructor

**Description:** This course will familiarize students with the complexity of the immune system. The goals of the course encompass understanding the importance of the immune system, its components, the responsibilities of each of the components, how the immune response combats different kinds of infectious agents



including bacteria, fungi, parasites, and viruses, what happens to cause autoimmunity, what happens during allergic reactions, and how the immune system is responsible for transplant rejection.

### **BIO 3351 - Immunology Laboratory**

**Credits:** 1

**Corequisite(s):** BIO 3350

**Description:** This is an optional laboratory course that introduces students to the theories and skills of standard procedures used in an immunology laboratory. Students perform various immunological techniques, including leukocyte enumeration, agglutination, and precipitation assays. Students also utilize a variety of techniques to purify, quantify, and visualize antibody from serum.

### **BIO 3360 - Animal Physiology**

**Credits:** 4

**Prerequisite(s):** BIO 3200 or BIO 3260 and CHE 1810, or Permission of instructor

**Description:** This is a lecture course for science majors on the physiological processes common to most animals and on the physiological adaptations and acclimation to environmental challenges- especially with respect to temperature, moisture, and oxygen availability.

### **BIO 3400 - Microbial Physiology**

**Credits:** 4

**Prerequisite(s):** BIO 2400 or equivalent or Permission of instructor

**Prerequisite(s) or Corequisite(s):** CHE 3100 or equivalent or permission of instructor

**Description:** A detailed study of the organization and structure of bacterial cells is presented. An emphasis is placed on biosynthesis, polymerization, and assembly of bacteria.

### **BIO 3410 - Symbiosis and the Environment**

**Credits:** 3

**Prerequisite(s):** BIO 2400 and One Year of College Chemistry; or permission of instructor

**Description:** This course provides an overview of the diversity of mutualistic symbioses and their critical roles in the natural environment, including coral reef, hydrothermal vent, cellulose degrading, mycorrhizal ecosystems. This course takes an integrative approach, spanning ecosystems to molecules, to study these associations.

### **BIO 3471 - Biology of Women**

**Credits:** 3

**Prerequisite(s):** BIO 1000 or GWS 1001 or Permission of instructor

**Description:** An examination of the anatomy and physiology of sex in humans, the mechanisms involved in formation of sex and gender, and the interactions between science, society, and medical practice with regard to issues of sex and gender.

*Note:* Credit will be granted for only one prefix: BIO or GWS

**Cross Listed Course(s):** GWS 3470

### **BIO 3511 - Anatomy and Physiology of Speech and Hearing**

**Credits:** 3

**Prerequisite(s):** BIO 1080 and BIO 1090 or permission of instructor

**Prerequisite(s) or Corequisite(s):** SLHS 2530 or permission of instructor

**Description:** Students in this course will gain a foundational understanding in the structural and functional organization of the systems that support speech and hearing. The mechanisms of swallowing are also reviewed. Students explore how anatomical and physiological changes may impact sound perception and production.

*Note:* Credit will be granted for only one prefix: SLHS or BIO.

Students must achieve a C or better to count towards an SLHS degree or certificate. Other programs may have different minimum grade requirements.

**Cross Listed Course(s):** SLHS 3530

### **BIO 3520 - General Ecology**

**Credits:** 3

**Prerequisite(s):** BIO 1080 and BIO 1090, BIO 1081 and BIO 1091, and College Algebra (MTH 1109, MTH 1110, MTH 1111, MTH1112 or MTH 1115), or permission of the instructor.

**Description:** This lecture course examines the interrelationships between organisms and their environments. Subject matter includes organism, population, community, and ecosystem levels of study and application to current environmental issues. The emphasis is on the underlying principles of ecology that affect all types of organisms.

### **BIO 3530 - Physiology of Aging**

**Credits:** 3

**Prerequisite(s):** BIO 2310 and BIO 2320

**Description:** This course views aging from biological perspectives, explores theories of aging, and examines individual and cultural variations in the aging process. These themes form a backdrop to a detailed study of age-related structural and functional changes in the bodily systems, as well as the common diseases associated with each system. Successful aging will be emphasized through an examination of the modifiable risk factors for senescence and age-associated diseases.

**Cross Listed Course(s):** ITP 3700

### **BIO 3600 - General Genetics**

**Credits:** 4

**Prerequisite(s):** BIO 1080 and BIO 1090, BIO 1081 and BIO 1091, College Algebra (MTH 1109, MTH 1110, MTH 1111, MTH 1112, or MTH 1115), CHE 1100 or CHE 1800, and one additional semester of biology required, or permission of instructor.

**Description:** A study is made of classical genetics, with emphasis on numerical analysis of inheritance. The molecular biology of

replication, transcription, and translation is presented. Genetic variation and human genetic diseases are discussed.

*Note:* Students cannot take both BIO 3600 and BIO 3610 for credit.

## BIO 3610 - Genetics: Principles and Analysis

**Credits:** 4

**Prerequisite(s):** BIO 1080 and BIO 1090, BIO 1081 and BIO 1091, CHE 1100 or CHE 1800, and one additional semester of biology required or permission of instructor.

**Description:** This course includes lectures and laboratories. The lecture portion covers classical genetics, with emphasis on numerical analysis of inheritance, and molecular genetics of replication, transcription, translation, and regulation. The laboratory portion allows hands-on work that illustrates principles presented in the lecture and provides an opportunity for the presentation of scientific results and theories.

*Note:* Students cannot take both BIO 3600 and BIO 3610 for credit.

## BIO 3980 - Internship in Biology

**Credits:** 1-4

**Prerequisite(s):** Department approval required for registration

**Description:** Students engage in an on- or off-campus internship experience that applies biological principles to practical experiences in professional settings, e.g., laboratory, clinical, museum, fieldwork, etc. Internships provide practical, hands-on experience in science and are supervised by a Biology Department faculty member. Internship placements must be established prior to enrollment in this course in consultation with the supervising faculty member and the university internship program.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* A maximum of 4 credits of teaching assistant/independent study/internships/practicum/undergraduate research may be applied toward a major or minor in Biology.

## BIO 3990 - Teaching Assistant in Biology

**Credits:** 1-4

**Prerequisite(s):** Department approval required for registration.

**Description:** Teaching assistants participate in classroom/laboratory activities to support student learning in a Biology course under the direct supervision of an instructor. Students may only register as a teaching assistant in Biology after satisfactory completion of the course for which they apply and they must meet with a specific professor who teaches that course. A maximum of 4 credits of teaching assistant/independent study/internships/practicum/undergraduate research may be applied toward a major or minor in Biology.

## BIO 4000 - Biology Field Experience: Variable Topics

**Credits:** 3

**Prerequisite(s):** BIO 1081 and BIO 1091; or Permission of instructor

**Description:** This course is designed to give hands-on experience in a variety of field environments with 30 hours of predeparture lectures and 30 hours of field work in a regional, national, or international setting.

*Note:* This course may be repeated for credit under different topics with permission of the department.

## BIO 4050 - Advanced Cell and Molecular Biology

**Credits:** 3

**Prerequisite(s):** BIO 3050 or CHE 4310 or permission of instructor, senior standing

**Description:** This course provides an in-depth analysis of selected topics from cell and molecular biology, including cell signaling, regulation of the cell cycle, and control of protein expression and function through cytosolic mechanisms, change in gene expression, or epigenetic change. The field of translational research, as it applies to basic research and clinical practice, will be emphasized.

## BIO 4060 - Cellular and Molecular Biology Laboratory

**Credits:** 2

**Prerequisite(s) or Corequisite(s):** BIO 3050; or permission of instructor

**Description:** This laboratory is designed to give students experience and exposure to modern cell biology laboratory techniques. Topics include cell structure, function, recombinant DNA, and molecular cloning.

## BIO 4070 - Biology of Cancer

**Credits:** 3

**Prerequisite(s):** BIO 3600 or BIO 3610, and BIO 3050 or permission of instructor

**Description:** This course examines the cellular and molecular bases of cancer, and relates the biological basis of cancer to its clinical manifestations and treatments. The cellular and molecular processes involved in the initiation, promotion, and progression of cancer are examined in detail.

## BIO 4200 - General Mycology

**Credits:** 3

**Prerequisite(s):** BIO2400, and BIO3600 or BIO3610, or permission of instructor

**Description:** This course is a general study of the fungi including fungal structure and life cycles, nomenclature, and current classification. Emphasis is on the biodiversity of the fungi and their ecological importance, as well as the parasitic and mutualistic/symbiotic interactions of the fungi with other organisms including plants, animals, microbes, and other fungi.

## BIO 4210 - Principles of Wildlife Biology and Management

**Credits:** 3

**Prerequisite(s):** BIO 1081, BIO 1091, and permission of instructor

**Prerequisite(s) or Corequisite(s):** BIO 3520

**Description:** In this lecture and field course, students explore the relationship between wildlife and their habitats, the impact of human activity on wildlife, and how government agencies manage these impacts. Students participate in pre-departure lectures and field work, including interaction with field experts, observations of wildlife, and application of techniques to monitor management practices. Field work requires hiking, camping, and/or travel.

*Note:* This course requires additional fees that are paid to the University for housing, board, local naturalist, and ground transportation. Please see instructor for information.

## BIO 4230 - Issues in Conservation Biology

**Credits:** 3

**Prerequisite(s):** BIO 1080, BIO 1090, senior standing

**Description:** Students will explore issues in the subject of conservation biology. This is an integrative subject that applies the fields of ecology, evolution, biogeography, population genetics, economics, sociology, anthropology, philosophy and other disciplines to address the global problem of declining biodiversity of species and ecosystems. Two field trips during the scheduled course time will highlight conservation issues on a local level.

**University Requirement(s):** Senior Experience

## BIO 4250 - Entomology

**Credits:** 4

**Prerequisite(s):** BIO 3520; or permission of instructor

**Description:** This course is an intensive introduction to insect diversity, basic biology, ecology and importance to people in economic, forensic and medical/veterinary arenas. Special emphasis is placed on insects living in the Colorado Front Range, including urban, prairie and montane environments.

## BIO 4271 - Parasitology

**Credits:** 4

**Prerequisite(s):** BIO 1080 and BIO 1090, BIO 1081 and BIO1091, BIO 3200, and at least senior standing

**Description:** This course is an overview of the most important groups of eukaryotic parasites in human and veterinary medicine. It emphasizes concepts ranging from parasite diversity to how the fundamental aspects of parasitism such as complex life cycles and transmission pathways affect the evolutionary biology, ecology, behavior, and clinical response of host organisms.

*Note:* The Biology Department requires students who do not attend the first week of scheduled laboratory sessions to drop that course. Those students who do not drop the course will not be permitted to attend labs the rest of the semester, will receive an F in the course,

and will be responsible for all tuition and fees incurred.

**University Requirement(s):** Senior Experience

## BIO 4280 - Ornithology

**Credits:** 4

**Prerequisite(s):** BIO 1080 and BIO 1090, BIO 1081 and BIO 1091, and eight hours of additional biology courses, or permission of instructor

**Description:** This course is designed so that the student will achieve a general understanding of birds and how they function. This objective requires a synthesis of several fields of zoology (ecology, anatomy, physiology, behavior, evolution, and systematics) as they apply to birds. The laboratory portion of the course will emphasize anatomy, physiology and field techniques for identifying birds of Denver, Colorado.

**Field Trips:** Required field trips may include one weekend trip.

## BIO 4290 - Mammalogy

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** BIO 3260 or permission of instructor

**Description:** This course is a survey of taxonomic, physiological, and anatomic characteristics of modern orders of mammals. Illustrative environmental adaptations and major evolutionary trends will be discussed. The laboratory will include study-skin preparation and identification of representative mammalian species.

## BIO 4300 - Neurobiology

**Credits:** 3

**Prerequisite(s):** BIO 2310, or permission of instructor, and senior standing

**Description:** This course covers the organization and function of the nervous system. Emphasis is placed on physiological mechanisms of cells and tissues and how these mechanisms give rise to perception and behavior in vertebrates and invertebrates.

**University Requirement(s):** Senior Experience

## BIO 4350 - Clinical Immunology

**Credits:** 3

**Prerequisite(s):** BIO 3350 or permission of instructor

**Description:** This course is an advanced study of the immune response as it relates to clinical disease and immune-based therapies. Content focuses on immunological aspects of infection, hypersensitivity, leukemia, and the various mechanisms by which immunodeficiency and autoimmunity can arise. Immunological strategies for therapeutics will also be explored.

## BIO 4440 - Virology

**Credits:** 3

**Prerequisite(s):** BIO 2400, BIO 3600 or BIO 3610, or permission of instructor

**Description:** This course is a survey of the interactions of viruses and their hosts. The emphasis is on bacterial and animal host forms.

### **BIO 4450 - Pathogenic Microbiology**

**Credits:** 5

**Prerequisite(s):** BIO 2400, BIO 3600 or BIO 3610, or permission of instructor

**Description:** This course is a comprehensive study of human bacterial pathogens. The emphasis is on etiology, pathogenesis, and epidemiology of human diseases. Laboratory studies involve isolation and identification.

### **BIO 4470 - Microbial Genetics**

**Credits:** 4

**Prerequisite(s):** BIO 2400, BIO 3600 or BIO 3610, or permission of instructor

**Description:** This course is a study of current information on the mechanisms of microbial inheritance and expression of genetic information; intended to develop perspectives relative to the evolution of the field, applications to higher organisms, and directions in current research.

### **BIO 4510 - Microbial Ecology**

**Credits:** 4

**Prerequisite(s):** BIO 2400, BIO 3520, and one upper-division microbiology and/or molecular biology course; or permission of instructor; completion of General Studies requirements; and senior standing.

**Description:** This course is a detailed study of microbial ecology, emphasizing population interactions, quantitative ecology, habitat ecology, and biochemical cycling. Discussion of biotechnological aspects of microbial ecology is included.

**University Requirement(s):** Senior Experience

### **BIO 4540 - Plant Ecology**

**Credits:** 4

**Prerequisite(s):** BIO 2100 and BIO 3520, or permission of instructor; senior standing; and completion of General Studies requirements

**Description:** This course proceeds from a study of concepts (matter and energy, food webs, nutrient cycles, succession) to a discussion of populations, communities, and biomes, emphasizing the interrelationships and interdependence of living things with each other and with their nonliving environment.

**University Requirement(s):** Senior Experience

### **BIO 4550 - Animal Ecology**

**Credits:** 4

**Prerequisite(s):** BIO 3200 or BIO 3260, BIO 3520, and one additional upper division biology course, or permission of instructor; senior standing; and completion of General Studies requirements

**Description:** In this course, a detailed consideration is made of population dynamics, intra- and interspecific interactions, niche segregation, species diversity, specialization and distributional patterns.

**Field Trips:** Field Trips are required

**University Requirement(s):** Senior Experience

### **BIO 4560 - Field Methods in Plant Ecology**

**Credits:** 3

**Prerequisite(s):** BIO 2100

**Description:** This is an intensive course that covers plant sampling techniques and field methods essential to biological community surveys. Content includes basic ecological principles, plant classification and identification, vegetation sampling methods, statistical data analysis, and report writing and presentation.

### **BIO 4820 - Developmental Biology**

**Credits:** 4

**Prerequisite(s):** BIO 3600 or BIO 3610 or permission of instructor, senior standing

**Description:** This course is a study of animal development and embryogenesis in both vertebrate and invertebrate model systems. Emphasis is placed upon the cellular, molecular, and genetic mechanisms underlying differentiation, morphogenesis, and developmental pattern formation. The laboratory includes study of living embryos and larva. Laboratory drawings are required.

**University Requirement(s):** Senior Experience

### **BIO 4850 - Evolution**

**Credits:** 3

**Prerequisite(s):** BIO 3600 or BIO 3610, or permission of instructor, satisfaction of all General Studies course requirements, senior standing

**Description:** This course will develop an awareness and understanding of organismic evolution as the foundation of biological thought. The major features of evolution-variation, natural selection, adaptation and specialization-and their significance to the origin and evolution of major plant and animal groups are investigated. A research paper and an oral presentation will be required.

**University Requirement(s):** Senior Experience

### **BIO 4950 - Undergraduate Research in Biology**

**Credits:** 1-2

**Prerequisite(s):** BIO 3600 or 3610 and permission of instructor

**Description:** Students will engage in a research project that involves the application of scientific methodology to biological problems. Experience will be gained in literature searches, generating hypotheses, data collection, data handling, data analyses, and presentation of results. Course may be repeated. A maximum of 4 credits of independent study/internships/practicum/undergraduate research may be applied toward a major or minor in Biology.

## Business

### BUS 1500 - Introduction to Career Management

**Credits:** 1

**Description:** The purpose of this course is to help students explore business career opportunities, match job requirements to personal skills and abilities, develop a plan for professional growth, and introduce students to the job search process. Students will gain an understanding of the value and the process of building a professional network.

### BUS 1850 - Introduction to Business

**Credits:** 3

**Description:** This course presents an introduction to business concepts that are further developed in the business core and in other courses pursued by business and economics majors. Also discussed are contemporary issues facing business. This course allows business students to develop a context for their studies and gives non-business students insights into the world of business. Transfer students that transfer in 6 or more credits of business courses may seek advisor approval to substitute BUS 1850 with another College of Business 3-credit hour course that does not appear in their Major or Business Core requirements.

### BUS 1950 - Business Communication

**Credits:** 3

**Prerequisite(s):** COMM 1010 or COMM 1100

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** This marketing course explores multiple forms of communication within a business environment. Emphasis is placed on writing, listening, speaking, nonverbal and interpersonal communication with internal and external business audiences. Students apply the principles learned to written exercises and oral presentations.

### BUS 1980 - Freshman Internship in Business

**Credits:** 1-6

**Description:** Internships provide practical, hands-on experience in a professional field related to business. Students will gain substantial work experience in a professional business environment where they will examine the role and importance of the different business disciplines in a real-world environment.

### BUS 2250 - Personal Money Management

**Credits:** 3

**Description:** This survey course is oriented to the identification and solution of personal financial problems. The subject matter ranges from the determination of one's financial condition to estate planning, including controlling credit usage, making major purchase decisions, buying insurance, making investments, and planning retirement.

## BUS 3010 - Global Business Experience

**Credits:** 3

**Prerequisite(s):** ENG 1020, sophomore standing or higher and instructor approval

**Description:** This travel-based course focuses on the challenges and opportunities associated with entrepreneurship and various business strategies in the international business environment, including geography, culture, and economy of the country. Students first research an overview of the process and effects of internationalization in the current business environment, then travel to the country to meet with government and non-government agencies, local businesses, and international businesses, as well as experience aspects of local culture. Students integrate knowledge to identify the conceptual framework of global business issues and apply knowledge to business situations in a foreign country.

**General Studies:** Social and Behavioral Sciences, Global Diversity

### BUS 3040 - Global Corporate Social Responsibility and Sustainability

**Credits:** 3

**Prerequisite(s):** At least 60 semester hours earned

**Description:** This course offers a global perspective of responsibility for conducting sustainable business. The over-arching theme is the integration of planet, people, and profits. Values and cultural differences among corporate entities, countries, and societies are explored within the context of stakeholder analyses. Leadership characteristics within successful companies are examined. Examples and case analyses provide means to explore social, cultural, and human aspects of doing business worldwide.

### BUS 3980 - Internship in Business Administration

**Credits:** 1-15

**Prerequisite(s):** Major in Business Administration; junior standing; 2.5 cumulative GPA; permission of instructor

**Description:** Internships provide practical, hands-on experience in a professional field related to business. The internship must be based on work that is new to the student and supervised by a business professional. Internship placements must be approved through the internship credit approval process. Once enrolled, internship coursework is supervised by a faculty member. Students will complete academic work that encourages reflection regarding the approved learning objectives for the internship.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable credit based on hours of work; 50 hours of work = 1 credit. Up to 6 credits may be applied as Business Administration major electives. Credits earned above 6 and up to 15 will count as general electives.

### BUS 4500 - Career Planning

**Credits:** 1

**Prerequisite(s):** Junior or senior standing

**Description:** This course provides the opportunity for students to analyze and evaluate the information needed, processes involved, and the skills required for career planning. Processes of industry research, self-assessment, occupational exploration, and preparation for employment are critiqued, designed, and implemented. In addition to traditional classroom activities, content is presented in an experiential manner through observation, role-play, simulations, individual projects, and contact with resource experts.

## Career and Personal Development

### CPD 1300 - Transformations: Student Success

**Credits:** 3

**Description:** This course focuses on the tangible student skills and strategies that lead to self-efficacy and self-advocacy, the development of student-focused habits of mind and a growth mindset, and the achievement of college completion goals. The course helps students learn to navigate societal systems including higher education. Course topics and a required on-campus service learning placement will help students to identify the means and ways of integration into the campus community that promote a sense of belonging and facilitate exploration of major courses of study and career paths.

*Note:* Some sections of this course may be taught as Service Learning.

### CPD 1901 - Interdisciplinarity and the Individualized Degree

**Credits:** 1

**Prerequisite(s):** IDP Undeclared Major or Minor or by permission of department. Sophomore standing or higher.

**Description:** This course serves as a gateway to the Individualized Degree Program (IDP) major or minor. Its purpose is to introduce students to the concepts of interdisciplinarity and multidisciplinary studies so they can develop the skills necessary to create a successful IDP proposal. Students will complete assignments that will guide them through the process of planning their educational, personal, and career goals, identifying coursework needed to achieve these goals, and synthesizing and reflecting upon their learning.

### CPD 2300 - Time Management

**Credits:** 1

**Description:** Learning to manage time efficiently is a necessary skill for successful students, educators, and professionals. This course is designed to enable women and men to analyze their use of time, identify factors that contribute to wasting time, and improve use of time through better prioritizing, scheduling, and increased motivation.

### CPD 2310 - Stress Management

**Credits:** 1

**Description:** In every individual's life there are numerous sources of stress. Instead of simply treating the symptoms of stress, this course will help students identify their own causes of stress and then deal with those causes prescriptively. Discussions will focus on understanding stress theory, personality attributes that contribute to stress, stress in the work environment, and relationship stress.

### CPD 2320 - Self Esteem

**Credits:** 1

**Description:** This course will explore the issues of self-esteem within a feminist framework, including the effects of sexism on self-worth, the role of women in a sexist society, and the tools needed to survive with a strong self-image. The goal is to apply what is learned to enhancing everyday living through an understanding of societal, familial, and self-induced pressures.

### CPD 2330 - Assertiveness

**Credits:** 1

**Description:** This course explores assertive behavior from a feminist point of view. The differences between passive, assertive, and aggressive behaviors are discussed. Avenues for change and tools to achieve change are identified.

### CPD 2340 - Sexual Harassment/Discrimination

**Credits:** 1

**Description:** This interactive workshop will help students to become aware of sexual harassment and learn how to stop and prevent it.

### CPD 2350 - Career Evaluation Workshop

**Credits:** 1

**Description:** This course will focus on career evaluation and will assist students in acquiring the skills and attitudes to plan effectively for and manage the changes which they will experience during their work lives.

### CPD 2360 - Multilevel Wellness

**Credits:** 1

**Description:** This course will empower students with tools to attain their own personal sense of well-being. It will address wellness as a multilevel process consisting of emotional, cognitive, somatic, and spiritual components. The workshop will include information, experiential exercises, and process work. Group work and journal keeping will also be used to bridge the communication gap between the self and others.

### CPD 2370 - Money Issues for Women

**Credits:** 1

**Description:** The economic and social circumstances of women's

lives in the United States often place them in a different material and psychological relationship to money and issues surrounding money than men. This course will review a variety of issues women face when planning for the future, as well as some of the tools used to build a secure future.

*Note:* Credit will be granted under one prefix only: CPD or FIN.

**Cross Listed Course(s):** FIN 2370

### CPD 2380 - Finding an Internship

**Credits:** 1

**Description:** This is an internship preparation course for students from any department without a pre-internship class in their curriculum. Students will develop a plan for finding an internship site and learn the skills needed to successfully obtain the internship. They will research potential employers, write a resume and cover letter, and develop interviewing skills. Students will also reflect on the process of finding an internship in their field and develop goals and learning objectives for their placement.

### CPD 2600 - Meditation and Activism

**Credits:** 2

**Description:** Students in this course explore basic lay meditation techniques and how they can support various forms of social justice activism. It explores the centrality of the body in the workings of oppression and privilege and organized social change through readings and mindfulness exercises. Through this focus, we familiarize ourselves with the texts of environmental and racial justice activists, and feminists, queer, and other gender justice advocates who have integrated meditation and mindfulness in their academic and activist work. This course provides students an introduction to the literature on mindful anti-oppression work and basic self-care through simple meditation practices.

*Note:* Credit granted for only one prefix.

**Cross Listed Course(s):** GWS 2600

### CPD 3300 - Women's Leadership

**Credits:** 2

**Description:** This course will examine the various roles, models, and guiding principles of women in leadership. The discussions will be intentionally interactive as students share their own experience of women's leadership ranging from traditional to unconventional. Students will identify the values most clearly associated with women's leadership crossculturally and read diverse women's experiences in their communities. Each student will interview a woman whom they deem to be in a leadership role, though not necessarily a formal position, and will present his or her findings to the class. All class members will reflect on their own leadership values in relation to the course material.

*Note:* Credit will be granted under one prefix only: CPD or GWS.

**Cross Listed Course(s):** GWS 3300

### CPD 3320 - Women's Self-Defense

**Credits:** 1

**Description:** This course will begin by examining the psychological tools needed to defend oneself and will gradually move into the actual, physical skills necessary to survive, escape, avoid and/or resist violence. The Women's Empowerment Model will be presented. This model emphasizes self-respect, an understanding of one's inalienable human rights, and the determination and ability to protect those rights. Students will learn self-defense against verbal and physical assaults by becoming more aware, assertive and skilled in physical resistance techniques. Using interactive exercises, students will practice both verbal and physical self-defense skills. All ability levels are welcome, but the class is extremely physical; thus, students should come prepared to move.

*Note:* Credit will be granted under one prefix only: CPD or ESSA.

**Cross Listed Course(s):** ESSA 3320

### CPD 4100 - Promoting Your Individualized Degree

**Credits:** 1-3

**Description:** Individualized Degree Program (IDP) students participate in assignments and activities to synthesize the interdisciplinary concepts and skills they achieved through their IDP major or IDP minor. Students in this class will analyze the transformative outcomes of their IDP experiences to prepare for post-graduate possibilities such as interviews, internships, graduate school applications, etc. Students will develop materials for the job market and/or graduate school based on their IDP. Students may take this course for 1-3 credits. Students taking the course for more than 1 credit are expected to complete additional assignments.

*Note:* Students cannot earn credit for both CPD 490A and CPD 4100.

## Chemistry

### CHE 0010 - Effective College Teaching in Chemistry I: T2 Mentor

**Credits:** 0

**Corequisite(s):** CHE 4971

**Description:** This course is a non-credit co-requisite for CHE 4971 Effective College Teaching in Chemistry I in which students function as Teaching Assistants (TAs) in undergraduate CHE courses at MSU Denver. The professor of record to which the student is assigned as a TA functions as the student's Tier 2 mentor. The student and their mentor work together to develop strategies for effectively applying the concepts, skills, and strategies taught in CHE 4971 Effective College Teaching in Chemistry I to their assigned course curriculum.

*Note:*

1. Students must participate in the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) to enroll in this course.
2. This course must be taken during the student's first semester in their program.
3. Since students are compensated as a part of these programs, work, and training expectations are set beyond that determined by the credit hours of certain courses.

Accordingly, students are expected to meet with their Tier 2 mentor for at least 22.5 hours per semester to work on this internship practicum.

## **CHE 0015 - Ethical Practices in the Employment Sector: T2 Mentor**

**Credits:** 0

**Corequisite(s):** CHE 4974 (ING-BP students only)

**Description:** This course is a non-credit co-requisite for CHE 4974 Ethical Practices in Scientific Work preparing students to address ethical dilemmas that might arise in an industrial, government, or national laboratory. This course enables each student in CHE 4974 to be assigned a Tier 2 mentor with whom students engage in a practicum experience. The student and their mentor delve deeper into ethically ambiguous scenarios that could or have occurred in the chemical/biochemical industry, or a national or governmental laboratory. Ultimately, the student learns how to identify and develop strategies to effectively address ethical issues in the workplace.

**Note:**

1. Students must be participating in the Chemical Industry, National, and Government Laboratory Post-Baccalaureate Bridge Program (ING-BP) to enroll in this course.
2. This course must be taken during the student's first academic year in their program.
3. Since students are compensated as a part of these programs, work, and training expectations are set beyond that determined by the credit hours of certain courses. Accordingly, students are expected to meet with their Tier 2 mentor for *at least* 22.5 hours per semester to work on this internship practicum.

## **CHE 0020 - Effective College Teaching in Chemistry II: T2 Mentor**

**Credits:** 0

**Prerequisite(s):** CHE4976 AND CHE 0010

**Corequisite(s):** CHE 4976

**Description:** This course is a non-credit co-requisite for CHE 4976 Effective College Teaching in Chemistry II in which students function as Teaching Assistants (TAs) in undergraduate CHE courses at MSU Denver. The professor of record to which the student is assigned as a TA functions as the student's Tier 2 mentor. The student and their mentor work together to develop strategies for effectively applying the concepts, skills, and strategies taught in CHE 4976 Effective College Teaching in Chemistry II to their assigned course curriculum.

**Note:**

1. Students must be participating in the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) to enroll in this course.
2. This course must be taken during the student's second semester in the ACS-BP program.
3. Since students are compensated as a part of these programs, work, and training expectations are set beyond that determined by the credit hours of certain courses.

Accordingly, students are expected to meet with their Tier 2 mentor for at least 22.5 hours per semester to work on this internship practicum.

## **CHE 0025 - Data Handling in the Employment Sector: T2 Mentor**

**Credits:** 0

**Corequisite(s):** CHE 4975 (ING-BP students only)

**Description:** This course is a non-credit co-requisite for CHE 4975 Data Handling in Scientific Work preparing students to address common scenarios students might encounter handling data in an industrial, government, or national laboratory. This course enables each student in CHE 4975 to be assigned a Tier 2 mentor with whom students engage in a practicum experience. The student and their mentor delve deeper into data handling issues specific to the student's desired employment sector and/or Immersive Research/Laboratory work. Ultimately, the student learns how to handle common laboratory data to generate relevant, clearly communicated results.

**Note:**

1. Students must be participating in the Chemical Industry, National, and Government Laboratory Post-Baccalaureate Bridge Program (ING-BP) to enroll in this course.
2. This course must be taken during the student's first academic year in their program.
3. Since students are compensated as a part of these programs, work, and training expectations are set beyond that determined by the credit hours of certain courses. Accordingly, students are expected to meet with their Tier 2 mentor for at least 22.5 hours per semester to work on this internship practicum.

## **CHE 1010 - Chemistry and Society**

**Credits:** 3

**Description:** This course introduces basic concepts of chemistry in modern society. An emphasis is placed on the understanding of chemical principles and their application to societal issues.

**Note:** This course is intended for non-science majors and satisfies three credits of the General Studies Natural and Physical Sciences (NPS) requirement.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC2

## **CHE 1100 - Principles of Chemistry**

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** MTH 1109 or MTH 1110 or MTH 1111 or MTH 1112 or a College Level Math (CLM) score of greater than or equal to 65 on the Accuplacer Exam or an Advanced Algebra and Functions (AAF) score of greater than or equal to 280 on the Accuplacer Exam

**Description:** This course is a study of the fundamentals of chemistry. A survey of atomic structure, periodicity, bonding, nomenclature, stoichiometry, gas laws, and solution chemistry is provided for those



students with no background in these areas.

*Note:* Completion of both CHE 1100 and CHE 1150 with passing grades is required to receive guaranteed transfer GT-SC1.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## CHE 1150 - Principles of Chemistry Laboratory

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** CHE 1100 or permission of Instructor

**Description:** This course is an introduction to the academic chemistry laboratory and is intended for students with no prior experience. The course will cover health and safety issues, preparation and use of common glassware/lab equipment, proper recording of qualitative and quantitative observations, and common lab techniques.

*Note:* Completion of both CHE 1100 and CHE 1150 with passing grades is required to receive guaranteed transfer GT-SC1.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## CHE 1800 - General Chemistry I

**Credits:** 4

**Prerequisite(s):** MTH 1109 or MTH 1110 or MTH 1111 or MTH 1112 or a College Level Math (CLM) score of greater than or equal to 65 on the Accuplacer Exam or an Advanced Algebra and Functions (AAF) score of greater than or equal to 280 on the Accuplacer Exam

**Description:** A comprehensive study of the facts, concepts, and laws of chemistry. This course meets the requirements of students majoring in chemistry, medicine, medical technology, biology, physics and other fields requiring a strong background in chemistry. Students enrolling in this course should have successfully completed high school chemistry or equivalent coursework.

*Note:* Completion of both CHE 1800 and CHE 1801 with passing grades is required to receive guaranteed transfer GT-SC1.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## CHE 1801 - General Chemistry I Laboratory

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** CHE 1800. If used as a Prerequisite, CHE 1800 must be completed with minimum grade of C- or better.

**Description:** This course introduces basic laboratory techniques and reinforces and explores the concepts introduced in CHE 1800 - General Chemistry I. Chemical literacy, including report writing, is introduced. Emphasis is placed on learning methods and technologies appropriate to a chemical or physical determination, learning graphical, statistical, and symbolic methods to organize and interpret data, and understanding the role of repeatability in the acquisition of scientific data.

*Note:* Completion of both CHE 1800 and CHE 1801 is required to receive guaranteed transfer GT-SC1.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## CHE 1805 - General Chemistry I Recitation

**Credits:** 1

**Corequisite(s):** CHE 1800 or CHE 1801

**Description:** Students in this course, which accompanies course content in regular General Chemistry I, build problem-solving skills in a highly supportive and interactive study-group environment. Class time is used to review, reflect on, and reteach concepts through guided practice. Included in these recitation sessions are quizzes, practice problems, and exams.

## CHE 1810 - General Chemistry II

**Credits:** 4

**Prerequisite(s):** CHE 1800 and one of the following: MTH 1109, MTH 1110, MTH 1111, MTH 1112, MTH 1120, MTH 1400, MTH 1410, MTH 2410, or MTH 2420

**Description:** This course is a continuation of CHE 1800 - General Chemistry I and provides a comprehensive study of the facts, concepts, and laws of chemistry. The course meets the requirements of students majoring in such areas as chemistry, medicine, medical technology, biology, physics and other fields requiring a strong background in chemistry.

*Note:* Completion of both CHE 1810 and CHE 1811 with passing grades is required to receive guaranteed transfer GT-SC1.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## CHE 1811 - General Chemistry II Laboratory

**Credits:** 1

**Prerequisite(s):** CHE 1801 with a minimum grade of C- or above

**Prerequisite(s) or Corequisite(s):** CHE 1810 with a minimum grade of C- or above

**Description:** This course is the second semester of a one-year sequence in laboratory work that reinforces and explores the concepts introduced in CHE 1810 - General Chemistry II. Chemical literacy, including report writing, is continued. Emphasis is placed on identifying relevant variables in experimental design and testing hypotheses. This course also reinforces learning methods and technologies appropriate to a chemical or physical determination, learning graphical and statistical methods to interpret data, and understanding the role of repeatability in the acquisition of scientific data.

*Note:* Completion of both CHE 1810 and CHE 1811 is required to receive guaranteed transfer GT-SC1

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## CHE 2100 - Introduction to Organic and Biological Chemistry

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** CHE 1810 or CHE 1100

**Description:** This course is a lecture-based study of the elements of organic and biological chemistry. This course, in conjunction with CHE 2150, satisfies the requirements for nursing programs and other fields requiring a survey of organic and biological chemistry.

### **CHE 2150 - Introduction to Organic and Biological Chemistry Laboratory**

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** CHE 2100 and either CHE 1150 or CHE 1811

**Description:** This course is a laboratory-based study of the elements of organic and biological chemistry. This course, in conjunction with CHE 2100, satisfies the requirements for nursing programs and other fields requiring a survey of organic and biological chemistry.

### **CHE 2710 - Introduction to Criminalistics**

**Credits:** 3

**Prerequisite(s):** CHE 1100 or CHE 1800

**Corequisite(s):** CHE 2711

**Description:** This course introduces the student to the application of science at crime scenes and the crime laboratory. It provides a survey of forensic science including pathology, entomology, anthropology, microevidence, drug analysis, toxicology, dactyloscopy, firearm examination, serology, hair and fiber analysis, soil and glass analysis, and crime scene processing.

### **CHE 2711 - Introduction to Criminalistics Laboratory**

**Credits:** 1

**Prerequisite(s):** CHE 1150 or CHE 1801

**Corequisite(s):** CHE 2710

**Description:** This course introduces the student to laboratory methods involved with presumptive tests for biological fluids, firearms examination, document examination, pattern analysis, and fingerprint examination.

### **CHE 2750 - Arson and Explosives**

**Credits:** 3

**Prerequisite(s):** CHE 1100

**Description:** This course will include a study of the chemistry of fires and explosions. Arson scene evidence collection and preservation techniques will be discussed, as well as techniques for analyzing the residues collected.

### **CHE 2760 - Field Testing and Laboratory Analysis of Drugs**

**Credits:** 1

**Prerequisite(s):** CHE 1100

**Description:** The course introduces the theory and practice of using a drug-testing kit to screen for the presence or absence of controlled substances.

### **CHE 3000 - Analytical Chemistry**

**Credits:** 3

**Prerequisite(s):** Completion of CHE 1810 with a minimum grade of "C-" or better, and completion of CHE 1811 with a minimum grade of "C-" or better.

**Corequisite(s):** CHE 3010

**Description:** Students in the course study the fundamentals of analytical chemistry including principles of gravimetric, volumetric, potentiometric, and spectrophotometric analysis. Students apply statistical analysis and uncertainty estimation to evaluate the accuracy and reliability of results.

### **CHE 3010 - Analytical Chemistry Laboratory**

**Credits:** 2

**Prerequisite(s):** Completion of CHE 1810 with a grade of C- or better, completion of CHE 1811 with a C- or better, and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Prerequisite(s) or Corequisite(s):** CHE 3000

**Description:** Students in this course develop the laboratory skills required to perform gravimetric, volumetric, potentiometric, and spectrophotometric analyses with accuracy and precision. Students also learn to report results in a scientific manner by using statistics and chemical literature to support their claims.

### **CHE 3050 - Environmental Chemistry**

**Credits:** 3

**Prerequisite(s):** CHE 1810, CHE 1811, CHE 3100

**Description:** This course is a study of the sources, reactions, transport, effects, and fates of chemical species in water, soil, air, and biota environments.

### **CHE 3090 - Survey of Organic Chemistry**

**Credits:** 4

**Prerequisite(s):** CHE 1810, CHE 1811; and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Corequisite(s):** CHE 3120

**Description:** Survey of Organic Chemistry (CHE 3090) focuses on those areas of organic chemistry that are most pertinent to the study of Biochemistry (CHE 4310). The course covers acid-base chemistry, stereochemistry, the chemistry of alcohols, aldehydes, ketones, carboxylic acids and their derivatives, and the chemistry of major metabolic pathways.

### **CHE 3100 - Organic Chemistry I**

**Credits:** 4

**Prerequisite(s):** CHE 1800, CHE 1810, and CHE 1811

**Description:** This is the first of a two-semester sequence covering organic chemistry. Topic coverage emphasizes basic organic systems ranging from saturated organic compounds (alkanes) to unsaturated compounds (alkenes, alkynes, aromatics), halogenated organic compounds, and basic organometallic systems. The class also covers basic reaction mechanisms and the fundamental electronic principles governing such transformations, as well as the synthesis of organic systems using the retrosynthetic method.

## CHE 3110 - Organic Chemistry II

**Credits:** 4

**Prerequisite(s):** CHE 3100

**Description:** This course is the second of a two-semester investigation of organic chemistry. Topic coverage emphasizes basic homonuclear and heteronuclear systems, both saturated and unsaturated, and extends concepts learned in CHE 3100 to significantly more complex electronic systems. Students enrolled in this course explore functional group transformations from an electronic basis. The relationship of mechanisms and stereoelectronics are central to the synthesis of organic systems. Students in this course learn to evaluate and apply these concepts for retrosynthetic analysis and forward synthesis of organic structures using multi-step transformations.

## CHE 3120 - Organic Chemistry Laboratory 1

**Credits:** 1

**Prerequisite(s):** CHE 1810, CHE 1811, and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Prerequisite(s) or Corequisite(s):** CHE 3100 or CHE 3090

**Description:** The focus of this course is an introduction to basic laboratory techniques of preparation, purification, and identification of organic compounds.

## CHE 3130 - Organic Chemistry Laboratory II

**Credits:** 1

**Prerequisite(s):** CHE 3100, CHE 3120

**Prerequisite(s) or Corequisite(s):** CHE 3110

**Description:** This course is a continuation of CHE 3120. It is a qualitative organic analysis course in which both classical and instrumental techniques are utilized to elucidate organic structure. Students' chemical literacy is enhanced through the use of web based chemical literature search and American Chemical Society based report writing.

## CHE 3140 - Spectrometric Identification of Organic Compounds

**Credits:** 3

**Prerequisite(s):** CHE 3100 with a C- or better.

**Description:** The course expands on modern applications of Nuclear

Magnetic Resonance (NMR) and Fourier Transform Infrared (FTIR) spectroscopic probes for the identification of organic molecules. The course enhances connections to all subdisciplines of the undergraduate chemistry curriculum, but mainly focuses on organic chemistry. The course embeds activities for mastering soft skills that are needed for the practicing professional chemist. The latter include literature background searches, oral, written, and poster style presentations of data.

## CHE 3190 - Survey of Physical Chemistry

**Credits:** 4

**Prerequisite(s):** Completion of CHE 3000 with a grade of C- or better, MTH 1410 with a grade of C- or better, and PHY 2010 or PHY 2311 with a grade of C- or better.

**Description:** This course provides a one-semester survey of the principles of thermodynamics, equilibrium, kinetics, quantum mechanics, and spectroscopy.

*Note:* Credit will be granted for only one prefix: CHE or HON.

**Cross Listed Course(s):** HON 3190

## CHE 3200 - Survey of Physical Chemistry Laboratory

**Credits:** 1

**Prerequisite(s):** CHE 3010 and MTH 1410 and PHY 2010 or PHY 2311

**Prerequisite(s) or Corequisite(s):** CHE 3190

**Description:** This course provides a one-semester laboratory survey of the principles of thermodynamics, equilibrium, kinetics, quantum mechanics, and spectroscopy. Technical writing is emphasized.

## CHE 3300 - Inorganic Chemistry

**Credits:** 3

**Prerequisite(s):** CHE 3090 or CHE 3100

**Description:** In this course, students build a comprehensive, foundational understanding of the core concept of chemistry: the relationship between the structure and function of matter. Starting with how elements are formed from fundamental forces and particles after the big bang, the governing principles of nuclear structure are covered, related to nuclear function, then expanded to demonstrate how nuclear structure imparts atomic structure. Atomic theory is explored in-depth to reveal how the organization of the periodic table mirrors the intricacies of atomic structure via functional periodic trends such as redox behavior and acid-base properties. The atomic structure and periodic properties of the elements are then used to rationalize covalent and ionic bond formation via hard-soft acid-base theory and molecular orbital theory, paving the way for discussion of the basic concepts of coordination chemistry. Molecular and ionic structure is then discussed in the context of bulk material function such as the formation, energetics, and properties of crystal lattices, band theory, and the derivation of solubility rules for broader context of materials in aqueous environments. Finally, this course emphasizes the development of high-level scientific analysis skills through a

methodical approach to reading and interpreting primary scientific literature.

### CHE 3600 - Crime Scene Investigation I

**Credits:** 4

**Prerequisite(s):** CHE 2710 and CHE 2711

**Description:** The course is designed for field investigators seeking a minor in criminalistics. Course material presented includes identification; individualization; collection and preservation of physical evidence; approach, processing, and investigation of crime scenes; establishing identity; trace evidence; impressions evidence; blood; and other biological evidence.

### CHE 3610 - Crime Scene Investigation II

**Credits:** 4

**Prerequisite(s):** CHE 3600

**Description:** This course is a continuation of CHE 3600 for field investigators seeking a minor in criminalistics. Course materials include specialized instruction in the following topics: drugs and toxicology, arson and explosives, sexual assault investigation, burglary investigation, motor vehicle investigation, and homicide investigation.

### CHE 3700 - Forensic Chemistry

**Credits:** 4

**Prerequisite(s):** CHE 3000, CHE 3010, CHE 3100 or CHE 3090

**Description:** This course introduces the theory and practice of forensic science with an emphasis on the chemical analysis and interpretation of physical evidence. Topics covered in lecture and/or laboratory include ethics, statistics, quality assurance, drug analysis, toxicology, and arson/explosives analysis.

### CHE 3710 - Forensic Biochemistry

**Credits:** 4

**Prerequisite(s):** CHE 2100 or CHE 3090 or CHE 3100 with a grade of C- or better

**Description:** This course is an introduction to forensic biology/biochemistry including identification of body fluids with an in-depth focus on the techniques and instrumentation used to extract, quantify and analyze DNA for forensics. The development of written and oral communication skills is emphasized.

### CHE 3810 - Chemistry Literature and Research

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** CHE 3000, or permission of instructor.

**Description:** This course presents primary research literature and resources for critical consideration in the fields of chemistry and biochemistry. Students in this course focus on analysis of scientific literature and scientific seminars, particularly the evaluation of

chemical analysis techniques and comparison of data presentation methods.

### CHE 3890 - Science and Public Policy: Variable Topics

**Credits:** 1-3

**Prerequisite(s):** Any lower-division science course and ENG 1009 or ENG 1010, or Permission of instructor

**Description:** This course provides a working familiarity with the technical issues that influence major public policy decisions. Policy issues and relevant technologies and their interactions are discussed. Course content varies according to current topics, such as health, environment, and energy.

*Note:* This course may be repeated under different topics.

### CHE 3980 - Internship in Chemistry

**Credits:** 1-15

**Prerequisite(s):** Major in chemistry; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

### CHE 3990 - Teaching Assistant in Chemistry and Biochemistry

**Credits:** 1-3

**Prerequisite(s):** Department approval required for registration.

**Description:** Teaching assistants participate in classroom/laboratory activities to support student learning in a Chemistry & Biochemistry course under the direct supervision of an instructor. Students must have successfully completed the course for which they will TA and they must be approved for the TA role by a professor who teaches that course.

*Note:* A maximum of 6 credits of teaching assistant/independent study/internships/practicum/undergraduate research may be applied toward a major or minor in Chemistry and Biochemistry.

### CHE 4010 - Advanced Organic Chemistry

**Credits:** 3

**Prerequisite(s):** CHE 3110 and CHE 4450

**Description:** This course provides an integrated study of techniques used for the investigation of organic reaction mechanisms and a survey of the nature of important organic reaction intermediates.

## CHE 4020 - Synthetic Organic Chemistry

**Credits:** 3

**Prerequisite(s):** CHE 3110, CHE 3130

**Description:** This course covers a unified approach to classical and modern synthetic chemistry, including aspects of mechanism and stereochemistry.

## CHE 4100 - Instrumental Analysis

**Credits:** 3

**Prerequisite(s):** CHE 3000; CHE 3090 or CHE 3100

**Description:** Students in this course study the theory and practice of instrumental methods of analysis. Topics include sample preparation, instrument electronics, absorption and emission spectroscopy, mass spectrometry, electro-analytical methods, and chromatographic methods.

## CHE 4110 - Instrumental Analysis Laboratory

**Credits:** 2

**Prerequisite(s):** CHE 3010; CHE 3120 or CHE 4350

**Corequisite(s):** CHE 4100

**Description:** Students in this course study instruments used for identification and separation of chemicals. They will learn about the physical components of each instrument and how to use software to develop and optimize methods. Topics include electromagnetic radiation, mass spectrometry, chromatography, calorimetry, and electrochemistry. Students will also learn to report results in a scientific manner and use chemical literature to support their claims.

## CHE 4130 - Quality in the Chemical Industry

**Credits:** 2

**Prerequisite(s):** CHE 3000

**Description:** As the capstone for the Quality in the Chemical Industry Certificate, students in this course prepare for jobs in the chemical industry. Topics include quality assurance, statistical evaluation of data, method validation, and reporting.

## CHE 4160 - QA/QC Methods Laboratory

**Credits:** 1

**Corequisite(s):** CHE 4130

**Prerequisite(s) or Corequisite(s):** CHE 4100, CHE 4110

**Description:** As a capstone laboratory experience for the Quality in the Chemical Industry Certificate, students enrolled in this course prepare for jobs in the chemical industry. Topics include instrumentation operation, quality assurance, statistical evaluation of data, method validation, and reporting.

## CHE 4300 - Advanced Inorganic Chemistry

**Credits:** 4

**Prerequisite(s):** CHE 3190 or CHE 4450, CHE 3300, and

completion of General Studies Requirements

**Description:** This course is a capstone experience for students and provides an advanced study of topics relevant to the field of inorganic and organometallic chemistry, including atomic and molecular structure, bonding, molecular orbital theory, symmetry, and organometallic and inorganic reaction mechanisms.

**University Requirement(s):** Senior Experience

## CHE 4310 - Biochemistry I

**Credits:** 4

**Prerequisite(s):** CHE 3110 or CHE 3090

**Description:** This course is an introduction to the chemistry of living systems with emphasis placed on proteins, carbohydrates, lipids, metabolism, and bioenergetics.

## CHE 4320 - Biochemistry II

**Credits:** 4

**Prerequisite(s):** CHE 4310

**Description:** This course is a continuation of Biochemistry I. Students will engage in an in-depth study of the metabolism and function of lipids, amino acids, and nucleic acids.

## CHE 4350 - Biochemistry Laboratory

**Credits:** 2

**Prerequisite(s):** CHE 3120

**Prerequisite(s) or Corequisite(s):** CHE 4310

**Description:** Students enrolled in this class learn the basic techniques and instrumentation of biochemical research. Students use knowledge of these techniques to design and carry out a project and write about their results in a laboratory report, formatted in the style of an academic biochemistry journal.

## CHE 4360 - Computational Biochemistry Laboratory

**Credits:** 2

**Prerequisite(s):** CHE 3120

**Prerequisite(s) or Corequisite(s):** CHE 4310

**Description:** This course is an introduction to the basic computational approaches that can be applied to biochemical research. Students use knowledge of these techniques to design and carry out a project and write about their results in a laboratory report, formatted in the style of an academic biochemistry journal, and present an oral presentation.

This course can be completed as an off-campus substitute for Biochemistry Laboratory (CHE 4350). This course can also be completed for upper-division elective credit after the completion of CHE 4350.

## CHE 4370 - Undergraduate Research in Chemistry

**Credits:** 1-2

**Prerequisite(s):** CHE 1810 and permission of instructor

**Description:** Students will engage in a research project that involves

the application of scientific methodology to chemical problems. Experience will be gained in literature searches, generating hypotheses, data collection, data handling, data analysis, safety and chemical hygiene, and presentation of results.

*Note:* This course may be repeated. A maximum of 6 credits may be applied toward a major or minor in Chemistry or Biochemistry. Students interested in taking this course must consult with the Chemistry Department.

### **CHE 4390 - Advanced Biochemistry Laboratory**

**Credits:** 3

**Prerequisite(s):** CHE 4310 and CHE 4350 and Senior Standing

**Description:** This course is a capstone experience for students seeking a major in biochemistry. In the course, students utilize techniques and instrumentation of biochemical research. Students use knowledge of these techniques to design and carry out a project that addresses a biochemical question or hypothesis that they propose. Students write about their results in a short article report, formatted in the style of an academic biochemistry journal, and present their work to the Chemistry and Biochemistry Department.

**University Requirement(s):** Senior Experience

### **CHE 4450 - Physical Chemistry: Quantum Mechanics and Spectroscopy**

**Credits:** 4

**Prerequisite(s):** CHE 3000; and PHY 2020 or PHY 2331

**Corequisite(s):** CHE 4480

**Prerequisite(s) or Corequisite(s):** MTH 2420

**Description:** This course is an introduction to quantum mechanics. Topics include the postulates of quantum mechanics, application of the Schrodinger equation to quantum mechanical models, atomic structure, chemical bonding, molecular structure, and spectroscopy. Additionally, the principles of statistical mechanics and their application to chemical systems are covered. This course is the first of a two-semester sequence covering topics in physical chemistry. Topic coverage emphasizes the study of quantum mechanics and its application to atomic and molecular structure, chemical bonding, and spectroscopy. Additionally, the principles of statistical mechanics and their application to chemical systems are covered.

### **CHE 4460 - Physical Chemistry: Thermodynamics and Kinetics**

**Credits:** 4

**Prerequisite(s):** MTH 2420, and CHE 3000; and PHY 2020 or PHY 2331

**Corequisite(s):** CHE 4490

**Description:** This course is an introduction to chemical thermodynamics and kinetics. Topics include the study of gas dynamics, the laws of thermodynamics, phase and chemical equilibrium, and the rates and mechanisms of chemical reactions.

### **CHE 4480 - Physical Chemistry Laboratory: Quantum and Spectroscopy**

**Credits:** 2

**Prerequisite(s):** CHE 3010; and PHY 2020 or PHY 2331

**Corequisite(s):** CHE 4450

**Prerequisite(s) or Corequisite(s):** MTH 2420

**Description:** This course emphasizes the techniques and methods used in modern physical chemistry. Experiments illustrate the principles of quantum mechanics and spectroscopy, and reinforce the topics covered in the lecture portion of the course.

### **CHE 4490 - Physical Chemistry Laboratory: Thermodynamics and Kinetics**

**Credits:** 2

**Prerequisite(s):** MTH 2420 and CHE 3010; and PHY 2020 or PHY 2331

**Corequisite(s):** CHE 4460

**Description:** This course emphasizes the techniques and methods used in modern physical chemistry. Experiments illustrate the laws of thermodynamics, chemical equilibrium, and the rates and mechanisms of chemical reactions, and reinforce the topics covered in the lecture portion of the course.

### **CHE 4650 - Chemistry Work Experience/Cooperative Education**

**Credits:** 4

**Prerequisite(s):** CHE 3010, CHE 3110

**Description:** This course is a laboratory field experience for students majoring or minoring in chemistry. A total of 600 hours of work experience will be required.

### **CHE 4800 - Special Topics in Chemistry**

**Credits:** 4

**Description:** This Special Topics course in chemistry provides an in-depth examination of particular aspects of chemical phenomena. Topics ranging from analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, to physical chemistry, and connections to biology, mathematics, and physics, will be the focus of each course.

*Note:* This course may be repeated under different topics.

### **CHE 4950 - Senior Experience in Chemistry**

**Credits:** 3

**Prerequisite(s):** Senior standing, CHE 3000, CHE 3110, either CHE 3190 or CHE 4450

**Description:** This is a capstone experience for students seeking a degree in chemistry. In the course, students utilize techniques and instrumentation of chemical research in a course-based undergraduate research experience (CURE) model. Students use knowledge of these techniques to design and carry out a project that addresses a chemical question or hypothesis that they propose across the broad disciplines of chemistry. Students write about their results in a short article report, formatted in the style of an academic chemistry journal or equivalent, and present their work to the Chemistry and Biochemistry

Department.

**University Requirement(s):** Senior Experience

## CHE 4960 - Senior Experience in Biochemistry

**Credits:** 3

**Prerequisite(s):** Senior Standing; CHE 3110; CHE 4310

**Description:** This course is a capstone experience for students seeking a major in biochemistry. The course consists of library research in conjunction with a chemistry faculty member; the submission of a significant paper on some area of biochemistry; presenting the paper to the Chemistry Department; and completing the Diagnostic Undergraduate Chemistry Knowledge American Chemical Society examination.

*Note:* CHE 4960 can be used as a substitution for CHE 4950

**University Requirement(s):** Senior Experience

## CHE 4970 - Internship I: T1 Mentor

**Credits:** 0.5

**Description:** The T1 mentor stays with the student throughout the program and ensures their retention and success by identifying student-specific challenges and devising solutions. The T1 mentor closely monitors the student's progress and helps them stay on track to complete requirements on time. The student meets with their tier-1 mentor weekly or biweekly in this course and works towards establishing an Individual Development Plan (IDP) for their post-bac coursework and receives support in deciding their research goals as well as identifies a research advisor to achieve these goals.

*Note:*

1. This course is part of the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) and the Chemical Industry, National, and Government Laboratory Post-Baccalaureate Bridge Program (ING-BP).
2. Internship I is required for each participant in their first year of the ACS-BP or ING-BP postbaccalaureate program and is repeated three times.

## CHE 4971 - Effective College Teaching in Chemistry I

**Credits:** 0.5

**Corequisite(s):** CHE 0010

**Description:** This is the first of a two-semester course sequence introducing teaching assistants (TAs) to core theoretical frameworks of learning and the scientific evidence that can inform their teaching. In collaboration with their course instructor and Tier 2 mentor, students gain a foundation in learning theory and develop widely valuable skills and tools for a professional in any career that includes training, supervising, or teaching others. In the first semester, students focus on the nature of science, navigating the chemistry laboratory, strategies for effective teaching, and introductory aspects of evidence-based course design. Class time is used to discuss case studies, examples of enacted teaching practices in lecture, lab, and online scenarios, peer-review implementation plans and teaching demonstrations.

*Note:* Students must be participating in the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) to enroll in this course.

## CHE 4972 - Navigating Graduate School

**Credits:** 0.5

**Corequisite(s):** CHE 4970 (co-requisite only applies to ACS-BP students)

**Description:** In this course, students learn how to prepare graduate school applications, understand common requirements for time management, and adopt effective work habits in graduate school. Additionally, methods and strategies are integrated to manage mental health and stress in graduate school.

*Note:* While this is a required course for the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP), *undergraduate students are welcome to enroll with instructor permission.*

## CHE 4973 - Advanced Science Communication I

**Credits:** 1

**Description:** This is the first of a two-course sequence introducing students in the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) to communication in science. Students gain a foundational understanding of communication goals, styles, and methods in science that will be applied in ACS-BP Research Capstone. Topic coverage emphasizes literature research, concise writing practices, writing good hypotheses, proposing new research questions, and poster presentations.

*Note:* While this is a required course for the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP), *undergraduate students are welcome to enroll with instructor permission.*

## CHE 4974 - Ethical Practices in Scientific Work

**Credits:** 0.5

**Corequisite(s):** CHE 0015 (Corequisite only applies for students in the ING-BP)

**Description:** In this course students explore ethical dilemmas, current ethical standards and practices and their origins, and the sometimes obvious yet nuanced differences in rules and cultures across disciplines. Using case studies, narratives, and articles, the course raises and aspires to answer questions related to the responsible treatment of data, reporting scientific information, responsibilities of the peer review system, conflicts of interest, the relationship of chemistry to society, and the role of the scientist in society.

*Note:*

1. While this is a required course for the Chemical Industry, National, and Government Laboratory Post-Baccalaureate Bridge Program (ING-BP) or American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP), *undergraduate students are welcome to enroll with instructor permission.*

- For ING-BP Students, CHE 4974 and CHE 0015 are co-requisites and must be taken concurrently.

## CHE 4975 - Data Handling in Scientific Work

**Credits:** 0.5

**Corequisite(s):** CHE 0025 (Corequisite only applies for students in ING-BP)

**Description:** In this course, students are introduced to the use and presentation of data in scientific work. Topic coverage emphasizes analysis of schemes, figures, and tables from literature, presentation style to promote reader understanding, use of software to efficiently analyze data, use of software to create plots, and preparing succinct descriptions of schemes, figures, and tables.

*Note:*

- While this is a required course for the Chemical Industry, National, and Government Laboratory Post-Baccalaureate Bridge Program (ING-BP) and the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP), *undergraduate students are welcome to enroll with instructor permission.*
- For ING-BP Students, CHE 4975 and CHE 0025 are co-requisites and must be taken concurrently.

## CHE 4976 - Effective College Teaching in Chemistry II

**Credits:** 0.5

**Prerequisite(s):** CHE 4971

**Corequisite(s):** CHE 0020

**Description:** This is the second of a two-semester course sequence introducing teaching assistants (TAs) to core theoretical frameworks of learning and the scientific evidence that can inform their teaching. In collaboration with their course instructor and Tier 2 mentor, students gain a foundation in learning theory and develop widely valuable skills and tools for a professional in any career that includes training, supervising, or teaching others. In the second semester, students build on ideas from CHE 4971 - Effective College Teaching in Chemistry I - i.e., strategies for effective teaching and evidence-based course design - and emphasis is placed on inclusive teaching practices and creating a roadmap for future development. Class time is used to discuss case studies, examples of enacted teaching practices in lecture, lab, and online scenarios, peer-review implementation plans and teaching demonstrations, and prepare a teaching portfolio.

*Note:* Students must be participating in the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) to enroll in this course.

## CHE 4977 - Research/Laboratory Rotation

**Credits:** 0.5

**Prerequisite(s):** CHE 4972 OR JMP 2610, and CHE 0010 OR CHE 0015

**Corequisite(s):** CHE 4970 (Second repetition)

**Description:** During the Research/Laboratory Rotation course,

students visit the laboratories of potential Tier 3 mentors that align well with the student's research or employment sector interests. The students are required to spend a minimum of three hours a week for two weeks in the laboratory of each potential Tier 3 mentor, rotating through four different laboratories within this eight-week class. Through this course, students interact with potential Tier 3 mentors on a daily basis, experience the laboratory environment, meet peer researchers, familiarize themselves with potential scientific projects, and ultimately determine which T3 mentor(s) and research project(s) best fit their interests for their research/laboratory internships.

*Note:* Students must be participating in the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) and Chemical Industry, National, and Government Laboratory Post-Baccalaureate Bridge Program (ING-BP) to enroll in this course and it must be taken during the first 8 weeks of the student's second semester in the program.

## CHE 4978 - Internship II: T1 Mentor

**Credits:** 0.5

**Prerequisite(s):** CHE 4970

**Description:** The T1 mentor stays with the student throughout the program and ensures their retention and success by identifying student-specific challenges and devising solutions. The T1 mentor closely monitors the student's progress and helps them stay on track to complete requirements on time. The student meets with their tier-1(T1) mentor weekly or biweekly and works toward completing their Individual Development Plan (IDP) for their post-bac coursework and receive support in realizing their research goals.

*Note:*

- This course is part of the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) and the Chemical Industry, National, and Government Laboratory Post-Baccalaureate Bridge Program (ING-BP).
- Internship II is required for each participant in their second year of the ACS-BP or ING-BP postbaccalaureate program and is repeated up to three times.

## CHE 4979 - Research/Laboratory Internship I: T3 Mentor

**Credits:** 0.5

**Prerequisite(s):** CHE 4977

**Prerequisite(s) or Corequisite(s):** CHE 4970

**Description:** During the Research/Laboratory Internship I course, students begin the Immersive Research/Laboratory Internship portion of the ACS-BP and ING-BP programs. Due to the inter-institutional nature of the laboratory internships, this course is designed to give students the opportunity to perform all of the necessary administrative tasks and initial required training modules, as well as gain access to their T3 mentor's laboratory and institutional resources. Once administrative tasks and training are complete, students start part-time laboratory work on-site in their T3 mentor's laboratory.

*Note:*



1. Students must be participating in the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) or Chemical Industry, National, and Government Laboratory Post-Baccalaureate Bridge Program (ING-BP) to enroll in this course.
2. This course must be taken during the third 5 weeks of the student's second semester in their program.
3. Since students are compensated as a part of these programs, work expectations are set beyond that determined by the credit hours of certain courses. Accordingly, students are expected to spend at least 15 hrs per week performing tasks associated with this internship.

### **CHE 4983 - Research/Laboratory Internship IA: T3 Mentor**

**Credits:** 0.5-1

**Prerequisite(s):** CHE 4977 AND CHE 4979

**Prerequisite(s) or Corequisite(s):** CHE 4970

**Description:** During the Research/Laboratory Internship IA course, students engage in full-time research/laboratory work as part of the Immersive Research/Laboratory Internship portion of the ACS-BP and ING-BP programs. For this work, students gain invaluable experience in the laboratories of their Tier 3 mentors performing hands-on experiments and procedures that are relevant to the student's specific research/laboratory projects and future goals.

*Note:*

1. Students must be participating in the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) and Chemical Industry, National, and Government Laboratory Post-Baccalaureate Bridge Program (ING-BP) to enroll in this course.
2. This course must be taken during the student's first summer in the ACS-BP or ING-BP program (full summer term).
3. Since students are compensated as a part of these programs, work expectations are set beyond that determined by the credit hours of certain courses. Accordingly, students are expected to spend an average of **37 hrs per week** performing tasks associated with this internship.

### **CHE 4984 - Advanced Science Communication II**

**Credits:** 0.5

**Prerequisite(s):** CHE 4973

**Corequisite(s):** enrolled in CHE 4985 for the second time

**Description:** This is the second of a two-course sequence introducing students in the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) to communication in science. Students apply knowledge from *Advanced Science Communication I* to plan a thesis that will be written in *ACS-BP Research Capstone*. Topic coverage emphasizes writing about scientific topics for different audiences, creating an outline of the research thesis, and critiquing scientific presentations.

*Note:* Students must be participating in the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) or obtain instructor permission to enroll in this course.

### **CHE 4985 - Research/Laboratory Internship II: T3 Mentor**

**Credits:** 1-2

**Prerequisite(s):** CHE 4977 AND CHE 4979 AND CHE 4983

**Corequisite(s):** CHE 4978 AND CHE 4984 OR CHE 4997 (the latter two courses are co-requisite with the second repetition of the course in the ACS-BP or ING-BP, respectively)

**Description:** During the Research/Laboratory Internship II course, students continue their full-time research/laboratory work as part of the Immersive Research/Laboratory Internship portion of the ACS-BP and ING-BP programs. For this work, students gain invaluable experience in the laboratories of their Tier 3 mentors performing hands-on experiments and procedures that are relevant to the student's specific research/laboratory projects and future goals.

*Note:*

1. Students must be participating in the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) and Chemical Industry, National, and Government Laboratory Post-Baccalaureate Bridge Program (ING-BP) to enroll in this course.
2. This course is repeatable, variable credit, and must be taken during both semesters of the second academic year in the ACS-BP or ING-BP programs.
  - A. ACS-BP: 2 credit hour course, repeatable twice for a maximum of 4 credits.
  - B. ING-BP: 1 credit hour course, repeatable twice for a maximum of 2 credits.
3. Since students are compensated as a part of these programs, work expectations are set beyond that determined by the credit hours of certain courses. Accordingly, students are expected to spend an average of **37 hrs per week** performing tasks associated with this internship.

### **CHE 4987 - Research/Laboratory Internship IIA: T3 Mentor**

**Credits:** 0.5

**Prerequisite(s):** CHE 4985 AND CHE 4997

**Corequisite(s):** CHE 4978

**Description:** During the Research/Laboratory Internship IIA course, students in the ING-BP continue engaging in full-time research/laboratory work as part of the Immersive Research/Laboratory Internship portion of the ING-BP programs. Importantly, during this internship, students are able to continue working on their projects while applying for jobs in their desired employment sector. Students benefit from real-time feedback from their mentors on specific resumes and application materials as they continue to gain hands-on experience while navigating the transition from their ING-BP to employment in an industrial, national, or government laboratory.

### **CHE 4997 - ING-BP Capstone: Resume, Interviews, and Professionalism**

**Credits:** 0.5

**Prerequisite(s):** CHE 4970 and CHE 4983 and (CHE 4975 OR CHE 4974)

**Corequisite(s):** For ING-BP students only: CHE 4985 AND CHE 4978 (second iterations)

**Description:** In this course, students in the ING-BP engage in a capstone project that culminates their experience in this bridge program. Students learn how to highlight the skills and experience they've gained through the ING-BP in their application materials and mock interviews while learning about the standards of professionalism in their desired employment sector. Upon finishing this course, students are thoroughly prepared to apply to, interview for, and enter a laboratory position in the chemical or biochemical sciences.

*Note:*

1. Students must be participating in the Chemical Industry, National, and Government Laboratory Post-Baccalaureate Bridge Program (ING-BP) or Instructor Permission to enroll in this course.
2. This course must be taken during the spring semester of the student's second year in the ING-BP program.

## CHE 4998 - ACS-BP Research Capstone

**Credits:** 0.5

**Prerequisite(s):** CHE 4984 AND CHE 4985

**Corequisite(s):** CHE 4978

**Description:** In this course, students in the ACS-BP engage in a capstone project that culminates their experience in this bridge program. Students apply the knowledge they gained from the bridge program-specific coursework, such as *Advanced Scientific Communication I/II* and *Data Handling in Scientific Work*, to prepare a publication-quality thesis-style document on the research they performed during the Immersive Research/Laboratory Internship with their T3 mentor. The students also prepare a final oral presentation for an orals-style exam and give a poster presentation at the ACS/ING-BP Poster Session.

*Note:*

1. Students must be participating in the American Chemical Society Post-Baccalaureate Bridge Program (ACS-BP) to enroll in this course.
2. This course must be taken during the student's second summer in the ACS-BP program (full summer term).

## Chicana and Chicano Studies

### CHS 1000 - Introduction to Chicana/o Studies

**Credits:** 3

**Description:** This course is an introduction to the broad range of the interdisciplinary field of Chicana/o Studies. The course covers the major historical moments beginning with an overview of Pre-Columbian civilizations in the Americas and Medieval Spain, which have led to the contemporary social location of Mexican-origin population within the United States. In addition, the course is an introduction to the broad scope of Chicana/o cultural production in the creative arts such as visual, film, music and literature. Resources

draw from various disciplines, including but not limited to: sociology, history, political science, anthropology, education, art and art history, women and gender studies, and religious studies.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** HON 1003

### CHS 1030 - Introduction to Social Justice and Decoloniality

**Credits:** 3

**Description:** This course introduces students to the interdisciplinary fields of Social Justice and Decolonial Studies through interdisciplinary perspectives, methods, and approaches. Students learn about privilege, power, and oppression and their relationships to race, class, gender, sexuality, and other identities. This course asks complex and difficult questions regarding colonialism, decoloniality, sovereignty, and agency. It offers students opportunities to study social movements, and engage in social justice and decolonial praxis.

*Note:* Credit will be granted for only one prefix.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Cross Listed Course(s):** AAS 1030, GWS 1030, NAS 1030

### CHS 1090 - Social Justice and Advocacy

**Credits:** 3

**Description:** Students in this course survey theories and methods of social justice work. Students examine intersecting methods of oppression, modes of resistance, and strategies towards social transformation. Students also develop the analytical and practical skills necessary to address multiple and intersecting forms of oppressions and injustice.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** AAS 1090, GWS 1090

### CHS 1150 - Race and Social Justice in U.S. History

**Credits:** 3

**Description:** Students explore the broad history of the United States with a particular focus on race, inequality, and social justice. From Spanish and British settler colonialism through recent social movement protest, students examine how ideas about race and ethnicity were embedded in economic, legal, social, cultural, and political contexts. We compare the historically-rooted identities, agency, and resistance of marginalized groups. Students develop a foundational understanding of enduring inequalities and movement protests to realize democratic promises in America's past. We also ask how history can shape national identity.

**General Studies:** Historical

**Guaranteed Transfer:** GT-HI1

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** AAS 1150, HIS 1150

### CHS 2000 - Living Culture and Language of the Mexican and Chicano

**Credits:** 3

**Prerequisite(s):** CHS 1000 or CHS 1020

**Description:** This course traces the fusion of cultures and dialects of the Spanish-speaking Southwest into elements that characterize Chicano intracultural and intercultural diversity.

*Note:* Credit will be granted for only one prefix: CHS or ANT.

**Cross Listed Course(s):** ANT 2360

## **CHS 2010 - Survey of Chicana/o Literature**

**Credits:** 3

**Prerequisite(s):** CHS 1000 or ENG 1010 or permission of the instructor

**Prerequisite(s) or Corequisite(s):** ENG 1020 or permission of instructor

**Description:** This course is a review of major literary genres associated with Chicana/o and Latina/o creative expression from the 1800s to the present, including poetry, drama, and the novel. Students in this course examine themes related to the Chicana/o and Latina/o experience such as racism, colonialism, sexism, and other structural forms of oppression, and the social justice efforts to combat these systems of oppression.

*Note:* Credit will be granted for only one prefix: CHS or ENG.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH2

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** ENG 2410

## **CHS 2020 - Chicano Poetry and Drama**

**Credits:** 3

**Prerequisite(s):** CHS 2010 or Permission of instructor

**Description:** This course is an intensive study of Chicano poetic and dramatic arts as they attempt to create a new reality. The course will also equip the student with a basic approach to poetry and drama as a craft through production.

## **CHS 2030 - Interdisciplinary Research Methods in Social Issues**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or AAS 1010 or CHS 1000 or Permission of Instructor

**Description:** This course focuses on the interdisciplinary study of methods, analyses and critiques used by scholars to study social issues within and across a range of disciplines (e.g., history, arts, humanities, sciences, education, health, economics, law and social/behavioral sciences). Research designs and general statistical interpretation will be reviewed for each methodology. Techniques for laboratory and field research, conducting qualitative and quantitative studies, and writing research reports will also be included.

*Note:* Credit will be grade for only one prefix: GWS or AAS or CHS.

**Cross Listed Course(s):** AAS 2010, GWS 2010

## **CHS 2100 - Women of Color**

**Credits:** 3

**Description:** In this course students focus on the narratives, practices and everyday life experiences of women of color in the U.S. The similarities and differences among diverse groups of women, and other gender expansive minorities of color, are also examined to better understand the complexity of our gendered and racialized lives. Through an intersectional perspective, students address issues of work, health, interpersonal violence, media representations, globalization, as well as activism, social change and theoretical innovation. Students complete the course with a better understanding of the systems of privilege and oppression that have historically shaped the experiences of women of color and will acquire new tools to analyze social and cultural experiences.

*Note:* Credit will be granted for only one prefix: AAS, CHS, or GWS.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** AAS 2100, GWS 2100

## **CHS 2110 - The Chicano in Aztlan**

**Credits:** 3

**Prerequisite(s):** CHS 1000 or Permission of instructor

**Description:** This course focuses on three major motifs associated with the socio-historical development of the Chicano in the Southwest: land, farm labor, and urban enclave.

## **CHS 2200 - Survey of Chicano/a Cultural Studies**

**Credits:** 3

**Prerequisite(s):** CHS 1000

**Description:** This course introduces students to the inter- and trans-disciplinary approaches to recognizing, analyzing, constructing and deconstructing cultural texts. The course considers different kinds of cultural texts and ways of reading them from folktales, myths, music, monuments, rituals and games, to poems, novels, and political movements.

## **CHS 2500 - Borderland Studies: Variable Topics**

**Credits:** 3

**Prerequisite(s):** CHS 1000

**Description:** This course examines the various expressions of borderland experiences through literature, film, religion, gender, immigration, music, and language.

*Note:* This course may be repeated under different titles for up to 9 credits.

## **CHS 2600 - Chicana/o and Latina/o Religious Cultures**

**Credits:** 3

**Description:** This course will engage aspects of Chicana/o and Latina/o religious experiences, practices, and expressions in the United States of America. While the course is grounded in Chicana/o

religious experience, other Latina/o communities will also be discussed with emphasis on comparative aspects of the groups. Some attention will be given to historical contexts in Iberia and Latin America, as well as questions of how one studies Latina/o religions, but most of the course will examine moments in which religious expressions intersect with politics, popular culture, and daily life in the U.S.A.

*Note:* Credit will be granted for only one prefix: CHS or PHI.

**Cross Listed Course(s):** PHI 2600

### **CHS 3000 - History of Meso-America: Pre-Columbian and Colonial Periods**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course examines the history of Meso-America and its relationship to the American Southwest from pre-Columbian times to 1836. Particular attention will be paid to the dynamism of indigenous peoples and the hybrid nature of the region's culture after the Spanish conquest.

*Note:* Credit will be granted for only one prefix: CHS or HIS.

**Cross Listed Course(s):** HIS 3745

### **CHS 3010 - The Mexican Revolution**

**Credits:** 3

**Prerequisite(s):** CHS 1000 or Permission of instructor

**Description:** This course traces the social, political, and economic forces that contributed to the Mexican Revolution (1910-1920). Furthermore, it provides a critical analysis of how leaders, women, the Mexican masses, and the U.S. influenced revolutionary events.

*Note:* Credit will be granted for only one prefix: CHS or HIS.

**Cross Listed Course(s):** HIS 3830

### **CHS 3020 - Chicana/o History, 1836 to the Present**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course is a historical survey of the Mexican population born and living in the Southwestern United States. Students in this course examine the era from the Texas Revolt in 1836 through the contemporary era of the 21st Century. Students will study complex racial, class, gender, regional, and generational identity issues affecting the intra-ethnic relations among Chicanas/os in the multicultural U.S. Special attention will be paid to Chicanos/as in Colorado history.

*Note:* Credit will be granted for only one prefix: CHS or HIS.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** HIS 3560

### **CHS 3025 - Contemporary Chicana/o Art**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course is a survey of contemporary Chicana/o art. The historical, religious, social and political contexts of the artworks are studied. Students examine recurrent themes, icons, imagery, and forms within the historical timeline. This course may not be used as the sole art history elective for art studio majors.

*Note:* Credit will be granted for only one prefix: CHS or ARTH.

**Cross Listed Course(s):** ARTH 3360

### **CHS 3100 - Social Justice and Activism in the Chicana/o Community**

**Credits:** 3

**Prerequisite(s):** CHS 1000

**Description:** Students in this course are provided an in-depth sociological, historical and political analyses of community-based organizations, the processes by which they originated, leadership styles, and information relative to their missions and functions within the Chicana/o community. Students will analyze theories regarding social change as they apply to social justice, activism and community organizing.

*Note:* Credit will be granted for only one prefix: CHS, HON, or SWK.

**General Studies:** Social and Behavioral Sciences

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** HON 3101, SWK 3110

### **CHS 3200 - Chicanos and the Law**

**Credits:** 3

**Prerequisite(s):** CHS 1000 or CJC 1010, or permission of instructor; and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** Students in this course explore a range of legal, philosophical, and policy approaches to legal issues affecting the Latinx population. Students will study the interaction between Chicanos/as and Latinos/as and the legal system is examined within the political, social and historical context of the U.S. Specifically, an overview of White supremacy, intersectionality, and the history of oppression in America via the legal system, and U.S. Constitutional Law via U.S. Supreme Court cases in the context of Latinos is presented as they relate to the legal significance of the social factors of race, ethnicity, class, gender, sexual orientation, national origin, and citizenship.

*Note:* Credit will be granted for only one prefix: CHS or CJC.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** CJC 3720

### **CHS 3210 - The Chicano Family**

**Credits:** 3

**Prerequisite(s):** CHS 1000 or permission of instructor; and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This course provides an in-depth analysis of the Chicano family as a social institution. The course covers the social and economic history of the Chicano family in the Southwest and examines contemporary patterns of urban Chicano family life in a changing society.

**Cross Listed Course(s):** SOC 3470

### CHS 3300 - Education of Chicano Children

**Credits:** 3

**Prerequisite(s):** CHS 2000

**Description:** This course presents the Chicano perspective on current public education policy and its implementation in the schools. Examines learning and teaching differences in students and teachers.

*Note:* Credit will be granted for only one prefix: CHS or EDU.

**Cross Listed Course(s):** EDU 3120

### CHS 3400 - The Chicano Novel

**Credits:** 3

**Prerequisite(s):** CHS 2010 or Permission of instructor

**Description:** This course deals with origins, themes, and techniques that characterize the Chicano novel. It is an in-depth study of the best examples of literary production in both Spanish and English.

*Note:* Credit will be granted for only one prefix: CHS or ENG.

Suitable for non-English majors.

**Cross Listed Course(s):** ENG 3480

### CHS 3401 - Art of Mesoamerica: from Olmec to Aztec

**Credits:** 3

**Prerequisite(s):** ARTH 1600 with C- or better OR CHS 1000 with D- or better; OR permission of department.

**Description:** Students in this course explore the rich and varied visual cultures of Mesoamerica, from the colossal heads of the Olmec and the painted city of Teotihuacan to the courtly arts of the Classic Maya and the great temples of the Aztec. Using artworks and writings from both pre- and post-contact with Europeans, students engage with the indigenous systems of scientific knowledge, political and spiritual power, and complex mythologies. Students also investigate the materials and processes employed by Mesoamerican sculptors, painters, potters and scribes, from lustrous jade and brilliant cochineal to the precious pigment known as "Maya blue".

*Note:* Credit will be granted for only one prefix: ARTH or CHS.

**Cross Listed Course(s):** ARTH 3401

### CHS 3410 - Chicano Folklore of the Southwest

**Credits:** 3

**Prerequisite(s):** CHS 2000 or Permission of instructor

**Description:** This course accents the study of oral and written folklore as a genre in Chicano history and culture. Its focus is upon tales, traditions, belief, and humor as a means to gain insight into what is culturally specific.

### CHS 3460 - Chicana Feminisms

**Credits:** 3

**Prerequisite(s):** CHS 1000 or GWS 1001; or permission of instructor

**Description:** This course will provide students with a general background on Chicana feminist thought. Chicana feminism has carved out a discursive space for Chicanas and other women of color, a space where they can articulate their experiences at the intersection of race, class, gender, and sexuality, among other considerations. In the process, Chicana feminists have critically challenged Chicano nationalist discourse as well as European and North American feminism. The course will address the diversity in thinking and methodology that defines these discourses thus acknowledging the existence of a variety of feminisms that occur within Chicana intellectual thought. The course will also explore the diversity of realms in which this feminist thinking is applied: labor, education, cultural production (literature, art, performance, etc.), sexuality, and spirituality, among others.

*Note:* Credit will be granted for only one prefix: CHS, GWS or HON.

**Cross Listed Course(s):** GWS 3550, HON 3460

### CHS 3481 - Latin American Moderns: from Rivera to Botero

**Credits:** 3

**Prerequisite(s):** ARTH 1800 with C- or better or CHS 1000; or permission of department

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** Students in this course are introduced to the artistic developments of modernism and postmodernism in Latin American history from the wars of independence in the 19th century to the political upheavals of the 1970s and '80s. During this period many artists gained international reputations, from Diego Rivera and Frida Kahlo to Roberto Matta and Fernando Botero, bringing greater visibility to Latin America. Students examine these and other artists of differing periods and nationalities within a unifying thematic framework. These themes include: responses to the colonial past; nationalism and public art; indigenismo; folk/ popular arts; and relations with the European avant-garde. The ways that artists of varying nationalities and artistic philosophies approached these themes created the many distinct but intersecting manifestations of modernism within 20th century Latin America.

*Note:* Credit will be granted for only one prefix: ARTH or CHS.

**Cross Listed Course(s):** ARTH 3481

### CHS 3600 - Mexico and Chicana/o Politics

**Credits:** 3

**Prerequisite(s):** CHS 1000 or Permission of instructor

**Description:** This course reviews the main approaches which have been utilized, in the past and in the present, to comprehend Mexico and Chicana/o politics.

### CHS 3660 - Poverty, Race and Gender

**Credits:** 3

**Prerequisite(s):** SWK 1010 or permission of instructor

**Description:** This course introduces the student to the relationship between race, gender and poverty and examines the underlying causes of the "feminization of poverty" in the United States. Social, economic, age-based and ethnic factors are explored in detail. The differences between prevailing stereotypes and current realities are highlighted.

*Note:* Credit will be granted for only one prefix: CHS, GWS, SOC, or SWK.

**Cross Listed Course(s):** GWS 3660, SOC 3660, SWK 3660

### CHS 3800 - Topics in Chicano Studies

**Credits:** 3

**Prerequisite(s):** CHS 1000, or permission of instructor; and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** Facilitates in-depth study of selected topics in Chicano studies.

### CHS 3880 - Exploring Folklore

**Credits:** 3

**Prerequisite(s):** ANT 1310 or CHS 1000; or Permission of the instructor

**Description:** This course will help the student to analyze the various elements of folklore from verbal to nonverbal classifications, survivals, revivals, and the implications for modern society. Folklore will be studied in a historical and contemporary context. The student will gain an understanding of both the universality and variability of folklore through many global examples compared and contrasted with a regional focus on the folklore of the American Southwest.

**Cross Listed Course(s):** ANT 3380

### CHS 3980 - Internship in Chicana and Chicano Studies

**Credits:** 1-15

**Prerequisite(s):** Major in Chicano studies; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

### CHS 4010 - The Chicano Movement

**Credits:** 3

**Prerequisite(s):** CHS 1000, CHS 3100 or Permission of instructor

**Description:** This course provides a perspective on the Chicano civil rights movement. Discusses the social conditions, civil rights issues, and directions of the movement in contemporary society.

### CHS 4050 - Chicana/o Mental Health Perspectives

**Credits:** 3

**Prerequisite(s):** CHS 1000, CHS 3210; or permission of the instructor

**Description:** This course examines the application of prevention, intervention, and support systems necessary to develop effective mental health practice for the Chicana/o populations. Students examine stressors such as identity and cultural conflict, enculturation, acculturation and the long term effects of oppression that cause individual and family disruption. Students also compare and contrast culturally specific strategies and theories of alternative healing practices in relationship to mainstream practice as well as participate in class field trips to agencies that provide services in the community.

### CHS 4200 - Seminar: Carlos Castaneda

**Credits:** 3

**Prerequisite(s):** At least junior standing or Permission of instructor

**Description:** This course is a serious and detailed analysis of major literary figure Carlos Castaneda and the scope of his production.

*Note:* Credit will be granted for only one prefix: CHS or ENG.

**Cross Listed Course(s):** (ENG 4130)

### CHS 4210 - Chicanas and the Politics of Gender

**Credits:** 3

**Prerequisite(s):** CHS 1000 or GWS 1001, CHS 3460

**Description:** This course is designed to further the theoretical understandings of Chicana Feminisms. The course spends a considerable amount of time dealing with the construction of gender in Chicana/o and Latina/o communities, and how the construction of gender has impacted the daily, lived experiences of not only Chicanas and Latinas, but also of gay, lesbian, transgendered, and queer identified Chicanas/os and Latinas/os. The course examines the social construction of gender within Chicana/o and Latina/o communities through cultural texts such as academic production, art, film, popular culture, and spirituality.

*Note:* Credit will be granted for only one prefix: CHS or GWS.

**Cross Listed Course(s):** GWS 4210

### CHS 4850 - Research Experience in Chicana/o Studies

**Credits:** 3

**Prerequisite(s):** Six hours of upper-division courses in CHS or Permission of instructor and preferably Senior standing

**Description:** This course enhances the development of research skills, theory construction, and application of theory to the discipline of Chicana/o studies. The course requires an in-depth research project

and a research paper on a selected topic. It emphasizes critical understanding of the literature and the writing of a research paper. The course is designed primarily for Chicana/o studies majors and minors.

**University Requirement(s):** Senior Experience

## Chinese

### CHI 1010 - Elementary Chinese I

**Credits:** 5

**Description:** This is an introductory course in Chinese that stresses pronunciation, speaking, listening, and writing. Attention is given to the sound system of Chinese to enable students to distinguish the four tones and to develop and use functional, communicative language skills. Open to students with no previous experience in Chinese

**General Studies:** Oral Communication

### CHI 1020 - Elementary Chinese II

**Credits:** 5

**Prerequisite(s):** CHI 1010 or its equivalent

**Description:** This course is a continuation of CHI 1010 and focuses on skills development in listening, speaking, reading, and writing with emphasis on the use of functional, communicative language for oral and written proficiency and cultural competency.

**General Studies:** Arts and Humanities, Global Diversity

### CHI 1021 - Bridging Cultures on the Job

**Credits:** 1

**Description:** This one-credit course complements the existing CHI 1020 - Elementary Chinese II or its equivalent. It adds a professional dimension to the study of Chinese, with two main objectives: enhancing students' ability to communicate in specific, career-relevant situations in the target language, and developing intercultural expertise for effective communication with individuals from diverse cultural backgrounds.

**General Studies:** Arts and Humanities

## Civil Engineering Technology

### CET 1040 - Introduction to Engineering

**Credits:** 3

**Prerequisite(s):** Minimum performance standard score on math placement test

**Description:** This course is an introductory engineering course exposing students to a cross section of topics in contemporary civil, electrical and mechanical engineering disciplines to assist them with their education career choices. Students are taught to work in teams, introduced to the design process, utilize math and computer programs to analyze raw data and properly display their results in a presentation to their peers. The history of the engineering profession and its relation to current national, social, industrial, ethical, and

international issues and problems will be discussed.

*Note:* Credit will be granted for only one prefix: CET, EET, or MET.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC2

**Cross Listed Course(s):** EET 1040, MET 1040

### CET 1100 - Introduction to Civil Engineering Technology

**Credits:** 3

**Description:** In this course, students learn a cross-section of topics in contemporary Civil Engineering and its sub-disciplines, including Structural Engineering, Water Resources Engineering, Geotechnical Engineering, Infrastructure Engineering, and Sustainable Development. The course emphasizes fundamental concepts and principles of civil engineering, as well as rules, ethics, and education curricula, preparing students to begin their engineering studies.

### CET 1215 - Civil Engineering Graphics

**Credits:** 3

**Description:** Students are introduced to drawing and modeling concepts used in civil engineering applications via Computer Aided Design (CAD).

### CET 2003 - Building Structures

**Credits:** 3

**Prerequisite(s):** CET 1215 or IND 1450 or MET 1200 or permission of instructor

**Description:** In this course students learn building structural components and details and architectural modeling through integrated class projects. The students are also introduced to Building Information Modeling (BIM) and to the importance of collaboration between related fields in the building industry.

**Cross Listed Course(s):** ARCH 2003

### CET 2150 - Mechanics I-Statics

**Credits:** 3

**Prerequisite(s):** MTH 1410 and PHY 2311 with a grade of "C" or better

**Prerequisite(s) or Corequisite(s):** PHY 2321

**Description:** In this course, students examine principles of statics, studies of vectors, their resolution and composition, forces and moments, force systems and their resultants. It also covers force systems in equilibrium, static friction, introduces section properties, shear and moment diagrams.

### CET 3000 - Environmental Engineering Fundamentals

**Credits:** 3

**Prerequisite(s):** CHE 1810, CHE 1811, MTH 2410, ENV 1200

**Description:** In this course, students are exposed to the interplay

between humans, our activities, and the environment around us. Over the course of the semester, they will explore anthropogenic and natural effects on air and water quality, how these systems operate and the application of applied sciences (e.g., physics, chemistry, and biology) to the natural world.

*Note:* Credit will be granted for only one prefix: CET or ENV.

**Cross Listed Course(s):** ENV 3000

### **CET 3100 - Construction Methods**

**Credits:** 3

**Prerequisite(s):** At least junior standing; or permission of instructor

**Description:** This course provides a basic understanding of the planning and scheduling methods used to plan the project, develop the baseline schedule, and manage/control project scheduling updates including changes. The students are introduced to the application of project planning fundamentals, CPM schedule development with production rate determinations, and schedule management and control methods.

### **CET 3110 - Construction Estimating**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** CET 3100 or permission of instructor

**Description:** This course is a prerequisite or corequisite of CET 3100, Construction Methods. It provides a basic understanding of the methods used to prepare a construction project cost estimate. The students will use plans and specifications to do quantity takeoffs to determine costs, and assemble a lump sum bid.

### **CET 3120 - Engineering Economy**

**Credits:** 3

**Prerequisite(s):** Junior Standing

**Description:** This course covers the application of economic principles to both engineering and personal economic decision-making. Students in this course are introduced to cash flow diagrams as well as the time value of money concepts of present worth, future worth, and annual worth. This course covers various economic analysis techniques for the comparison and selection of competing economic alternatives. Topics on the proper handling of inflation, depreciation, taxes, and risk are described.

**General Studies:** Social and Behavioral Sciences

### **CET 3135 - Mechanics of Materials with Laboratory**

**Credits:** 4

**Prerequisite(s):** CET 2150 and JMP 2610 with grades of "C" or better; or permission of instructor

**Prerequisite(s) or Corequisite(s):** MTH 2410 or permission of instructor

**Description:** This course introduces the theory of strength of materials, stresses, and strains in members subjected to tension, compression, torsion, and shear. Flexural and shearing stresses in

beams, principal stresses, and deflection of beams, column analysis, and indeterminate structures are also introduced. The laboratory component of the course is structured to give students experience in the use of laboratory equipment for conducting axial loading, shear and bending tests on various materials.

### **CET 3170 - Introduction to Structural Analysis**

**Credits:** 3

**Prerequisite(s):** CET 3135 with a grade of "C" or better, or permission of instructor.

**Description:** In this course, students are introduced to the theory and applications of structural analysis as it applies to various statically determinate and indeterminate trusses, beams, and frames. Students are also introduced to the modeling of such structures for a computer analysis.

### **CET 3185 - Fluid Mechanics I for Civil Engineering Technology**

**Credits:** 3

**Prerequisite(s):** MET 3160 with a grade of "C" or better, or Permission of instructor

**Description:** This course covers and studies the engineering applications of physical properties of ideal fluids, real fluids, hydrostatics, kinematics, energy considerations, momentum principle, dimensional analysis, and incompressible flow in pipes and ducts.

### **CET 3190 - Fluid Mechanics II for Civil Engineering Technology**

**Credits:** 3

**Prerequisite(s):** CET 3185 with a grade of "C" or better

**Description:** This course is a continuation of the fundamentals introduced in Fluid Mechanics I for Civil Engineering Technology, with emphasis on the analysis of forces on immersed bodies, steady flow in open channels, fluid measurements, and the problems associated with unsteady fluid flow.

### **CET 3320 - Environmental Impact Statements**

**Credits:** 3

**Prerequisite(s):** At least junior standing, or Permission of instructor

**Description:** This course is a study of the physical and legal requirements of the environmental impact assessment process. Students will learn to do information research and prepare a draft environmental impact statement.

### **CET 3330 - Environmental Technology Processes**

**Credits:** 3

**Prerequisite(s):** CHE 1100 or CHE 1800 with a grade of "C" or better, at least junior standing; or permission of instructor

**Description:** This course covers chemistry basics, acid-base



reactions, biochemical processes and reactions. Also included is an overview of water and wastewater processes following fieldtrip(s) in this area.

## **CET 3980 - Industry Internship**

**Credits:** 1-15

**Prerequisite(s):** Department permission

**Description:** Industry Internship provides experiential learning opportunities to students through practical, hands-on experiences in the Civil/Construction Project Management field, and is supervised by a faculty member, in conjunction with an internship-site supervisor. Internships must be established following university procedures for credit.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu)*

## **CET 4100 - Capstone: Design Project I**

**Credits:** 1

**Prerequisite(s):** CET 3120 AND JMP 2610 AND MTH 2420 with grades of "C" or better; senior standing

**Prerequisite(s) or Corequisite(s):** One of the following: CET 4120 OR CET 4400 OR CET 4450 with grades of "C" or better

**Description:** In this two phase project-based course, students, within small groups, plan and design a civil-orientated project in consultation with faculty advisors and industry contacts. In phase I of the capstone project, students focus on identifying and planning for a project that is to be fully executed in phase II. Students use their knowledge obtained from the program to research and select a project, generate a project management plan, and initiate the design process. In addition to technical design criteria and considerations, students will need to recognize and incorporate additional critical factors (e.g., professional and ethical, social, economic, sustainability) throughout the planning and design processes.

**University Requirement(s):** Senior Experience

## **CET 4110 - Capstone: Design Project II**

**Credits:** 2

**Prerequisite(s):** CET 4100 with a grade of "C" or better

**Description:** In this two phase project-based course, students, within small groups, plan and design a civil-orientated project in consultation with faculty advisors and industry contacts. In phase II of the capstone project, students focus on developing a complete project design informed by the planning and preliminary design activities conducted in Phase I. Students use their knowledge obtained from the program to develop a complete project. In addition to technical design criteria and considerations, students will need to recognize and incorporate additional critical factors (e.g., professional and ethical, social, economic, sustainability) throughout the design processes.

**University Requirement(s):** Senior Experience

## **CET 4120 - Concrete Design I**

**Credits:** 3

**Prerequisite(s):** CET 3135 with a grade of "C" or better, or permission of instructor

**Prerequisite(s) or Corequisite(s):** CET 3170 with a grade of C or better

**Description:** This course is a basic introduction to the fundamental principles of reinforced concrete design according to current American Concrete Institute (ACI) Code. The course covers flexural analysis and design of beams and one-way slabs, serviceability, bond and development lengths, and shear and diagonal tension.

## **CET 4130 - Soil Mechanics**

**Credits:** 4

**Prerequisite(s):** CET 3135 with grade of "C" or better, and senior standing

**Prerequisite(s) or Corequisite(s):** CET 3185 with "C" or better or permission of instructor

**Description:** This course covers the principles of soil mechanics and fundamentals of application in geotechnical engineering. This course covers soil behaviors and mechanical properties of soil, engineering classification of soil, permeability and seepage, consolidation and settlement, shear strength, lateral earth pressures, fundamentals of retaining structures, soil bearing capacity, and slope stability. This course also provides students the opportunity to obtain "hands-on" experience with some of the laboratory tests, techniques used in geotechnical engineering data collection and analysis methods.

## **CET 4135 - Foundation Engineering**

**Credits:** 3

**Prerequisite(s):** CET 4130 with grade of "C" or better

**Description:** Within this course, students apply the principles of engineering mechanics and soil mechanics to the practical analysis and safe design of shallow foundations, deep foundations, and earth retaining structures. Within the geotechnical design, students learn to manage risk in both Allowable Stress Design (ASD) and Load and Resistance Factor Design (LRFD) methodologies. Students are introduced to ground improvement strategies, site exploration and characterization practices, methods for obtaining and selecting engineering properties, and sustainability practices (e.g., carbon emissions, foundation reuse, geothermal energy).

## **CET 4140 - Concrete Design II**

**Credits:** 3

**Prerequisite(s):** CET 4120 with a grade of "C" or better, or Permission of instructor

**Description:** This course is a continuation of the fundamentals introduced in Concrete Design I, with emphasis on the analysis and design of columns, footings, retaining walls, two-way slabs, and introduction of principles of prestressed concrete.

## **CET 4150 - Highway Engineering and Surveying**

**Credits:** 3

**Prerequisite(s):** At least junior standing; or permission of instructor

**Description:** This course is a specialized course in requirements, functional characteristics, and system characteristics of highway design, incorporating surveying essentials for the civil engineering field. The course develops design methods, procedures, and analysis for pavement design, roadway alignment, and user information for freeways, city arterials, and rural roadways.

## **CET 4200 - Experimental Methods in Structural Engineering**

**Credits:** 3-6

**Prerequisite(s):** CET 3135

**Description:** In this course, students will be dealing with the aspects of static and dynamic testing methods of structures made of steel, concrete, or timber. Students will be introduced to test planning, specimen design and building, loading systems and instrumentation, data acquisition and processing. They will be involved in laboratory applications and hybrid techniques, illustrative physical and numerical simulations.

*Note:* This course is repeatable up to 6 credits.

## **CET 4400 - Steel Design I**

**Credits:** 3

**Prerequisite(s):** CET 3135 with a grade of "C" or better, or permission of instructor

**Description:** This course focuses on the analysis and design of structural steel members, based on the latest edition of the American Institute of Steel Construction (AISC) design requirements and specifications for structural steel.

## **CET 4410 - Steel Design II**

**Credits:** 3

**Prerequisite(s):** CET 4400 with a grade of "C" or better, or permission of instructor.

**Description:** This course is a continuation of the fundamentals introduced in Steel Design I, with emphasis on the analysis and design of structural steel connections, based on the latest AISC design requirements and specifications for structural steel.

## **CET 4450 - Timber Design**

**Credits:** 3

**Prerequisite(s):** CET 3135 with a grade of "C" or better, or permission of instructor

**Prerequisite(s) or Corequisite(s):** CET 3170

**Description:** This course focuses on the analysis and design of wood structures based on the latest edition of the *National Design Specifications for Wood Construction and Supplement*.

## **CET 4520 - Refurbishment of Structures**

**Credits:** 3

**Prerequisite(s):** CET 2150 with "C" or better, or permission of instructor

**Description:** In this course, students study technologies used in restoration, repair, and strengthening of civil engineering structures in order to extend their service life for a sustainable built environment. This course addresses the refurbishment of contemporary steel, concrete, timber, and masonry structures, as well as bridges and historic structures.

## **CET 4570 - Engineering Law**

**Credits:** 3

**Prerequisite(s):** CET 3120 or Permission of instructor

**Description:** This course provides the student with a basic understanding of contract laws and regulations, laws that govern the execution of the work being performed under the contract, laws that relate to the settling of differences and disputes, and licensing laws.

## **Communication Design**

### **CDES 2222 - Fundamentals of Communication Design**

**Credits:** 3

**Prerequisite(s):** ART 1101 and (ARTH 1700 or ARTH 1800) and (ART 1501 or ART 1531 or IND 2100); or (JMP 2430 and JMP 1000 and ART 1531); or (MKT 3000); or permission of department

**Description:** Students in this course learn fundamental theories and principles of communication design for print and screen media as a means to solve problems visually. Emphasis is on idea generation, processes, and concepts that integrate the use of specific technologies. Within this context students investigate the role of design and how it informs contemporary culture. This is an Integrated Media course.

### **CDES 2225 - Typographic Syntax**

**Credits:** 3

**Prerequisite(s):** ART 1101 and (ARTH 1700 or ARTH 1800) and (ART 1501 or ART 1531 or IND 2100); or (JMP 2430 and JMP 1000 and ART 1531); or (MKT 3000); or permission of department

**Prerequisite(s) or Corequisite(s):** ARTH 1700

**Description:** Students in this course are introduced to the study of typography focusing on the function of typography as a visual language, a form of communication, and a central theme in the field of communication design. Subjects explored include typographic history, anatomy, construction and design, grid systems, and identification and classification systems. Functional issues of setting and using typography with sophistication within a variety of contexts are central to this course.

### **CDES 2226 - Design Inquiry**

**Credits:** 3

**Prerequisite(s):** ART 1101 and (ARTH 1700 or ARTH 1800) and (ART 1501 or ART 1531 or IND 2100); or (JMP 2430 and JMP 1000 and ART 1531); or (MKT 3000); or permission of department

**Description:** Students in this course are introduced to the fundamental theories, principles, and objectives of the communication design field. Critical frameworks presented in readings respond to historic and contemporary contexts that define design practice and its impacts. The function of designed communications as products, services, and experiences are assessed in their relationship to culture through social, economic, and environmental factors. Theoretical and practical content includes the role technology and audience experience play in a contemporary context where "design" is ubiquitous.

## CDES 2302 - Interactive Systems

**Credits:** 3

**Prerequisite(s):** ART 1101 and (ARTH 1700 or ARTH 1800) and (ART 1501 or ART 1531 or IND 2100); or (JMP 2430 and JMP 1000 and ART 1531); or (MKT 3000); or permission of department

**Description:** Students in this course research and investigate various methods of constructing design processes and interactive systems for digital audiences. Students implement design frameworks and mapping for interactive components while gaining fundamental skills in user experience research and interaction design, including foundational user interface design competencies. Emphasis is placed on usability, accessibility and user-centered design strategies for creating foundational interactive experiences. This is an Integrated Media course.

## CDES 2602 - Interface Design and Development

**Credits:** 3

**Prerequisite(s):** ART 1101 and (ARTH 1700 or ARTH 1800) and (ART 1501 or ART 1531 or IND 2100); or (JMP 2430 and JMP 1000 and ART 1531); or (MKT 3000); or permission of department

**Description:** Students in this course examine contemporary standards of interactive web design and development. Students investigate contemporary design culture, conceptual development and technical learning capabilities with application to real-world scenarios based on industry expectations and procedures. As author and designer, students produce a functioning website utilizing the web as a vehicle for community-driven collaborations. Students gain knowledge of intuitive user interface design tools and foundational web development. This is an Integrated Media course.

## CDES 3001 - Zeromile and 'Zines

**Credits:** 3

**Prerequisite(s):** ARTH 1800 and CDES 3215 with C- or better in each.

**Description:** Students in this course examine communication design's role in print publishing. Zeromile is a self-funded, annual, print and Internet magazine published collectively by students and faculty in the Communication Design program. In addition to performing a staff role on Zeromile students self-publish their own

magazines ('zines) and books. Topics include editorial design and content development, print publishing software and tools, print production and post-production techniques, copyright issues, publication, distribution and the business of publishing.

*Note:* This course is repeatable for a maximum of six semester hours.

## CDES 3101 - Community-Based Design

**Credits:** 3

**Prerequisite(s):** ARTH 1800 and ART 3237 or ART 3393 or CDES 2602 or CDES 3625 with "C-" or better in each.

**Description:** This course challenges students to formulate design solutions that create positive change collaboratively with underserved or marginalized communities and individuals. Sometimes referred to as design in the public interest, this course facilitates interaction between student designers and those in need of life-changing design solutions. Students work in teams to solve triple bottom line issues through social, environmental and economic filters. Emphasis is on development projects that can be implemented regionally, nationally or internationally. Students are required to work in a highly inclusive manner with project participants. This is an integrated media course.

*Note:* This course is repeatable for up to 6 credits. Some sections of this course may be taught as Service Learning.

## CDES 3215 - Typographic Aesthetics

**Credits:** 3

**Prerequisite(s):** ART 1101, ART 1141, ART 1501, ART 1531, ARTH 1600, ARTH 1700, CDES 2222, and CDES 2225 with "C-" or better in each; or permission of department

**Description:** Students in this course conduct critical studies of typographic design with an emphasis on the meaning, application, and aesthetics of typography solutions by examining typographic form, function, and concepts. Students analyze and criticize the meaning of typographic form in various social, cultural and historical communication contexts. Students construct and design custom typefaces while further practicing and analyzing critical conceptualization, authoring, and research skills.

## CDES 3222 - Design Research Methods

**Credits:** 3

**Prerequisite(s):** CDES 2222, CDES 2225 and CDES 2226 with C- or better in each; or permission of department

**Prerequisite(s) or Corequisite(s):** CDES 2302 and CDES 3215 with C- or better in each; or permission of department

**Description:** This course examines how designers conduct research in order to produce relevant and meaningful visual communications that are appropriate for specific audiences, cultures, and contexts. Students learn how to harness meaning and potential in their work by applying a range of research methods to their everyday design practice. Concepts include developing and using ethnographic strategies, personas, interviewing, and iterative design processes among others. Students work in teams, putting theory into action, which informs collaborative design practice thereafter.

## CDES 3225 - Integrated Production Techniques

**Credits:** 3

**Prerequisite(s):** CDES 3215 with C- or better or permission of department

**Prerequisite(s) or Corequisite(s):** CDES 3222 with a C- or better or permission of department

**Description:** Students in this course are offered a specialized focus on production techniques integral to the practice of communication design. The application of integrated methods bridges design concepts and design forms in a variety of mediums including traditional print publishing, packaging, and product development. Students examine multi-level publishing, content management, production workflow, integrated software use, and print and new media production and post-production. This course is restricted to Communication Design majors who have passed the BFA in Communication Design portfolio review.

## CDES 3236 - Experimental Animation

**Credits:** 3

**Prerequisite(s):** ART 1531 with C- or better; or permission of the department

**Description:** Students in this course learn experimental concepts and techniques to create 2D and 3D digital animations. They focus on the intellectual investigation of animation themes and forms, emphasizing innovative concepts and processes to expand the scope of animation possibilities within the discipline of studio art. This is an integrated media course.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** ART 3236

## CDES 3300 - Data-Driven Design

**Credits:** 3

**Prerequisite(s):** ART 1531 with "C-" or better; either ART 1101, ART 1141, ART 1501, and ARTH 1600 with "C-" or better; or JMP 2430 and JMP 1000.

**Description:** Students in this course explore the practical and theoretical aspects of data driven design. Students learn to visually communicate information clearly by creating dynamic, information rich, and interactive projects by using current programming and compositing applications. Research and presentation skills, conceptual thinking, and the integration of technological and design methodologies are explored throughout the course. This is an integrated media course.

## CDES 3500 - Site Specific Studies in CDES: Variable Topics

**Credits:** 3

**Prerequisite(s):** CDES 2222; or permission of instructor

**Description:** Students in this course travel to a city or a region and explore design practices that are specific to the location. Emphasis is placed upon the contemporary, historical, geographical, and philosophical context of cultural sites, design studios, public spaces,

and other sites visited or viewed. Combining field study and studio practice, design work will be made on-site in response to the social and cultural immersion.

*Note:* Variable topics; may be repeated for up to 9 credits under different topics.

## CDES 3602 - Interactive Design I

**Credits:** 3

**Prerequisite(s):** CDES 2602 and CDES 2302 with C- or better in each; or permission of department

**Description:** Students in this course explore the theory and practice of designing for multiple devices. Students create and implement consistent design applications that function across multiple devices and scenarios. By designing interfaces that respond to changes in the current environment, students further their knowledge of user experience design, user interface design, and advanced web development. The ability to apply these skills to real-world scenarios based on industry expectations and procedures are demonstrated. Emphasis is on the exploration of trends in technology that are bridging disciplines and offering new opportunities to designers. This is an integrated media course.

## CDES 3623 - Identity and Systems Design

**Credits:** 3

**Prerequisite(s):** CDES 3215 with C- or better; or permission of department

**Prerequisite(s) or Corequisite(s):** CDES 3222 with a C- or better; or permission of department

**Description:** Students in this course focus on the historical and contemporary practice of designing brand identity and related systems applications. Subjects for investigation include identity design, application of brand strategy, and design of system architecture. Students research design processes, create communicative identity marks, and apply strategies to design systems, applications, products and services. Students engage in an in-depth study of the qualities, ideals, elements and dynamics that shape branded communication design outcomes. Emphasis is on creating strong, clear conceptualization processes over a series of related communication design pieces that cross digital, social media and print formats.

## CDES 3625 - Animation Practices

**Credits:** 3

**Prerequisite(s):** ART 1531; or MKT 3000; with "C-" or better in each; or permission of department.

**Description:** In this course, students learn to animate by examining movement and timing, exploring different techniques, and studying historical and contemporary animation practices. With an emphasis on storytelling, students produce a series of 2D animations, which begin with storyboard development and character designs. This course emphasizes research and conceptual thinking while incorporating art and design methods. This is an Integrated Media course.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** ART 3625

## **CDES 3690 - History of Communication Design**

**Credits:** 3

**Prerequisite(s):** ART 1101, ARTH 1700 or ARTH 1800 with "C-" or better; or permission of department

**Description:** Students in this course engage in a study of communication design through the lens of history and the practices of making. Social, economic, and environmental factors provide frameworks for the analysis of movements, people, places, processes, and technologies that have revolutionized society's relationship with visual communication throughout history. Contemporary scholarship and practice in design is contextualized through written and visual outcomes so that recent innovations in the field may be explored. Students relate and compare practices across design history and examine creative and scholarly interpretations of works of design in a contemporary context.

## **CDES 3980 - Communication Design Junior Internship**

**Credits:** 1-4

**Prerequisite(s):** At least sophomore standing; cumulative MSU Denver GPA of 2.5 or higher; and CDES 3215 with a "C-" or better; or permission of department

**Description:** Students in this junior-level communication design internship gain "real world" experience in the discipline of design, building upon knowledge gained in the classroom. This course functions as an elective and can be a supportive precursor to the required, senior-level internship, CDES 4625.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable credit; course may be repeated for a maximum of five total credit hours. Repeated experiences must either be at different employer or with significantly different tasks at same employer. Fieldwork requires a minimum of 50 contact hours for each semester credit hour.

## **CDES 4051 - Sight Sound Syntax**

**Credits:** 3

**Prerequisite(s):** CDES 3215 with a C- or better, or permission of department

**Prerequisite(s) or Corequisite(s):** CDES 3222 with a C- or better, or permission of department

**Description:** Students in this course explore how communication design is enriched via the employment of sensory experiences. Through the multidimensional relationships among typography, photographic sequencing, and originally generated sound, students are introduced to shared elements of auditory and visual composition: theme, rhythm, harmony (including consonance and dissonance), texture, dynamics, color, and form. Exploration

focuses on interpretive visualizations that include experimental interactive studies referred to as sonographics. Studies in abstract typography, grid systems, photographic sequencing, and sound experiments challenge students to arrive at associative and interactive solutions. Students work individually and in teams to synthesize and exhibit their understanding of the conceptual and structural relationships between visual and sonic media. They demonstrate the capacity to design engaging and compelling solutions as applied to real-world scenarios.

## **CDES 4151 - Design in Public Space**

**Credits:** 3

**Prerequisite(s):** CDES 3215 with a C- or better or permission of department

**Prerequisite(s) or Corequisite(s):** CDES 3222 with a C- or better or permission of department

**Description:** Students in this course develop critical and technical skills as they relate to contemporary design as practiced for both advertising and community based design in public space. Exploration of Communication Design for the public space focuses on developing skills that communicate to diverse urban communities and are relevant to contemporary design culture. Students foster a visual language that reflects the philosophical, conceptual, and technical demands of design for the public space through site-specific research, problem identification, ideation, and prototyping.

## **CDES 4152 - Citizen Designers: Social Poster Design**

**Credits:** 3

**Prerequisite(s):** CDES 3215; or permission of department

**Prerequisite(s) or Corequisite(s):** CDES 3222; or permission of department

**Description:** Students in this course explore themes of social advocacy with emphasis placed upon research, process and production techniques through poster design. Social causes are addressed through large-scale print media as a platform for communication, applied to real-world scenarios. As a medium for social change, posters are persuasive, conceptual, educational and informational as platforms for advocacy through the public dissemination of ideas. Students demonstrate the designer's role in social and political frameworks, integrating how to respond to cause-based contexts in relation to design and communication.

## **CDES 4202 - Interactive Design II**

**Credits:** 3

**Prerequisite(s):** CDES 3602 with "C-" or better or permission of department.

**Description:** Students in this course build upon the skills and knowledge acquired in CDES 3602 - Interactive Design I. Students continue to explore the theory and practice of designing for multiple devices as well as advanced user interface design and web development variables. This course provides students with expanded comprehension of how to create design applications that function across multiple devices by responding to changes in various environments and scenarios. Students demonstrate their ability to

apply these skills to real-world scenarios based on industry expectations and procedures. Emphasis is on the advanced exploration of trends in technology that are bridging disciplines and offering new opportunities to designers.

## **CDES 4251 - Designing the Human Experience**

**Credits:** 3

**Prerequisite(s):** CDES 2222 and ART 1505 or ART 3301 or ARTH 2600 or ARTH 3690 or ARTH 4480 or CDES 3602 or CDES 3625 or IND 3000; or permission of department

**Description:** Students in this course learn that good design can serve to enrich the human experience. Students explore a spectrum of life experiences and/or personal events, which may include habit, memory, disaster, and imagination, as inspiration to create and implement positive design solutions. Students produce a series of intensive, multi layered projects with emphasis on tracking, recording, and journaling the human experience. Students build upon their knowledge of design discourse in the discipline through a mix of readings, writings, and development of rich, meaningful design projects. Design projects are presented in a variety of media. This is an integrated media course.

## **CDES 4252 - Mobile Prototyping**

**Credits:** 3

**Prerequisite(s):** ARTH 1800, CDES 2602 and CDES 2302 with "C-" or better in each; or permission of department

**Description:** Students in this course create mobile applications via user experience, user interface design, and interactive prototyping. Exploration and emphasis is placed upon usability, accessibility as well as user-centered design methodologies and processes in this growing digital medium. Students utilize design thinking to better respond to diverse audiences, implement mobile strategy and content in order to create a working design system for mobile applications, inclusive of prototyping and testing. Human-centered design, dependent on the psychology and intersection of usability within digital mediums, is discussed, evaluated and applied to interactive prototyping in response to technology's continual diversification of end-user products.

## **CDES 4300 - Variable Topics in Communication Design**

**Credits:** 3

**Prerequisite(s):** CDES 2222 and CDES 2225 with a "C-" or better, or permission of department

**Corequisite(s):** CDES 2226

**Description:** This course provides a thematic forum in communication design for advanced-level students to develop critical and technical skills as they relate to contemporary design practices. Exploration within the theme focuses on developing skills that communicate to diversified communities and are relevant to contemporary design culture. Students foster a visual language that reflects thematic course content. Projects may be produced in a

variety of design applications based on course content. Variable topics: may be repeated for up to 9 credits under different topics.

## **CDES 4400 - Thesis Preparation**

**Credits:** 3

**Prerequisite(s):** CDES 2226 and CDES 3215 with C- or better in each; or permission of department

**Prerequisite(s) or Corequisite(s):** CDES 3222 and CDES 3690 with C- or better; or permission of department

**Description:** Students in this course develop a thesis topic supported by a research question, which serves as the foundation for a thesis project exhibition in CDES 4721 the following semester. Students conduct research, propose a topic for investigation, craft a research question, refine an abstract, and create visual studies of a project concept in an exhibition context. This course is restricted to Communication Design majors.

## **CDES 4450 - Professional Practices in Communication Design**

**Credits:** 3

**Prerequisite(s):** CDES 3215 and CDES 2302 with "C-" or better in each.

**Prerequisite(s) or Corequisite(s):** CDES 2602, CDES 3222 and CDES 3225

**Description:** Students in this course are provided an overview of professional practices in communication design. Professional practices range from resume writing and job application material development to best practices in conducting contract and freelance work and pitching concepts in front of clients. Topics include strategies for personal communications packages, networking, applying for jobs, interviewing skills, and ethical practices in the work place as a design employee or proprietor in a wide variety of workplace settings. Entrepreneurial initiatives are covered from starting a business to negotiating contract and/or freelance work and bidding on jobs. This course is restricted to communication design majors.

## **CDES 4600 - Communication Design Portfolio Development**

**Credits:** 3

**Prerequisite(s):** Senior standing; completion of Written Communication, Oral Communication, and Quantitative Literacy General Studies requirements; ARTH 1800, CDES 3225, CDES 3623, CDES 3625, and CDES 4450 with "C-" or better in each; or permission of department.

**Prerequisite(s) or Corequisite(s):** ARTH 3690 and CDES 3001 or CDES 3101 or CDES 3300 or CDES 3500 or CDES 3602 or CDES 3980 or CDES 4051 or CDES 4151 or 4152 or CDES 4202 or CDES 4251 or CDES 4252 or CDES 4300

**Description:** Students refine an existing body of work to generate final portfolio solutions. Students explore the critical nature of their work by clarifying project results, and as necessary, redeveloping outcomes, for presentation in both web and print-based

portfolios. Writing and critical inquiry skills supporting portfolio development are emphasized. The portfolio work generated in this course will be used in the course CDES 4721 - Communication Design Senior Experience: Exhibition and Thesis.

**University Requirement(s):** Senior Experience

## **CDES 4625 - Communication Design Internship**

**Credits:** 3

**Prerequisite(s):** CDES 3225 and CDES 4450 with "C-" or better and permission of department

**Description:** Students in this course apply for and acquire a communication design internship identified for its professional challenges and overall integrity. Students gain "real world" experiences in the discipline of design building upon previous knowledge gained in the classroom. Fieldwork requires a minimum of 150 contact hours for three semester credit hours. This course is restricted to communication design majors.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

## **CDES 4650 - Studio M**

**Credits:** 3

**Prerequisite(s):** CDES 3225 and CDES 4450 with "C-" or better and permission of department

**Description:** This course operates as a functioning design studio where communication design students work collaboratively with course faculty and peers and a range of university and/or community sponsors. Sponsored projects are taken from initiation and planning through to final production and implementation based on the requirements of the design brief. This unique mentored opportunity requires students to apply for a limited number of available design positions in Studio M. Studio M requires a minimum of 150 contact hours for three semester hours. The course fulfills the senior level internship requirement in the Communication Design major.

*Note:* This course may be repeated once for up to 6 credits total. Some sections of this course may be taught as Service Learning.

## **CDES 4721 - Communication Design Senior Experience: Exhibition and Thesis**

**Credits:** 3

**Prerequisite(s):** Satisfaction of Written Communication, Oral Communication, and Quantitative Literacy course requirements; ARTH 4480 and CDES 4400 with "C-" or better in each; and senior standing; or permission of department.

**Prerequisite(s) or Corequisite(s):** ARTH 3690 and CDES 4600 and (CDES 4625 or CDES 4650) and (CDES 4450 or CDES 4700) with C- or better in each

**Description:** Students in this BFA in Communication Design capstone course create a thesis project, research and write a thesis paper, participate in a public exhibition, and defend their work in a formal, final review setting. Students synthesize learning from

previous coursework and articulate meaning in their thesis investigations relative to art and design theories, movements, and conceptual and philosophical frameworks. Students work in teams to conceptualize, organize, and present an exhibition consisting of the work of participating art and design students. A blend of team and individual activities punctuate the semester experience culminating in the public thesis exhibition.

**University Requirement(s):** Senior Experience

## **CDES 4801 - Communication Design Studio Assistantship**

**Credits:** 1-4

**Prerequisite(s):** Permission of department

**Description:** This studio course allows the advanced student to put into use the studio skills learned in previous courses to assist faculty and other students. Students learn to assist in laboratories, maintain tools and equipment, mix chemicals (if appropriate) and handle and stock supplies in an appropriate manner. They demonstrate techniques and assist other students with technical and creative questions.

*Note:* Variable credit; course may be repeated once for a maximum of 6 semester hours of credit with different duties.

## **CDES 4802 - Letterpress Assistantship**

**Credits:** 1-4

**Prerequisite(s):** Permission of department

**Description:** This studio course allows the advanced student to put into use letterpress printing operation and skills learned in previous courses and through specialized training workshops to assist faculty and other students. Students learn to assist in laboratories, maintain letterpress tools and equipment, and handle inks and stock supplies in an appropriate manner. They demonstrate techniques and assist other students with technical and creative questions.

*Note:* Variable credit; course may be repeated once for a maximum of 6 semester hours of credit.

## **CDES 4842 - Directed Studies in Communication Design**

**Credits:** 1-4

**Prerequisite(s):** CDES 3625 with "C-" or better and permission of department; student must provide a suitable laptop computer.

**Description:** This course provides advanced, independent studio work in communication design with emphasis on the production of finished work in preparation for either senior portfolio or thesis exhibition. The student integrates techniques and skills learned in previous courses to develop an individual voice and create a coherent body of work.

*Note:* Variable credit; this course may be repeated once for a maximum of 6 semester hours total credit.

## **CDES 4848 - Directed Studies in Letterpress**

**Credits:** 1-3

**Prerequisite(s):** CDES 2225 or Art 2682 with "C-" or better and permission of department

**Description:** Students in this course create advanced, independent studio work in communication design with emphasis on the production of finished work in letterpress printing through an emulation of the traditional Letterpress apprenticeship model in which knowledge is continually passed on to those with less experience. Skills learned in previous courses and through specialized training workshops are used to produce advanced studio work. Students become familiar with type and presses through ongoing maintenance training and activities. Students learn to assist in laboratories, maintain letterpress tools and equipment, handle inks and supplies in an appropriate manner. They demonstrate techniques and assist other students with technical and creative questions.

*Note:* Variable credit; course may be repeated once for a maximum of six hours of credit.

## Communication Studies

### COMM 1010 - Presentational Speaking

**Credits:** 3

**Description:** This course teaches students how to design and deliver effective, ethical presentations. The ability to adapt to different audiences and contexts - such as professional or public situations - is emphasized. The course provides instruction on and practice of organization, delivery and performance, technology, and research skills. Students also learn effective listening techniques and critical thinking skills. The course empowers students to become successful professional presenters and public speakers.

*Note:* Credit will be granted for only one prefix: COMM or HON. Sections of this course may be offered in-person, in hybrid format, or online.

**General Studies:** Oral Communication

**Cross Listed Course(s):** HON 1013

### COMM 1100 - Fundamentals of Oral Communication

**Credits:** 3

**Description:** This is an introductory course in the art and process of communicating with people in a variety of environments and contexts. This class provides students with insight and tools from communication research to analyze communication situations and develop effective, ethical messages appropriate to purpose, audience, context and medium. The course emphasizes developing basic communication skills in listening, assertive communication, self-analysis, presentations, and managing conflict.

**General Studies:** Oral Communication

### COMM 2010 - Gender and Communication

**Credits:** 3

**Description:** This course explores the relationship of gender to the communication process examining issues of power, conflict, sex role

stereotypes, and cultural patterns of interaction on relationships and identity. Students explore the multiple ways that masculinity and femininity are created and sustained through communication in such contexts as families, schools, the workplace, and the media. Students use feminist theoretical perspectives and interpretive approaches from communication studies to analyze cultural assumptions and the relationships of notions of gender to class, sexuality and race.

*Note:* Credit will be granted for only one prefix: COMM or GWS.

**General Studies:** Arts and Humanities

**Cross Listed Course(s):** GWS 2770

### COMM 2020 - Introduction to Health Communication

**Credits:** 3

**Prerequisite(s):** COMM 1010 or COMM 1100 or Permission of Instructor

**Description:** This course explores the essential connections between communication processes and human health. Different modes of communication are considered in contexts that range from one-on-one conversations to information exchange with large groups. The importance of relationships, culture, technology, and media for health practices are also explored.

*Note:* Credit will be granted for only one prefix, COMM or SLHS.

**General Studies:** Social and Behavioral Sciences

**Cross Listed Course(s):** SLHS 2990

### COMM 2030 - Intercultural Communication

**Credits:** 3

**Prerequisite(s):** COMM 1010 or COMM 1100 or permission of instructor

**Description:** This course applies communication approaches and perspectives to intercultural communication processes within and outside of the United States. The major emphasis in the class is on face-to-face communication within and between members of different cultures and the impact of popular culture on those communications. Living in a global society, it is imperative to know how different cultures communicate around the world. In the course, students will examine the complex relationship between culture, communication, power, and context from three conceptual perspectives: the social scientific perspective, the interpretive perspective, and the critical perspective.

### COMM 2040 - Group Communication

**Credits:** 3

**Description:** In this course, students are introduced to the functions, processes, and issues related to communication in groups. Students learn skills and strategies for communicating effectively with diverse people and for different goals in contexts where group work is essential, especially professional life.

### COMM 2200 - Introduction to Interpersonal Communication



**Credits:** 3

**Description:** This course surveys the theory and practice of interpersonal communication in environments ranging from face-to-face communication to computer-mediated interaction. Students learn concepts and tools essential to self-awareness, listening, assertive and effective communication, cultural competence, and conflict management. These fundamental 'people skills' are explored across relationships in personal, professional, and public life.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

## **COMM 2300 - Introduction to Organizational Communication**

**Credits:** 3

**Description:** This course introduces students to the study of organizational communication theory and practice. It surveys communication-related phenomena such as organizational identity, culture, leadership, and networks. Internal, external, everyday, and strategic communication processes are addressed. Students learn to analyze organizations as systems of communication that both shape and are shaped by individuals and society.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

## **COMM 2400 - Introduction to Rhetoric and Popular Culture**

**Credits:** 3

**Description:** This course introduces students to the rhetorical and critical study of popular culture. Classical and contemporary approaches to examining discourse, persuasion, and cultures are discussed. Students develop analytical tools to identify and explain connections between popular culture and power, identity, diversity, and more. Students also reflect on how they consume and produce popular culture, and how that shapes their sense of self and connections to others.

**General Studies:** Arts and Humanities

## **COMM 3000 - Diversity and Communication in the U.S.**

**Credits:** 3

**Description:** This course examines the relationship between communication and cultural identity with emphasis on the application to four groups of color in the United States: African American, Asian American, Hispanic, and Native American. The goal of the course is to broaden students' perspectives on the power of communication to shape our lived experience and to expand students' capacities to adapt ethically to a changing and diverse world. Students will explore verbal and non-verbal differences and similarities across cultures and critique the communicative construction of ethnocentrism, bias, prejudice, and discrimination.

**General Studies:** Social and Behavioral Sciences

**University Requirement(s):** Ethnic Studies & Social Justice

## **COMM 3010 - Business and Professional Speaking**

**Credits:** 3

**Prerequisite(s):** COMM 1010 or COMM 1100 or Permission of Instructor

**Description:** This course prepares students to communicate competently in professional settings. Students practice communicating in simulated business, public, and employment-related settings. Communication challenges addressed may include employment interviews, online profiles and communication, informational presentations, and team presentations. This course does not satisfy the General Studies Oral Communication requirement.

## **COMM 3020 - Advanced Public Speaking**

**Credits:** 3

**Prerequisite(s):** COMM 1010 or COMM 1100 or HON 1013 or Permission of Instructor; Students must possess a GPA of 3.3 or higher, or be a member of the MSU Denver Honors Program.

**Description:** This course prepares students to design and deliver technical and/or professional presentations with an advanced level of skill. Students select one course project or theme and develop several presentations for different audiences and settings-these include: academic conferences and/or technical presentations to professional associations, public presentations on complex topics, and research poster sessions or business expos. This course is useful for students who plan to earn graduate degrees or seek employment in positions that require communication of complex information.  
*Note:* To register for this course, students must be enrolled in the MSU Denver Honors program or have a 3.3 or higher GPA.

## **COMM 3030 - Teamwork and Collaboration**

**Credits:** 3

**Description:** To be a successful professional in any field today you have to master the skills of effective teamwork. Students in this course learn the importance of shared goals, leadership, communicating appropriately and respectfully, and working across difference to maintain productive collaborations. Students leave this course empowered to build cohesive teams, facilitate productive meetings, and manage team-based projects effectively.

## **COMM 3040 - Crisis Communication**

**Credits:** 3

**Prerequisite(s):** COMM 1010 or COMM 1100 or Permission of Instructor

**Description:** This course covers communication strategies for recognizing, assessing the risk of, identifying the sources of, and effectively responding to organizational crises. Stakeholder analysis, ethical concerns, and emerging trends in the profession of crisis communication are explored in this course. Interpersonal and public communication, traditional media, and new communication technologies are addressed.

## COMM 3070 - Interpersonal Negotiation

**Credits:** 3

**Description:** This course focuses on skills and theories essential to the resolution of interpersonal, group, and organizational conflict. Distributive, integrative, collaborative, and mediated approaches to negotiation are covered. Topics such as conflict frames, cognitive biases, types and sources of power, and problematic communication styles are addressed. Students practice negotiation skills in simulation exercises.

## COMM 3100 - Communication Theory

**Credits:** 3

**Prerequisite(s):** COMM 1100

**Description:** This course surveys a variety of objective and interpretive styled theories, fleshing out the role of communication within each. The course explores theories in interpersonal, relationship development, relationship maintenance, influence, group decision-making, organizational communication, rhetoric, media, culture, and gender. The course is designed to give the students a foundation in communication vocabulary, basic knowledge of key theories, introduction to reading research journals, and application of theory to human communication.

## COMM 3110 - Applied Communication Research Methods

**Credits:** 3

**Prerequisite(s):** COMM 1100, COMM 3100

**Description:** This course exposes students to the different kinds of research that is conducted by communication professionals and scholars. The course prepares students to understand basic concepts of communication research and the variety of ways in which communication can be studied and measured in applied contexts. Students learn by practicing methods commonly employed by industry and academic researchers - including textual review, interviews, surveys, focus groups and basic statistical techniques.

## COMM 3120 - Analyzing Talk and Interaction

**Credits:** 3  
**Description:** Face-to-face interaction is a defining feature of human behavior. It is where language, bodily movement, and other modalities of expression become socially enacted as talk. Through this course, students collect and prepare data to examine this special site of human existence, focusing on how people coordinate and situate their language and bodies within a richly structured social, cultural, and material world.

**Cross Listed Course(s):** ANT 3520, SOC 3360

## COMM 3210 - Family Communication

**Credits:** 3

**Description:** This course is designed to assist students to better understand and improve interpersonal communication processes in

families, including dual-career communication problems, personality patterns, family group roles and their impact on interaction, verbal and nonverbal messages in family contexts, and managing family interpersonal conflict and change.

## COMM 3220 - Communication and the Elderly

**Credits:** 3

**Description:** This course is designed to investigate the particular communication patterns and problems of the aged. It focuses on culturally communicated attitudes toward elderly persons via media, marketing, and institutions, as well as specific communication issues of the aged, such as the communication of intimacy, friendship, control, interaction in work environments, home life, retirement, and death.

## COMM 3310 - Communication Systems and Structures in Organizations

**Credits:** 3

**Description:** This course examines current theories of organizational communication that focuses on interdependence of organizations and how external and internal structures influence individual organizing patterns and communication behaviors. This course introduces students to understand organizational communication as fluid and dynamic networks. Students learn how to analyze organizations as networks of self-organizing that are constantly evolving in dynamic communities as new network links are created, and dysfunctional ones are dissolved.

## COMM 3320 - Communication and Quality of Work/Life

**Credits:** 3

**Description:** This course examines the role of communication in issues of work/life. Students explore exactly what is communicated at work and the pervasiveness of organizations in our lives. By examining organizations through an ethical lens, students articulate what happens when organizations behave poorly or may not have workers best interest in mind. Students explore a variety of case studies to help illustrate various theoretical constructs. Students also contest the social construction of the modern "professional" and reflect on ways to empower oneself with communication strategies that may help foster a higher quality of work/life.

## COMM 3330 - Organizational Culture and Identity

**Credits:** 3

**Description:** This course introduces students to the interdisciplinary study of organizational and professional identity formation, maintenance, and change. Internal and external communication processes related to defining an organization/profession and its image are explored. Students apply theories and techniques for evaluating and crafting organizations' and occupations' socialization processes, cultures, and brands or images. Students engage with real-world case studies and original research in this course.

## COMM 3340 - Leadership Communication

**Credits:** 3

**Prerequisite(s):** COMM 1010 or COMM 1100 or Permission of Instructor

**Description:** In this course, students learn leadership communication theories and hone skills for career advancement. Leadership functions, strategies, contexts, and ethics are explored. Students also reflect upon and develop their own leadership abilities.

## COMM 3400 - Rhetorical Criticism

**Credits:** 3

**Prerequisite(s):** COMM 2400

**Description:** This course focuses on the historical and critical methodologies for analyzing rhetorical efforts, both from the point of view as an intellectual discipline and as a practical art in a democratic society.

## COMM 3410 - Rhetoric and Public Culture

**Credits:** 3

**Prerequisite(s):** COMM 2400

**Description:** This course examines public culture through the lens of rhetorical theory. Using a variety of critical approaches (structuralism, post-structuralism, Marxism, feminism, etc.), we examine various aspects of public culture, including economies of production and consumption of public culture, ways to critically read public culture artifacts, and methods for recognizing implicit value and power in these texts. We engage public culture in various ways in order to investigate how public culture communicates meaning and produces personal, professional, and public identities.

## COMM 3420 - Arguing Constructively

**Credits:** 3

**Prerequisite(s):** COMM 1010 and ENG 1009 or ENG 1010 or permission of instructor

**Description:** In this course, students focus on the principles of critical thinking and reasoning in the use of oral and written argumentation in a range of communication contexts such as political, public, interpersonal, global, mass media, organizational, small group, and technological. Special emphasis is placed on how to argue constructively and how to build, refute, support, and critically evaluate arguments across a variety of fields.

## COMM 3430 - Communication in Politics

**Credits:** 3

**Prerequisite(s):** COMM 1010 or permission of instructor

**Description:** This course acquaints students with the complexities of communication issues and strategies used in and by a variety of governmental bodies. This course emphasizes communication patterns in government institutions, the role and strategies of public influence and change on policy creation, the nature and ethics of campaign strategies and propaganda tactics, the responsibility of

media in public decision-making, and the impact of communication leadership and group dynamics on the resolution of political and social issues.

## COMM 3500 - Environmental Communication

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** What is "the environment" and how do we as humans relate to it? How should we relate to it? This course introduces students to the interdisciplinary study of environmental communication, with special attention to effective and ethical persuasion. The class is structured around historic benchmarks of environmental advocacy and activism that represent major discourses in environmentalism, as well as current case studies from around the world that demonstrate the discourses in action. We will "toggle" between history and contemporary contexts, as well as contexts within and outside of the US, to see how environmental communication takes root and fails to take root; grows and fails to effect change; as it spreads globally. Toggling between the local and non-local contexts around the world allows us to see interconnections, and the implications that such interconnections have for the environment and our relationship to it. It also permits us to explore the connections and divergences of worldviews, experiences, and power structures, with potential to transform business as usual to more just ways of life.

**General Studies:** Social and Behavioral Sciences, Global Diversity

## COMM 3510 - Communication and Conflict

**Credits:** 3

**Prerequisite(s):** COMM 1100

**Description:** This course helps individuals develop strategies for maintaining conflict dynamics in communication interactions at work, home, school, and the community. Effort is made to pinpoint individual communication conflict styles and to assess their effectiveness in conflict interactions. Major topic areas include, but are not limited to, the following: defining conflict; theories on conflict management; intrapersonal conflict; interpersonal conflict; approaches to managing conflict; power issues in conflict management.

## COMM 3980 - Internship in Communication Studies

**Credits:** 1-6

**Prerequisite(s):** COMM 1010 and Instructor Approval

**Description:** This course provides students an internship experience working in any one of a broad range of jobs and careers. Student interns' positions and experiences develop communication skills and aptitudes in real-world occupational and organizational settings. Student interns work with both site supervisors and faculty mentors.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

## COMM 4100 - Communication Ethics

**Credits:** 3

**Prerequisite(s):** Junior standing or Senior standing or Permission of instructor

**Description:** Students in this class explore enduring ideas about, challenges to, and strategies for ethical communication in personal, professional, and/or public contexts. They develop skills for ethical problem solving, responsible decision making, thoughtful expression/mindful listening, and healthy relationships.

## COMM 4120 - Trends in Communication Studies: Variable Topics

**Credits:** 3

**Prerequisite(s):** COMM 1100

**Description:** The purpose of this special topics course is to introduce students to an in depth discussion of issues or research within the field of communication studies.

*Note:* The course may be taken for up to 9 credit hours under different titles.

## COMM 4130 - Debate

**Credits:** 1-3

**Description:** This course focuses on the preparation of students for intramural debates, tournament competition, public exhibition events, and/or related debate activities. It features intensive argument coaching, practice speeches and debates, opportunities for event planning, professional networking (with students, staff, faculty, and civic leaders both on and off campus), and opportunities for special projects associated with the history, theory, pedagogy, and practice of intercollegiate and civic debate. All students at any experience level from novice to expert and any class standing are welcome.

*Note:* Course may be repeated for a total of 6 credits.

## COMM 4310 - Decision Making

**Credits:** 3

**Prerequisite(s):** COMM 2300

**Description:** This course applies organizational communication principles and skills to decision making and problem solving processes in organizational settings. Tools and techniques for identifying and analyzing risk, organizational networks, and strategic response build a communication framework for collaborative decision making. Students apply decision making processes to case studies and simulated environments.

## COMM 4320 - Organizational Communication Consulting

**Credits:** 3

**Prerequisite(s):** COMM 2300

**Description:** Students in this course learn how to consult for planned change and organizational development. The course covers skills and

tools for studying, assessing, reporting on, and intervening in organizations' problems and opportunities. Students plan consultation or development projects and practice elements of communication auditing. The course explores career opportunities in professional consulting and organizational development.

## COMM 4330 - Organizational Learning and Development

**Credits:** 3

**Prerequisite(s):** COMM 2300

**Description:** This course develops students' ability to design and deliver effective training sessions and activities for organizational and professional clients. Students address communication issues that trainers face, goal setting and needs assessment practices, delivery and performance, and professional opportunities in organizational development. Students create original training demonstrations and materials (face-to-face and/or online) in the course.

## COMM 4410 - Techniques of Persuasion

**Credits:** 3

**Prerequisite(s):** COMM 2400

**Description:** This course investigates the factors that influence individuals and groups through the media of persuasive rhetorical campaigns. This course involves specific investigation and analysis of twentieth century persuasive campaigns. Students will have opportunities to study and develop persuasive campaigns in various rhetorical areas.

## COMM 4420 - Freedom of Speech

**Credits:** 3

**Prerequisite(s):** COMM 2400

**Description:** This course is a study of the historical and social influences with inquiry into the legacy of our inherited rights to free speech. This course examines the first amendment's clause on freedom of speech and the press, threats to this freedom and special inquiry into contemporary issues and cases.

**University Requirement(s):** Senior Experience

## COMM 4440 - Sports Discourse in Media and Culture

**Credits:** 3

**Description:** Sports talk has moved off the playing field and into day-to-day discourse in interpersonal, organizational and public communication. This course explores metaphors, mythology, idioms and ideas that emerge from the world of sports and how they impact discourse about gender, community, politics, identity, education, ethnicity, parenting, and organizational life. The role of broadcast media is critically examined for its role in encouraging a cultural dialogue of sports metaphors.

## COMM 4450 - Social Movement Rhetoric

**Credits:** 3

**Prerequisite(s):** COMM 1010 or permission of instructor

**Description:** In this course, students examine social advocacy from the communication perspective. Emphasis is placed on communication styles and the premises associated with a social justice sensibility, informed by communication theory and applied communication practices. Students identify a social justice problem in the local community, design an intervention, and engage the community with various communication strategies and techniques. The class combines classroom instruction with coordinated, integrated, and structured volunteer service.

*Note:* Some sections of this course may be taught as Service Learning.

## COMM 4510 - Mediating Conflict

**Credits:** 3

**Prerequisite(s):** COMM 3510

**Description:** This course examines conflict as a complex communication event with an emphasis on developing skills to engage in mediation. Students learn communication theories relevant to the practice of mediation, several approaches to the process of mediation, a dynamic mediation model that can be adapted to a variety of conflict situations, as well as the interpersonal skills necessary to manage the mediation process.

## COMM 4520 - The Art of Dialogue

**Credits:** 3

**Prerequisite(s):** COMM 2200 or instructor's permission

**Description:** Students in this course learn and practice the art of dialogue - communication that prioritizes presence, mindfulness, and respect. The course explores the connections between thoughtful, empathic conversation and personal relationships, professional life, and healthy communities. Students apply listening, expression, conflict, and collaboration skills by participating in, designing, and facilitating dialogues.

## COMM 4810 - Communication Coaching

**Credits:** 3

**Prerequisite(s):** COMM 1010 and COMM 1100

**Description:** Students in this course develop and practice skills for communication coaching in professional contexts. Using hands-on practice and intensive collaboration, this course prepares students to help others solve problems and build communication skills in their professional lives. The course emphasizes coaching for presentations and teamwork. Students practice trust-building, listening, problem solving, and collaboration to support their own and their clients' growth. This course may be required for students working as peer coaches in the Department of Communication Studies.

## COMM 4910 - Applied Communication Research Project

**Credits:** 3

**Prerequisite(s):** Senior standing AND Communication Studies program, OR instructor permission

**Description:** Students in this course conduct applied research projects relevant to communication professions or graduate programs. They complete an original research project, applying theory and research learned in prior courses. Students learn and practice methods commonly employed by industry and academic researchers - including textual, interview, and/or basic statistical techniques.

**University Requirement(s):** Senior Experience

## COMM 4920 - Senior Seminar

**Credits:** 3

**Prerequisite(s):** Senior Standing or Instructor Permission

**Description:** Students in this course explore a specific, significant communication issue in depth. Topics addressed in the course vary from term to term. Drawing upon prior learning and relevant communication theory and research, students produce original research/professional projects related to the seminar's central themes.

**University Requirement(s):** Senior Experience

## COMM 4930 - Senior Communication Internship

**Credits:** 3-6

**Prerequisite(s):** Senior Standing

**Description:** Students in the Senior Internship explore their career interests while applying, within a work setting, the knowledge and skills they have learned from their Communication Studies coursework. Interns acquire practical communication-centric experience within the professional environment, acquire knowledge of the industry in which the internship is done, apply the knowledge and skills learned through their Communication Studies coursework, develop a greater understanding about career options, formulate career goals, experience the activities and functions of professionals, develop and refine their communication skills, and identify areas for growth.

**University Requirement(s):** Senior Experience

## Computer Engineering

### CEE 1140 - Circuits I

**Credits:** 3

**Prerequisite(s):** MTH 1410, or MTH 2410 (with a grade of "C" or better for all prerequisites)

**Corequisite(s):** MTH 3130 and PHY 2200 and CEE 1145

**Description:** Students in this course develop an understanding of DC circuit analysis, including mesh analysis, nodal analysis, Thevenin conversion, Norton conversion, power, magnetism and magnetic circuits, capacitance, and inductance.

### CEE 1145 - Circuits I Laboratory

**Credits:** 1

**Corequisite(s):** CEE 1140

**Description:** Students develop basic laboratory skills for circuit analysis in electrical and computer engineering. They apply the skills they learned in CEE 1140 (Circuits I) through hands-on laboratory exercises.

## CEE 1150 - Circuits II

**Credits:** 3

**Prerequisite(s):** CEE 1140, CEE 1145, and MTH 2410 (with a grade of "C" or better for all prerequisites)

**Corequisite(s):** CEE 1155

**Description:** This Circuits II course is a continuation of CEE 1140. Studies include single time constant circuits, phasors, and the  $j$  operator, RLC circuits with sinusoidal, steady-state sources, impedance and admittance, AC formulation of classic network theorems, complex network equations, complex power, frequency response, transformers, and two-port network models.

## CEE 1155 - Circuits II Laboratory

**Credits:** 1

**Prerequisite(s):** CEE 1140, CEE 1145, MTH 2410 (with a grade of "C" or better for all prerequisites)

**Corequisite(s):** CEE 1150

**Description:** This Circuits II laboratory course is a continuation of Circuits I and its companion laboratory (CEE 1140/CEE 1145). Studies include single time constant circuits, phasors, and the  $j$  operator, RLC circuits with sinusoidal, steady-state sources, impedance and admittance, AC formulation of classic network theorems, complex network equations, complex power, frequency response, transformers, and two-port network models.

## CEE 2145 - Solid State Electronics

**Credits:** 3

**Prerequisite(s):** CEE 1150 (with a grade of "C" or better for all prerequisites)

**Corequisite(s):** CEE 2165

**Description:** Students study the theory, modeling and application of semiconductor based electronic circuits. The devices include: diodes, MOSFET transistors, voltage regulators and operational amplifiers.

## CEE 2165 - Solid State Electronics Laboratory

**Credits:** 1

**Prerequisite(s):** CEE 1150 (with a grade of "C" or better for all prerequisites)

**Corequisite(s):** CEE 2145

**Description:** The student will develop the laboratory skills necessary for integration of electronic devices in applications such as filtering, amplification, and voltage regulation. The student will integrate the lecture content of CEE 2145 in the practical, hands-on laboratory exercises developed in this course.

## CEE 2310 - Digital Systems I

**Credits:** 3

**Prerequisite(s):** MTH 1410 (with a grade of "C" or better for all prerequisites)

**Description:** Students will develop the skills necessary to analyze and design logic circuits using Boolean algebra, Karnaugh maps and truth tables. They will also develop an understanding of the basic concepts of computer architecture. In addition, this course covers number systems, operation and codes. Combinational digital circuits are also studied. The use of basic logic gates, Flip-flops, memory, integrated circuits, as well as the design of digital systems will be covered in detail.

## CEE 2350 - Programming for Engineers

**Credits:** 3

**Description:** This is an introductory level programming course using C and C++ languages for engineering students. Methods for solving computer engineering problems using the two programming languages are studied. The fundamentals of shell scripts are also introduced.

## CEE 3330 - Digital Systems II

**Credits:** 3

**Prerequisite(s):** CEE 2310 with a grade of "C" or better

**Description:** This course is a continuation of CEE 2310. It covers the analysis and design of sequential (counters and shift registers) logic systems. Programmable Logic Devices (PLD) and associated Computer Aided Design (CAD) software are used to implement digital circuits by using the schematic design entry method. Johnson counter and Ring counter are studied. The general methods of analysis and design for Finite State Machine (FSM) is also introduced.

## CEE 3620 - A&D Communications

**Credits:** 3

**Prerequisite(s):** CEE 2145, CEE 2165 and MTH 2410 (with a grade of "C" or better for all prerequisites)

**Description:** This course is an introduction to communication systems. Topics include: information theory, channel capacity, A/D and D/A techniques, modulation (AM, FM, and digital), noise sources, quantization, and transmission lines including Smith Charts.

## CEE 3980 - Internship in Computer and Electrical Engineering

**Credits:** 3

**Prerequisite(s):** Major in Computer or Electrical Engineering; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be

established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at c2hub@msudenver.edu.*

*Note: This course may be taken only once for three credits.*

## CEE 4370 - Embedded System Design I

**Credits:** 3

**Prerequisite(s):** CEE 2350 and CEE 3330 (with a grade of "C" or better for all prerequisites)

**Description:** Students in this class will explore the fundamentals of embedded system hardware and firmware design. The following issues will be discussed, such as embedded processor selection, hardware/firmware partitioning, number conversion, computer hardware structure, memory technology, logic circuits, development tools, firmware architecture, firmware design, and firmware debugging. An industry standard microcontroller will be studied, and its architecture and instruction set will be covered. The students will apply a microcontroller demo board for their designs. The programming will be implemented in *Assembly* and C languages.

## CEE 4390 - Embedded System Design II

**Credits:** 3

**Prerequisite(s):** CEE 4370 (with a grade of "C" or better for all prerequisites)

**Description:** This course is a continuation of CEE 4370 and will cover embedded system design by interfacing with computers, peripherals, and other digital circuits. Students will gain knowledge and design experience with microcontroller-based embedded computer systems using assembly and C programming languages. In addition, the course will also examine the Real-time Operating Systems and their impact on performance. Computer engineering applications will also be emphasized.

## CEE 4700 - Senior Design I

**Credits:** 1

**Prerequisite(s):** CEE 4370, and COMM 1010 or COMM 1100, and MTH 3210 (with a grade of "C" or better for all prerequisites), senior standing

**Description:** This is the first half of a two semester senior capstone course. Students practice engineering design skills through project-based learning while working in a team. Projects incorporate the application of fundamental engineering knowledge and skills. Through this course, the students learn the design process in a hands-on way through conceptualization, construction, testing and presenting a deliverable project.

**University Requirement(s):** Senior Experience

## CEE 4800 - Senior Design II

**Credits:** 2

**Prerequisite(s):** CEE 4390 and CEE 4700 (with a grade of "C" or better for all prerequisites)

**Description:** This is the second half of the Senior Experience for EE and CPE majors. In this course, students complete the project they started in CEE 4700 - Senior Design I. The project is built, tested and demonstrated as a team. Written technical reports and oral presentations on the project are required. Part of this course involves the student working with a faculty member who acts as a consultant to the project team.

**University Requirement(s):** Senior Experience

## CPE 1040 - Introduction to Computer Engineering

**Credits:** 3

**Prerequisite(s):** Minimum performance standard score on math placement test

**Description:** This course is an introductory engineering course exposing students to a cross section of topics in computer engineering discipline to assist them with their education career choices. Students are taught to work in teams, introduced to the design process, utilize math and computer programs to analyze raw data and properly display their results in a presentation to their peers. The history of the engineering profession and its relation to current national, social, industrial, ethical, and international issues and problems will be discussed.

## CPE 3400 - Signals and Systems

**Credits:** 3

**Prerequisite(s):** CPE 1150, CPE 2310, and MTH 2410 (with a grade of "C" or better for all prerequisites)

**Description:** This course provides an introduction to the student to the basic concepts of signals and system modeling. The students will develop and understand time-domain and frequency-domain analysis of both continuous and discrete systems and signals.

## CPE 3500 - Semiconductor Device Fundamentals

**Credits:** 3

**Prerequisite(s):** CPE 2145, CPE 2165, MTH 3210 (with a grade of "C" or better for all prerequisites)

**Description:** Students develop an understanding of semiconductor physics, materials, devices and fabrication technology. The students learn semiconductor band theory, semiconductor materials and statistics, heterojunction, Schottky junctions, and MOSFETs. The course focuses on the MOSFET designs for advanced Very Large Scale Integrated Circuit (VLSI) technology from its physical structure, accurate modeling, manufacturability and applications by using computer simulation.

## CPE 3715 - Control Systems Analysis

**Credits:** 4

**Prerequisite(s):** CPE 2145 and CPE 3400 (with a grade of "C" or better for all prerequisites)

**Description:** This course analyzes classical, linear, continuous-time control systems. Analysis and design will be done using Laplace transforms, Bode plots. Topics discussed include: stability, transient response, steady-state response, and the design of P, PI, PD, and PID, Lag and Lead compensators. The laboratory section of the course uses the classical approach to the analysis and design of control systems.

### **CPE 4020 - Digital Circuits III - Hardware**

#### **Description Language**

**Credits:** 3

**Prerequisite(s):** CPE 2350 and CPE 3330 (with a grade of "C" or better for all prerequisites)

**Description:** Students in this course will learn a Hardware Description Language (HDL) which is used to design and simulate very large scale digital integrated circuits. Different modeling and design approaches will be covered as well as different simulation techniques.

### **CPE 4320 - Digital Filter Design**

**Credits:** 3

**Prerequisite(s):** CPE 2350 and CPE 3400 (with a grade of "C" or better for all prerequisites)

**Description:** This course introduces digital filters as applied in digital signal processing and sampled data control systems. Complex algorithms will be introduced for the design of digital filters.

### **CPE 4330 - Data Communication**

**Credits:** 3

**Prerequisite(s):** CPE 2310 with a grade of "C" or better

**Description:** This course covers methods of local and distant digital communications including: systems, standards, and hardware used for transmitting digital data either synchronously or asynchronously. In addition, limitations and problems will be discussed along with the solutions and areas that are being improved.

### **CPE 4600 - VLSI Circuits and Systems**

**Credits:** 3

**Prerequisite(s):** CPE 3500 and CPE 4020 (with a grade of "C" or better for all prerequisites)

**Description:** This course will explore the fundamentals of Very Large Scale Integrated Circuit (VLSI) design. The following design specifications will be addressed, such as functionality, performance, reliability, manufacturability, testability, cost, design layout rules and checking, circuit extraction, simulation, and verification.

### **CPE 4620 - Advanced Communication Systems**

**Credits:** 3

**Prerequisite(s):** CPE 3620 (with a grade of "C" or better for all prerequisites)

**Description:** This is a senior research course which requires student analysis of VHF, UHF, microwave, spread spectrum, optical, video, and satellite systems. Analog and digital cellular and personal communications services, including AMPS, GSM, CDMA, wireless LAN microwave satellite communications systems will be examined.

### **CPE 4710 - Digital Control System Design**

**Credits:** 4

**Prerequisite(s):** CPE 3715 (with a grade of "C" or better for all prerequisites)

**Description:** Students in this course will learn the process and theory of the design of digital control systems, using classical and modern control theory. Analysis of differences between continuous and discrete control systems will be discussed. State variable feedback control and other optimal control theories will be covered.

## **Computer Information Systems**

### **CIS 1005 - Surviving and Thriving in the E-World**

**Credits:** 3

**Description:** This course emphasizes using the Internet and online resources to collect, understand, evaluate, and validate information relating to basic computer literacy and emerging technologies. Using different search terms and search engines, students will find information that describes computer hardware, software, information systems, Web 2.0, and big data, among other information technology topics. They will prepare brief abstracts and ratings of information gathered. Additionally, students will learn to use Word, Excel, and PowerPoint to prepare reports and business documents. This course does not serve as a pre-requisite for CIS 2010.

### **CIS 1010 - Introduction to Computers**

**Credits:** 3

**Description:** This course is designed for students who wish to use a microcomputer in their academic pursuits and their career. The student will learn how to use a personal computer operating system and an office productivity suite (word processing, spreadsheets, presentation, database). This course also reviews the historical, societal, ethical, cyber security and technological aspects of computers.

### **CIS 1080 - The World Wide Web, the Internet, and Beyond**

**Credits:** 3

**Description:** This course is for anyone who uses or wants to access the World Wide Web or use the Internet. Students will master a set of basic skills including using electronic mail, logging-in to remote computers, obtaining online documents and software, and using a browser like Netscape to search and explore the World Wide Web for information. Students will also learn the fundamentals of Web page construction.



*Note:* Credit will be granted for only one prefix: CIS or CSS.

**Cross Listed Course(s):** CSS 1080

## **CIS 1985 - Introduction to Business Careers Internship**

**Credits:** 3

**Description:** Approved internships introduce the specific field of business as well as provide an opportunity to gain practical, hands-on professional work experience. Students will learn about the profession, explore related career paths, and increase professionalism.

*Note:* Internship must be approved by the department using the C2 Hub process.

**Cross Listed Course(s):** ACC 1985, ECO 1985, FIN 1985, MGT 1985, MKT 1985

## **CIS 2010 - Foundations of Information Systems**

**Credits:** 3

**Prerequisite(s):** Completion of General Studies in Oral Communication; ENG 1020 or ENG 1021; and CIS/CSS 1010 with a grade of "D-" or better, or appropriate score on the Computer Information Systems computer literacy screening test.

**Prerequisite(s) or Corequisite(s):** Completion of or enrollment in a course that meets the Quantitative Literacy requirement.

**Description:** This course is an introduction to information systems from a business perspective. It covers a wide range of information systems, computer hardware and software. Students are introduced to ERP systems, business analytics and cyber security issues for business. Emphasis is placed on how organizations can use their Information technology assets to gain strategic advantage.

*Note:* This course is primarily intended for students with majors in the College of Business.

## **CIS 2110 - Structured Problem Solving in Information Systems**

**Credits:** 3

**Prerequisite(s):** CIS 2010

**Description:** This is a problem-solving course in which the tools of structured design are used to design computerized solutions to business problems. Techniques of procedural programming languages are used to implement these designs. Emphasis is placed on the implementation of the three logic constructs in procedural languages: sequence, selection, and iteration. Students will be required to develop, test, and debug programs in one or more languages, using a variety of hardware and operating system platforms.

## **CIS 2200 - Introduction to Business Intelligence**

**Credits:** 3

**Prerequisite(s):** MTH 1110 or MTH 1310, CIS 2010

**Description:** Business Intelligence is the infrastructure and collection of methods that analyzes data generated by businesses to gain actionable insights. This course covers the practical aspects of the

field and intended for all business majors. It covers the principles of data visualization through the use of state-of-the art software, gaining insight to textual data, analyzing social networks and finding associations between items that customers buy together. The course also covers predictive methods such as decision trees. The delivery is practice oriented with emphasis on the application with real life data. The course takes advantage of industry leading software to deliver the material.

## **CIS 2300 - Business Statistics**

**Credits:** 3

**Prerequisite(s):** MTH 1320

**Description:** This is a course in the application of statistical inference and translation of quantitative data into information which can be used in business decision-making. This course will cover the topics of descriptive statistics, probability theory, probability distributions, sampling distributions, point estimates, confidence intervals, and tests of hypotheses, in the context of management decision-making skills needed by industry.

## **CIS 2320 - Descriptive and Predictive Analytics**

**Credits:** 3

**Prerequisite(s):** MTH 1310 or MTH 1110 or MTH 1410 C- or better; CIS 2010

**Description:** The course is designed to provide students with an introduction to the fundamentals of descriptive and predictive analytics within the context of statistics for business. Through a combination of lectures, discussions, and practical exercises, students develop a solid understanding of the key statistical concepts and techniques used in various business situations.

The course covers a wide range of topics including data collection, organization, analysis, and interpretation using descriptive and inferential statistics. Students learn how to use statistical techniques such as probability theory, confidence intervals, hypothesis testing and regression analysis to make informed business decisions. Emphasis is placed on developing the skills necessary to apply statistical methods in a practical context - using manual and software calculations - including the ability to analyze real-world data sets and effectively communicate findings to stakeholders. By the end of the course, students should be able to use statistical techniques to solve complex business problems and make data-driven decisions.

## **CIS 2500 - Security Essentials**

**Credits:** 3

**Prerequisite(s):** CIS 2010

**Description:** This course is designed to teach the principles and practices that all computing users need to keep sensitive information secure, both at work and at home. By introducing students to security theory and presenting best practices, the course will show students both the importance of protecting data and the associated techniques. Topics covered include how to secure systems, protecting personal data, organizational resources, securing computer networks, how to handle risks and ethical dilemmas, computer crime, policies and laws,

and how to implement safe Internet usage. This course is not intended for CIS and CYB majors.

### **CIS 3030 - Business Web Page Development**

**Credits:** 3

**Prerequisite(s):** CIS 2110

**Description:** This is a course in business Web page development. Specifically, the student will learn how to plan the development of a Web site, compose Web site specifications, apply coding to the development of any kind of Web site, and find and use development resources. The student will use a leading code-centric text editor to aid in all course Web page development projects. The student will also be introduced to a leading graphical editing tool for supplemental use.

### **CIS 3050 - Fundamentals of Systems Analysis and Design**

**Credits:** 3

**Prerequisite(s):** CIS 2110

**Description:** This course covers the basic concepts of an information system and systems analysis tools and techniques necessary to develop requirements for a business information system. Students will concentrate on systems analysis using current methodologies, technologies, and available tools of analysis, as well as an examination of the effect on systems analysis by business drivers such as globalization, security, privacy, ethics, and collaboration. The course will focus on the analysis phase including requirements definition, modeling, feasibility, project planning and management, and documentation.

### **CIS 3060 - Database Management Systems**

**Credits:** 3

**Prerequisite(s):** CIS 2110

**Description:** This course provides an introduction to the design, development, implementation, and manipulation of databases. Students will create information level database designs from a set of user requirements and implement those designs employing a 4GL database tool. Students will also be introduced to distributed database management, concurrency control, data warehousing, and data mining.

### **CIS 3145 - Business Application Development**

**Credits:** 3

**Prerequisite(s):** CIS 2110

**Description:** This course uses a high-demand programming language for the development of object-oriented, event-driven Graphical User Interface (GUI) business applications. Students create stand-alone solutions for business problems and complete a final multi-window application project with database support.

### **CIS 3220 - Analysis of Hardware, Software, and User Interfaces for Microcomputer Platforms**

**Credits:** 3

**Prerequisite(s):** CIS 2110

**Description:** The course develops a conceptual understanding of the underlying principles of computer systems hardware, operating systems software and associated use interfaces. These concepts are then applied to the problem of selecting and implementing microcomputer based systems to solve appropriate business problems.

### **CIS 3230 - Telecommunication Systems and Networking**

**Credits:** 3

**Prerequisite(s):** CIS 2110

**Description:** This course provides a comprehensive coverage of telecommunications and networking. Physical characteristics such as media and signaling are covered, as well as internetworking concepts and Transmission Control Protocol/Internet Protocol (TCP/IP). The material is discussed using the Open Systems Interconnection (OSI) and TCP/IP models as a framework.

### **CIS 3270 - Advanced Computer Applications for Business**

**Credits:** 3

**Prerequisite(s):** CIS 2010

**Description:** This is a software solutions microcomputer course that teaches problem solving at the business operational level using advanced applications of word processing, presentation graphics, electronic spreadsheets, and database management. Hands-on practice with the advanced Microsoft application suite and computer-based examinations are included.

### **CIS 3280 - LAN and WAN Systems for Business**

**Credits:** 3

**Prerequisite(s):** CIS 3230

**Description:** This course presents the technology, architecture, and interconnection of Local Area Networks and Wide Area Networks. The advantages and disadvantages of each technology will be discussed so that well-informed decisions can be made regarding the design of communication networks.

### **CIS 3290 - Operating Systems for End Users**

**Credits:** 3

**Prerequisite(s):** CIS 2010 and CIS 2110

**Description:** This is an end-user-oriented microcomputer operating systems course which teaches advanced concepts of the most popular operating systems, both networked and stand-alone. The course includes instruction in theory plus hands-on experience with each operating system.

## CIS 3300 - Business Analytics I (Descriptive and Predictive)

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021; completion of General Studies requirements in Oral Communication; C- or better in MTH 1320 or MTH 1410; CIS 2010 or CIS 2300; and at least junior standing.

**Description:** This business analytics course introduces the student to descriptive analytics and predictive analytics. Techniques include the applications of statistical inference and the translation of quantitative data into information that can be used in business decision making. This course covers the topics of frequency distributions, descriptive statistics, probability distributions, sampling distributions, point estimation, confidence interval estimation, hypothesis testing, analysis of variance, chi-square analysis, regression analysis, model building, and data mining. A specific statistical package is required.

## CIS 3310 - Business Forecasting Methods

**Credits:** 3

**Prerequisite(s):** CIS 3300 and Junior Standing

**Description:** This course introduces the student to both quantitative and qualitative forecasting techniques used in the public and private sectors. Software packages are used to perform the calculations for the quantitative forecasting techniques. Much emphasis is placed on real-world case problems.

## CIS 3320 - Prescriptive Analytics

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021; completion of General Studies requirements in Oral Communication; "C-" or better in MTH 1310 or MTH 1110; CIS 2320; and at least junior standing.

**Description:** The course introduces the fundamental principles and techniques of quantitative methods as they are applied to solve complex decision-making problems within a business environment. The course covers topics such as linear programming, transportation and assignment problems, project management, decision analysis, queuing analysis, simulation, forecasting, and inventory management. Students learn how to formulate and solve multiple quantitative models, interpret the results, and make informed business decisions based on them. They also acquire practical skills in using software tools for problem solving, such as Excel Solver. Upon completion of the course, students have a solid understanding of quantitative methods concepts and techniques and will be able to apply them to real-world business decision-making problems.

## CIS 3340 - Advanced Business Statistics

**Credits:** 3

**Prerequisite(s):** CIS 2300

**Description:** This course is a study of advanced statistical methods and techniques and their application in business decision-making situations. This course will cover the following topics: inferences about population variances, tests of goodness of fit and

independence, analysis of variance, experimental design, simple linear regression, multiple regression analysis, regression model building, forecasting, and nonparametric methods.

## CIS 3350 - Knowledge Discovery and Data Mining

**Credits:** 3

**Prerequisite(s):** CIS 2320 and at least junior standing

**Description:** This course provides students with a theoretical and practical understanding of data mining concepts and techniques; and hands-on experience in applying these techniques to practical real-world business problems using commercial data mining software. As an applied course, the emphasis is on application and interpretation of various data-mining methods using business cases and data rather than on mastering the theoretical underpinnings of the techniques.

## CIS 3360 - Advanced Machine Learning for Business

**Credits:** 3

**Prerequisite(s):** CIS 3350

**Description:** The course covers a variety of Machine Learning concepts including advanced algorithms such as Neural Networks (used for deep learning) and Support Vector Machines. It covers the theory, technical background and coding skills required to build, evaluate, optimize and use a model for prediction. The delivery is practice oriented, with several practical assignments and reports where students can put the learnt material to use.

## CIS 3460 - Data Warehousing and Mining

**Credits:** 3

**Prerequisite(s):** CIS 2320 and CIS 3060 or ACC 3300

**Description:** This course covers the concepts of data warehousing and data mining, and how they are used to convert data into strategic business information. It discusses the design, architecture, planning, and project management of a data warehouse. Data mining techniques (classification, association, genetic algorithms, machine learning, etc.) are discussed as a way to discover useful relationships among data.

## CIS 3490 - Managing Business Information with Enterprise Systems

**Credits:** 3

**Prerequisite(s):** CIS 2010

**Description:** Students gain an understanding of the theoretical and practical issues of Enterprise Resource Planning (ERP) systems used within organizations. The course demonstrates how ERP systems integrate information and organizational processes across functional areas with a unified database, best practices and shared operating tools. Students will configure a running ERP system (e.g. SAP), execute transactions and produce reports for supporting common business processes and business information management. Students will be able to evaluate how ERP systems enable firms to operate their business processes effectively and efficiently. Students also

learn to model, assess and improve processes through practical work and by analyzing case studies.

## CIS 3500 - Information Systems Security

**Credits:** 3

**Prerequisite(s):** CIS 3230

**Description:** This course covers a broad range of topics in security for networked and internetworked computer systems. It examines security and integrity objectives in terms of high-level policy and presents security services used to address those requirements. Network security architectures are analyzed to insure that critical security functions are protected from unauthorized access and modification. Access control in networked systems is examined.

## CIS 3980 - Internship in Computer Information Systems

**Credits:** 1-15

**Prerequisite(s):** Major in computer information systems (with 15 credit hours of CIS coursework completed toward the major); junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).  
Note: Variable Credit*

## CIS 4030 - Web Site Administration

**Credits:** 3

**Prerequisite(s):** CIS 3030

**Description:** This course presents the fundamentals of organizing and administering a business Web site with multiple clients. Students will learn how to design effective, business-oriented Web pages. They will be able to give advice to the users, describe how to put Web pages on a server, how to organize the published information, how to plan a business Web site, specify the hardware, choose the daemon, and install and configure a server. In addition, the course will cover the security issues of the internet access, the different protection techniques, how to maintain a site, content and interpretation of the log files, and tools and techniques required to run an effective business site.

## CIS 4050 - Systems Analysis and Design

**Credits:** 3

**Prerequisite(s):** CIS 3050, CIS 3060, CIS 3145, CIS 3230, CIS 3500, and Senior standing

**Description:** This course focuses on the development of business

systems. The emphasis of this course is on the design and prototyping phases of systems development using as a basis the concepts of problem solving, requirements specification, analysis, and programming from the prerequisite courses. Current methodologies and technologies will be evaluated and implemented in the development process. Information systems problems will be analyzed and alternative solutions will be proposed using design models, a solution will be selected, and a prototype will be constructed for that solution. Students will evaluate the system using tests they developed and then propose a plan for implementation, maintenance, and training for the system.

**University Requirement(s):** Senior Experience

## CIS 4060 - Advanced Database Management Systems

**Credits:** 3

**Prerequisite(s):** CIS 3060 and CIS 3145

**Description:** This course builds upon the design and implementation concepts taught in the introductory database course. The course introduces the student to advanced topics, technologies and emerging trends in the management of modern database systems. The course includes advanced SQL querying procedures and the use of PL/SQL to provide a basis for developing end-user applications. A rapid application tool such as Oracle's Application Express (APEX) will be used to create prototypes of end-user applications.

## CIS 4070 - Application of AI in Business

**Credits:** 3

**Prerequisite(s):** CIS 3350, CIS 3460

**Corequisite(s):** CIS 4370

**Description:** The course focuses on bringing together the topics covered for Business Intelligence majors. The emphasis of the course is developing Machine Learning projects for businesses from start to finish. Students have to identify business questions that need to be answered, link the business problem with strategy, determine which business metrics to use for evaluation, create a Machine Learning pipeline, run a model, evaluate the results and make actionable recommendations based on their findings.

## CIS 4260 - Database Administration

**Credits:** 3

**Prerequisite(s):** CIS 3060

**Description:** This course covers the functions and responsibilities of the Database Administrator (DBA) in an organization with an integrated, shared Relational Database Management System (RDBMS). The course will focus on the technical requirements of the DBA including enrolling new users, creating the database, backup and recovery of data, security measures, implementing data integrity, and tuning the database.

## CIS 4280 - Network Installation and Administration

**Credits:** 3

**Prerequisite(s):** CIS 3230

**Description:** This course presents the knowledge and skills necessary to install the network operating system and to perform competently in the role of a network administrator.

## **CIS 4281 - Network Installation and Administration with UNIX/Linux**

**Credits:** 3

**Prerequisite(s):** CIS 3230

**Description:** This course presents information and skills necessary to begin to perform competently in the role of a network/systems administrator in a Linux/UNIX environment including installation, configuration, and management of the operating system.

## **CIS 4370 - Data Science and Big Data Analytics**

**Credits:** 3

**Prerequisite(s):** CIS 2320, CIS 3460, and at least junior standing

**Description:** This course will cover the concepts of big data and data analytics used to solve business problems. Project management of data analytic activities will be introduced as part of the data analytic life cycle. The analytic life cycle starts with data discovery and preparation, which leads to the analytical methods of categorization, regression, and classification. Finally the results of the analytical steps are operationalized in order to benefit an organization.

## **CIS 4410 - Management Information Systems**

**Credits:** 3

**Prerequisite(s):** CIS 2010

**Description:** This course provides an overview of management information systems, managerial decision making practices and styles, and requisite information needs. International information concepts, the influence of national cultures on decision making, information use, and on various system design approaches are examined. The course addresses the practical aspects of the development of management information systems and decision-support systems.

## **CIS 4500 - Information Systems Security Tools and Techniques**

**Credits:** 3

**Prerequisite(s):** CIS 3500 and junior or senior standing

**Description:** This course covers tools and techniques that allow system administrators to protect organizational resources in a networked environment. It looks at design considerations, organizational policies, and industry best practices in all areas of security, reviews countermeasures to mitigate weaknesses, and introduces tools that can monitor, analyze, and visualize network activities for potential threats.

## **CIS 4550 - Information Systems Security Management and Information Assurance**

**Credits:** 3

**Prerequisite(s):** CIS 3500

**Description:** This course covers the broad fields of enterprise security and privacy, concentrating on the nature of enterprise security requirements by identifying threats to enterprise information technology (IT) systems, access control, and system and product evaluation criteria. Risk management and policy considerations are examined with respect to the complex nature of enterprise security as represented by government guidance and regulations to support information confidentiality, integrity and availability. The course develops the student's ability to assess enterprise security risks and to formulate recommendations in the areas of data and application protection, access control, policies, and regulation compliance and governance.

## **CIS 4920 - Health Care Information Systems Internship**

**Credits:** 3

**Prerequisite(s):** Minimum of twelve (12) semester hours of upper-division courses from CIS or HCM courses listed in the HCIS Major curriculum, all with a grade of "C" or better, or permission of instructor

**Description:** This capstone course provides students with the opportunity to integrate and operationalize previously learned health care management and computer information systems knowledge and skills in a field experience specific to the health care information systems discipline. The internship provides an opportunity for students to learn firsthand about working with others in a professional setting. Students complete projects using or working with health care information system applications in a health-related organization.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Credit will be granted for only one prefix: CIS or HCM.

**University Requirement(s):** Senior Experience

**Cross Listed Course(s):** HCM 4920

## **Computer Science**

### **CS 1030 - Computer Science Principles**

**Credits:** 4

**Description:** Computer Science Principles introduces students to the central ideas of computer science vital for success in today's world. Students are invited to develop the computational thinking skills that apply across disciplines, as we explore computing from multiple perspectives, including: *cognitive, economic, ethical, legal, mathematical, philosophical, social, and technical*. The course integrates computational thinking practices with big ideas in computing to address: *collaborative teamwork, communication, creativity, critical thinking, innovation, problem solving, and programming*. Students are afforded the opportunity to participate in

active-learning experiences and to create computational artifacts that bring ideas to life.

## CS 1050 - Computer Science 1

**Credits:** 4

**Description:** Students learn a modern programming language and develop the foundational skills needed to analyze problems and construct programs that solve them. Emphasis is placed on algorithm development, ensuring correctness, and adopting good programming practices. Additionally, students are introduced to the fundamentals of software engineering and the software development life cycle.

## CS 1400 - Computer Organization

**Credits:** 4

**Description:** Students study the internal organization, characteristics, performance, and interactions of a computer system's functional components. They explore binary codes and binary arithmetic, digital logic, central processor organization, instruction set architecture, input/output fundamentals, and memory architecture.

## CS 2050 - Computer Science 2

**Credits:** 4

**Prerequisite(s):** CS 1050 and MTH 1110 (or equivalent) with a grade of "C" or better, or permission of instructor

**Description:** This course, a continuation of CS 1050, further emphasizes the concepts of the software development cycle and introduces the concept of an abstract data type (ADT). The topics covered include linked-lists, trees, stacks, queues, classes, recursion, and a variety of data representation methods. Further topics in software engineering and programming style as well as algorithms for sorting and searching are included.

## CS 2240 - Discrete Structures for Computer Science

**Credits:** 4

**Prerequisite(s):** (((MTH 1110 or equivalent) AND MTH 1120) OR MTH 1400) AND CS 2050) all with grades of "C-" or better) OR permission of instructor

**Description:** This course provides a solid theoretical foundation for the understanding of computer science, with emphasis on the application of formal structures and reasoning to problems in computer science. The course introduces and demonstrates application of discrete mathematics concepts commonly used in computer science and needed to solve many computational problems. Topics include formal logic systems, Boolean algebra, techniques for formal reasoning (including proof methods), set theory, graph theory, functions, relations, sequences, and recursive structures.

## CS 2400 - Assembly Language Programming and Introduction to High Performance Computing

**Credits:** 4

**Prerequisite(s):** CS 1050 and CS 1400, both with a grade of "C-" or better, or permission of instructor.

**Description:** In this course, students learn assembly language programming and create software in assembly language using a contemporary development environment. Additionally, students study the functional organization of high-performance computers, multicore and multithreaded processors, high-performance storage, and multiprocessor and multicomputer parallel architectures.

## CS 3013 - Mobile App Development

**Credits:** 4

**Prerequisite(s):** CS 2050 and CS 2400 both with "C-" or above, or permission of instructor

**Description:** This course is an introduction to mobile app development, emphasizing the use of open-source software and a mobile app development environment. Content includes: event-driven programming, app development design patterns, incorporation of libraries, use of external web services, secure user authentication, data persistence, testing, documentation, deployment, and explorations of mobile device sensors.

## CS 3120 - Machine Learning

**Credits:** 4

**Prerequisite(s):** CS 2050 or MTH 2520, MTH 2140 or MTH 3130 or MTH 3140, each with C- or better, or permission of instructor.

**Description:** Machine learning is the ability of computers to learn without explicitly programming an algorithm. Machine learning techniques learn about hyper-dimensional spaces with either explicit direction or implicit reinforcement. This course covers a variety of machine learning techniques and their application to actual data. Topics include the clustering of data and the retrieval of related data, the use of machine learning for recommender systems, and the creation of deep learning systems. This course includes both the underlying theory of machine learning and the creation of machine learning software for real-world problems.

## CS 3150 - Digital Image Processing and Computer Vision

**Credits:** 4

**Prerequisite(s):** CS 2050 with grade of "C-" or better and CS 1400 with grade of "C-" or better, or permission of instructor

**Description:** This course presents fundamental concepts and techniques in digital image processing and computer vision. Both theoretical material and computing techniques are introduced. The analytical tools and methods which are currently used in digital image processing and computer vision are introduced and applied to practical applications. Basic digital computing knowledge and programming skills are reinforced by solving real world problems.

## CS 3210 - Principles of Programming Languages

**Credits:** 4

**Prerequisite(s):** CS 2050, CS 2400, CS 3240, CS 3250, and CS 2240, or permission of instructor

**Description:** This course traces the evolution of programming languages and identifies and analyzes the contributions made by several significant languages and their successors. Specific issues of programming language implementation such as creation of activation records for block structured languages and static and dynamic scoping as methods for defining program object visibility are studied in depth. All four of the modern programming language paradigms (procedural, functional, object-oriented, and logical) are studied.

## CS 3240 - Introduction to the Theory of Computation

**Credits:** 2

**Prerequisite(s):** CS 2050 and CS 2240 each with a grade of "C-" or better, or permission of instructor

**Description:** This course explores these foundations of computing and computer science: languages, computability, and complexity. Types of languages are identified by their expressive power and how they are represented and implemented. Explorations of computability and complexity provide definitive means for determining whether or not a given problem can be solved at all, and if so, how easy or difficult it is to solve.

## CS 3250 - Software Development Methods and Tools

**Credits:** 4

**Prerequisite(s):** CS 2050, ENG 1020, and (COMM 1010 or COMM 1100) with a grade of "C-" or better.

**Description:** This course introduces the basics of large-scale software development. As software size increases, so does the need to use appropriate tools and development techniques. The phases of traditional software development and several current software development lifecycles are introduced. The use of object-oriented techniques for large projects is covered. Creating appropriate and sufficient tests for test-driven and behavior-driven development is discussed. Students learn how to analyze their programs to detect errors and increase performance. The various types of automation used in creating a product are introduced. Students learn about group dynamics and work on a significant project in groups.

## CS 3350 - Free and Open Source Software

**Credits:** 4

**Prerequisite(s):** CS 2050

**Description:** The source code for Free and Open Source Software (FOSS) is available to others to view, copy, learn from, alter, or share. This course delves into the FOSS movements addressing: advantages and disadvantages of open source; open source licensing models; collaborative public development; common and best practices; and, how to contribute to FOSS projects. During the course, students actively investigate, engage with, and have guided opportunities to contribute to established FOSS projects.

## CS 3600 - Operating Systems

**Credits:** 4

**Prerequisite(s):** CS 2050, CS 2400, and CS 3250, all with grades of "C" or better; or permission of instructor

**Description:** This course provides an introduction to modern computer operating systems, their use, design, development, and implementation. Topics covered include: operating system modes, structuring methods, process and thread scheduling and dispatch, concurrency, inter-process communication, memory management, file system organization (in both stand-alone and networked environments), and system security. Students are required to write programs that implement some operating system functions.

## CS 3700 - Networking and Distributed Computing

**Credits:** 4

**Prerequisite(s):** CS 1400 and CS 2050 both with grades of "C-" or better, or permission of instructor

**Description:** This course covers the design, implementation, operation, and use of computer networks, with an emphasis on the most used protocols at the application, transport, and network layers. Aspects related to distributed applications and architectures are also discussed in detail.

## CS 3710 - Web Application Development

**Credits:** 4

**Prerequisite(s):** CS 2050 with a grade of C- or better

**Description:** Modern web application frameworks encompass many different technologies to allow for the rapid prototyping, development, testing, and deployment of fully-functional web applications. These applications also allow use on various platforms including traditional computers, tablets, and smart phones. This course introduces students to the development of the various parts of a modern web application.

## CS 3750 - Computer and Network Security

**Credits:** 4

**Prerequisite(s):** CS 1400 and CS 2050, both with a grade of "C-" or better, or permission of instructor

**Description:** In this course, students learn how computers and networks are compromised and what one needs to do to build security into every program. Additionally, students study how cryptography assists in securing data on a computer or in the Internet, how operating systems supports computer security, and how security objectives are achieved in network applications.

## CS 3755 - Computer Security Offense and Defense

**Credits:** 4

**Prerequisite(s):** CS 3700 with "C-" or better, or permission of instructor

**Description:** This course covers the basics of performing vulnerability assessments for networks, computers, and programs. Coverage includes reconnaissance and exploitation tools, injections, weak passwords and authentication, and memory

corruption techniques. The course also covers defense techniques including firewalls, intrusion detection/prevention systems, log analysis, event correlation, and security information and event management. The course addresses how programs are compromised via buffer overflows and heap corruption, along with techniques to counter those attacks.

## CS 3810 - Principles of Database Systems

**Credits:** 4

**Prerequisite(s):** CS 2050 and MTH 1410 with grades of "C" or better, or permission of instructor

**Description:** This course covers the principles and methodologies of database design, and techniques for database application development. The topics covered include relational algebra, SQL queries, normalization, entity-relationship model, SQL/Host-language interface, stored procedure, object-oriented databases, and semi-structured databases.

## CS 3980 - Internship in Computer Science

**Credits:** 1-15

**Prerequisite(s):** Major in Computer Science; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at c2hub@msudenver.edu.*

*Note:* Variable Credit

## CS 4050 - Algorithms and Algorithm Analysis

**Credits:** 4

**Prerequisite(s):** CS 3240, CS 3250, and 4 additional credits of upper division CS courses all with grades of "C" or better, or permission of instructor. MTH 3210 is recommended.

**Description:** The emphasis of this course is on the design, analysis, and evaluation of efficient algorithms for a wide variety of computing problems.

## CS 4250 - Software Engineering Principles

**Credits:** 4

**Prerequisite(s):** CS 3250, CS 2240, and COMM 1010 or COMM 1100, all with a grade of "C-" or better; or permission of instructor

**Prerequisite(s) or Corequisite(s):** CS 3240 (if corequisite then to be completed in first 8 weeks of semester)

**Description:** Students in this course explore key principles and best practices that support production and delivery of professional quality software. Current professional software engineering techniques are

reviewed and applied through an active-learning approach. The awareness and skills developed in this course prepare students for success in professional software engineering endeavors, including the development of quality products and effective interactions with product and project stakeholders.

## CS 4360 - Senior Experience in Computer Science

**Credits:** 4

**Prerequisite(s):** Senior standing, completion of all lower-division CS courses required for the BS CS degree, CS 3250 and 12 additional credits of upper-division CS courses, JMP 2610, PHI 3370, and (COMM 1010 or COMM 1100), all with grades of "C-" or better; or permission of instructor.

**Description:** This senior-level capstone course reflects a culmination of learning and an opportunity to develop, use, and express domain knowledge and communication ability. Students will identify and engage in semester-long projects that require integration and application of knowledge and skills acquired from work in earlier courses. Some projects may be solicited from constituents within MSU Denver or externally, and progress evaluated in conjunction with constituent representatives.

**University Requirement(s):** Senior Experience

## CS 4520 - Advanced Computing: Variable Topics

**Credits:** 1-4

**Prerequisite(s):** Permission of instructor

**Description:** This course will include further topics in computer science and its applications. Topics will be chosen from analysis of algorithms, compiler design, simulation, artificial intelligence, or other chosen by the instructor.

*Note:* This course may be repeated for credit under different titles.

## Computer Science Studies

### CSS 1010 - Introduction to Computers

**Credits:** 3

**Description:** This course is designed for students who wish to use a microcomputer in their academic pursuits and their career. The student will learn how to use a personal computer with application software featuring word processing, spreadsheets, file management, graphics, electronic communications, and thesaurus/spelling checker. This course also reviews the historical, societal, ethical, and technological aspects of computers.

*Note:* Credit will be granted for only one prefix: CSS or CIS.

**Cross Listed Course(s):** (CIS 1010)

### CSS 1080 - The World Wide Web, the Internet, and Beyond

**Credits:** 3

**Description:** This course is for anyone who uses or wants to access the World Wide Web or use the Internet. Students will master a set of



basic skills including using electronic mail, logging in to remote computers, obtaining online documents and software, and using a browser like Netscape to search and explore the World Wide Web for information. Students will also learn the fundamentals of Web page construction.

*Note:* Credit will be granted for only one prefix: CSS or CIS.

**Cross Listed Course(s):** CIS 1080

## **CSS 1247 - Introduction to Programming: Visual Basic**

**Credits:** 4

**Prerequisite(s):** CSS 1010, or equivalent knowledge; completion of General Studies requirements in Quantitative Literacy; or permission of instructor.

**Description:** This is an introductory computer programming course in which the major elements of Visual Basic are taught. Visual Basic is one of Microsoft's versions of Basic and was created to specialize in easy graphical user interface development. It is an object-based programming language with many characteristics of object oriented programming languages. Students will write programs to solve problems selected from a variety of applications.

## **CSS 1510 - Computer Programming: FORTRAN**

**Credits:** 4

**Prerequisite(s):** MTH 1120 or MTH 1400, with a grade of "C" or better

**Description:** This is a first course in computer programming for students in mathematics, science, or engineering, using the FORTRAN language. It includes an introduction to computer applications, program design, testing and debugging.

## **CSS 2751 - Principles of Cybersecurity**

**Credits:** 3

**Prerequisite(s):** CS 1030 OR CS 1050

**Description:** This course provides a broad overview of cybersecurity. The terminology, approaches, and underlying technologies used in cybersecurity are covered. How computers and networks are attacked, how the attackers benefit, and how to mitigate attacks are addressed. Social engineering, cryptography, and application security are introduced.

## **CSS 2752 - Information Assurance**

**Credits:** 3

**Prerequisite(s):** CS 1030 OR CS 1050

**Description:** This course takes a broad, practical view of security - including people, policies and procedures, and technology. While Information Assurance (IA) encompasses the various technologies, it puts them in the context of an organization's overall strategy. It applies risk management techniques to cybersecurity risks. It includes addressing data both at rest and in transit. IA looks at many aspects of an organization's functioning including its legal, regulatory, and national security aspects.

## **CSS 2753 - Network Security**

**Credits:** 3

**Prerequisite(s):** CSS 2751 or permission of instructor

**Description:** This class provides an overview of network security including threat models, web and electronic mail security, network layer security, transport layer security, packet filtering, firewalls, intrusion detection and prevention, and virtual private networks. Both wired and wireless security are covered. Methods for privacy and anonymity are discussed.

## **CSS 2754 - Host Security**

**Credits:** 3

**Prerequisite(s):** CSS 2751 or permission of instructor

**Description:** This course introduces the means for keeping computers safe. The topics of intrusion detection and protection, protection mechanisms, and auditing are introduced. Specific approaches to anti-virus and -malware protection are discussed. The importance of business continuity including secure backups are covered. More advanced protection mechanisms such as SELinux, AppArmor, EMET, multi-factor authentication, and least privilege are included.

## **CSS 3000 - Computing for Advanced Manufacturing**

**Credits:** 4

**Prerequisite(s):** ENG 1020, MTH 1120, PHY 2010, AMS 1010

**Description:** This course provides a broad overview of computing topics important to all Advanced Manufacturing disciplines. These topics include: algorithms and algorithmic thinking; computer programming; developing software to control robots and perform simulations; fundamental concepts in computer systems, networking, and hardware; human-computer interaction; legal, social and ethical implications of computing; and computer and data security.

## **CSS 3751 - Application Security**

**Credits:** 3

**Prerequisite(s):** CSS 2751 and CSS 2752 or permission of instructor

**Description:** Writing applications so that they are less susceptible to compromise is a critical aspect of cybersecurity. This course explores how applications are compromised and the steps that must be taken to make them more secure. Several different languages and platforms are covered.

## **CSS 3752 - Computer Forensics**

**Credits:** 3

**Prerequisite(s):** CSS 2751 and CSS 2752 or permission of instructor

**Description:** Once a cybersecurity incident has occurred, it must be investigated and reported so that an organization can learn from the incident. This course discusses the various types of evidence, how to analyze that evidence, and when to involve law enforcement. This course includes low-level device analysis including filesystems, flash memory, and mobile devices. The concepts of chain of custody and

the protection of evidence while performing effective forensics are covered.

## **CSS 3753 - Computing and Security for Manufacturing**

**Credits:** 3

**Prerequisite(s):** CSS 2751

**Description:** As all aspects of manufacturing have become computerized, it is important that everyone involved become knowledgeable in computing in general and computer security specifically. This course gives a overview of what computing is and how programming is done. It covers how computers are connected to networks and the related networking protocols. It emphasizes manufacturing-specific concerns such as Industrial Control Systems and the Supervisory Control And Data Acquisition (SCADA) technology, protecting intellectual property at all phases, and assuring the software supply chain.

## **Construction Project Management**

### **CPM 1010 - Introduction to Construction Project Management**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard score on math placement test

**Description:** Students will study the project life-cycle concepts in construction project management. This life-cycle concept includes the built environment from programming and design to operations and decommissioning.

### **CPM 1100 - Introduction to Facilities Management**

**Credits:** 3

**Description:** In this course students are introduced to the basic concepts that describe the field of facility management and how it can be of value to an organization. In this course students review a leader's role in tactical planning for how to schedule and accomplish daily facility management tasks that support the operation of an organization's facilities.

### **CPM 2010 - Building Technology and Software**

**Credits:** 3

**Prerequisite(s):** CPM 1100

**Description:** In this course, students are introduced to the application of technology to various types of facilities and built environments. Students learn how information technology and artificial intelligence are linked to modern building design and how to better choose and implement technological solutions with building needs in mind.

### **CPM 3000 - Workplace Safety**

**Credits:** 3

**Prerequisite(s):** AMS 1010

**Description:** The course is designed to prepare students to work safely in construction environments and allow the informed supervision of other workers in regard to workplace safety. Emphasis is placed on practical applications of safety theory and hazard specific content. The course also provides Occupational Safety and Health Administration (OSHA) 30 training and Department of Labor (DOL) course completion certification for students taking the course.

## **CPM 3020 - Facilities Maintenance and Operations**

**Credits:** 3

**Prerequisite(s):** CPM 1100 with grade of C or better

**Description:** In this course, students are introduced to operations, maintenance, and energy management requirements of various types of facilities and built environments.

## **CPM 4950 - Professional Internship**

**Credits:** 1-15

**Prerequisite(s):** Junior or Senior standing and completion of the following AMS Core courses with a grade of "C" or better: AMS 1010, AMS 3010, JMP 2610, CSS 1751, EET 1001, IND 1450 or CET 1215 or MET 1200, MET 1310, MET 2010, MET 3000 and MTH 1120; Or, Junior or Senior standing and the permission of the AMSI Director

**Description:** Students will have an opportunity to gain work experience under the guidance of an industry professional. Students must complete a minimum of 3 credits (45 clock hours per credit hour) cumulatively during their degree program in a placement relevant to their selected CPM concentration. All internship students will also be required to prepare weekly internship reports, complete a self-evaluation survey and a reflective paper at the completion of the placement.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* This course is variable credit and may be repeated for up to 15 credit hours.

**University Requirement(s):** Senior Experience

**Cross Listed Course(s):** AMS 4950

## **Criminal Justice and Criminology**

### **CJC 1010 - Introduction to the Criminal Justice System**

**Credits:** 3

**Description:** This is an introductory course covering the basic concepts and principles of the criminal justice system. A survey of the discipline, including the police, the law, courts, corrections, theory, and victimology, is examined. This course is required for all criminal justice majors and minors.

**General Studies:** Social and Behavioral Sciences  
**Guaranteed Transfer:** GT-SS3

## **CJC 1450 - Introduction to Corrections**

**Credits:** 3

**Description:** This course examines the history of institutional and community based corrections in the United States. The course includes an overview of local, state, and federal corrections. Trends of incarceration and community supervision rates, including the breakdown by race/ ethnicity, gender, and type of offense will be studied.

## **CJC 2020 - Research Methods and Basic Statistics for Criminal Justice Professionals**

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** This course is an introduction to basic research methods and statistics used in criminal justice research. The course explores quantitative and qualitative methods used to study crime and criminology. This course provides a basic understanding for criminal justice professionals as consumers of applied research findings as well as lays the foundation for those undergraduates seeking to pursue careers in crime analysis and/or graduate studies.

## **CJC 2050 - American Judicial System**

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** This course introduces students to the structure and organization of the American judicial system. The process of court proceedings, including pre-trial, plea bargain, trials, sentencing, and the appeals process, are discussed. The roles of the different "players" in the court process are also discussed, as well as the specialized court movement and other trends in adjudication.

## **CJC 2100 - Criminal Law**

**Credits:** 3

**Description:** This course acquaints students with common law and statutory law crimes, the Model Penal Code, the elements defining crimes and penalties, defenses to criminal accusations, and the definitions and distinctions between criminal and civil law. Students are assigned criminal law readings including appellate court case law and statutory law.

## **CJC 2210 - American Policing**

**Credits:** 3

**Description:** This course provides an introductory examination of law enforcement in the United States, including its historical foundations and emerging issues. The relationship between law enforcement and the community serves as the context within which the challenge of responding to society's multiple and changing public

safety needs are addressed. Law enforcement agencies, their administrative practices, and the behaviors of those involved in the delivery of police services are examined from the perspective of democratic values, racial and ethnic diversity, and societal perceptions of police effectiveness.

## **CJC 2500 - Criminal Investigation**

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** Students in this course will define and explain the relationship between law enforcement and the investigative process. These investigative processes will be further analyzed in the context of defining and categorizing criminal behavior alongside the increased need for technological advances. Law enforcement agencies and their evolving techniques will also be examined from the perspective of the challenges these agencies regularly face.

*Note:* Credit will be granted for only one prefix: CYB or CJC.

**Cross Listed Course(s):** CYB 2500

## **CJC 3110 - Constitutional Issues in Criminal Procedure and Evidence**

**Credits:** 3

**Prerequisite(s):** CJC 1010 with a minimum grade of C

**Description:** This course will study the U.S. Constitution and the function of the U.S. Supreme Court in interpreting that document, especially those issues related to criminal procedure, evidence and the admissibility of evidence. It will consist of readings of decisions in the areas of privacy, due process, equal protection, and specific amendments to the Constitution related to the administration of criminal justice in the United States.

## **CJC 3130 - Victimology**

**Credits:** 3

**Prerequisite(s):** CJC 1010 with a minimum grade of C

**Description:** This course explores the history, causes, nature, and type of criminal victimization; the impact of crime on victims; as well as the methods by which the justice system respond to victims. This course will also examine the Colorado Victims' Rights Amendment.

## **CJC 3200 - Criminal Justice Administrative Behavior**

**Credits:** 3

**Prerequisite(s):** CJC 1010 with a minimum grade of C

**Description:** This course is a comprehensive analysis of criminal justice organizational behavior and management. Roles and values in management, administrative alternatives, and the role of managers as an agent of change are studied.

## **CJC 3210 - White-Collar Crime**

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** Students will examine white-collar crime and its lack of punishment as well as its impact on individuals, businesses and society. Various types of white-collar crimes such as governmental corruption, organization fraud, consumer and environmental offenses, anti-trust violations, tax evasion, embezzlement, pyramid schemes, and medical fraud will be explored. Legal issues, including corporate liability and the range of civil and criminal penalties will also be reviewed. Students will survey law enforcement responses to white-collar crime and examine theoretical explanations. The course focuses on how the law evolves as criminal behaviors evolve in a technical age where transnational and internet crime are growing trends in the modern era. There is an emphasis on how these criminal and legal changes influence governmental institutions and society in general.

### **CJC 3270 - Community Corrections**

**Credits:** 3

**Prerequisite(s):** CJC 1010, CJC 1450

**Description:** This course covers the history and implementation of community corrections policies. The course covers community corrections as a part of a prison sentence. The focus is on pre-release programs, work release programs, and the shift from determinant to indeterminant sentencing. This course also focuses on community corrections as an alternative to prison. The emphasis is on restitution, house arrest, ankle-bracelet monitoring, drug courts, day reporting centers, and other methods that allow offenders to maintain ties within their community. There is an emphasis on the economic and social benefits of community corrections, rather than incarceration.

### **CJC 3290 - Probation and Parole**

**Credits:** 3

**Prerequisite(s):** CJC 1010, CJC 1450

**Description:** Students will explore the history, philosophy, and operations of probation and parole in the United States. Students will examine the theoretical foundations and supervisory functions of probation and parole as this relates to sentencing practices, legal issues, and evidence-based practices. There is an emphasis on the reentry phase of state supervision. Key issues include, recidivism, the role of the victim, and the outcome of punitive policies in the United States. Students will examine the community response to inmates coming home and the problems parolees face when returning to their community.

### **CJC 3350 - Juvenile Justice and Delinquency**

**Credits:** 3

**Prerequisite(s):** CJC 1010 or permission of instructor

**Description:** This course is a study of the nature and causes of delinquency and crime, criminal personality, and societal processes. This course analyzes the concepts of prevention, control and prediction in juvenile delinquency.

### **CJC 3400 - Criminological Theories**

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** The characteristics of criminal behavior, including biological, psychological, social, and cultural links to deviant and antisocial behavior are illustrated. This course examines criminal self-conceptions, criminal personality and serial criminals.

### **CJC 3410 - Criminal Justice and the Social Structure**

**Credits:** 3

**Prerequisite(s):** CJC 1010 with a minimum grade of C

**Description:** This course examines criminal justice systems in relation to social power, class structure, ecological patterns, subcultural developments, and processes of change in the community and in the criminal justice structure. Culture is examined in order to comprehend the interaction between subcultures in the larger society, as well as develop an understanding of cultural competence. The course evaluates the ambivalence in the social processes of law enforcement, courts and corrections, and the problems of professionalization.

### **CJC 3420 - Organized Crime**

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** Students in this course will examine history of organized crime in America and its impact on politics, law enforcement and the community. Students will explore the evolution of organized crime throughout American history, as well as the relationship between organized crime and law enforcement. Students will examine theories, politics, and policies related to organized crime. Students will also closely examine the history and development of legal punishment in the United States and the social consequences of these punishments, focusing on developing laws surrounding cybercrime and how the law evolves as criminal behaviors evolve in a technological age where transnational and internet crime are growing trends in the modern era. There is an emphasis on how these criminal and legal changes influence governmental institutions and society in general.

### **CJC 3430 - Drugs and the Criminal Justice System**

**Credits:** 3

**Prerequisite(s):** CJC 1010 with a minimum grade of C

**Description:** This course examines the history of drug use and drug laws, the relationship between drug use and crime, drug offenses and the criminal justice system, as well as treatment and prevention issues.

### **CJC 3440 - American Gangsters**

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:**

This course will examine the nature and causes of gangs with an interdisciplinary focus. It will provide a background on gang membership and structure, an overview of the theoretical background and purpose of gangs, and will discuss prevention and intervention from a cross cultural perspective.

### **CJC 3460 - Crime Mapping and Analysis**

**Credits:** 3

**Prerequisite(s):** CJC 1010 with a minimum grade of C

**Description:** In this course, students will define the concepts of crime mapping and develop skills to use Geographic Information System (GIS) in understanding crime problems. Students will explore applied research techniques for tactical (crime series), strategic (operations research & problem analysis), and administrative analysis (budget/crime trend forecasting). Students will also develop skills to use GIS (Crime Mapping) tools, and interpret temporal and spatial statistics that lead to informed, data driven, and evidence-based criminal justice policy.

### **CJC 3470 - Punishment and Society**

**Credits:** 3

**Prerequisite(s):** CJC 1010 with a minimum grade of C

**Description:** This course is a critical examination of the history and development of the United States' system(s) of criminal punishment and rehabilitation. It covers the different ways in which the United States has sought to penalize, correct, and prevent criminal behavior.

### **CJC 3480 - Sex Crimes and Offenders**

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** Students will examine the nature and etiology of the major categories of sex offenses. Students will also explore the criminal justice system's responses to sex crimes and offenders, including investigation and prosecution of sex crimes. Students will evaluate federal and local sex offender legislation, as well as community supervision and reentry issues that face offenders. Students will also survey theoretical approaches to sex crimes and offenders.

### **CJC 3490 - Serial Killers**

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** Students will study the phenomenon of serial murders and other serial violent crimes in America. Students will examine the typology of serial killers and other violent serial offenders. Different and unique characteristics of male, female, and team serial killers will be discussed. An overview of theoretical explanations and causes of serial offending and/violent crimes will be analyzed. The social and political implications of studying serial killings will be studied, as well as how law enforcement and the legal system investigate and prosecute serial murderers.

### **CJC 3650 - Human Trafficking: Public Health Response**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** Students explore human trafficking utilizing global public health frameworks to examine the interprofessional nature of community response in Colorado. A review of multidisciplinary perspectives on labor and sex trafficking provides a comprehensive understanding of this human rights issue. Further, students examine the tactics used by traffickers to recruit and control victims and the effects of abuse on survivors. Students will be presented with an overview of the United Nations, U.S. federal and Colorado state laws to curb trafficking. Finally, students evaluate global and local efforts of the current anti-trafficking movement, including ways to be involved.

*Note:* Credit may be granted for only one prefix.

**Cross Listed Course(s):** AAS 3405, GWS 3400, HSP 3405, PUB 3400, SWK 3405

### **CJC 3710 - Women and the Law**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or CJC 1010 or Permission of instructor

**Description:** This course introduces students to basic concepts that define the relationship of women to the law. Students will learn about the historical conditions and legal perspectives that affect women's rights in the U.S. This course deals specifically with women's equal participation in citizenship, work, education, reproductive rights, and protection from violence.

*Note:* Credit will be granted for only one prefix: CJC, PSC, SOC or GWS.

**Cross Listed Course(s):** GWS 3310, PSC 309J, SOC 365B

### **CJC 3720 - Chicanos and the Law**

**Credits:** 3

**Prerequisite(s):** CHS 1000 or CJC 1010, or permission of instructor; and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** Students in this course explore a range of legal, philosophical, and policy approaches to legal issues affecting the Latinx population. Students will study the interaction between Chicanos/as and Latinos/as and the legal system is examined within the political, social and historical context of the U.S. Specifically, an overview of White supremacy, intersectionality, and the history of oppression in America via the legal system, and U.S. Constitutional Law via U.S. Supreme Court cases in the context of Latinos is presented as they relate to the legal significance of the social factors of race, ethnicity, class, gender, sexual orientation, national origin, and citizenship.

*Note:* Credit will be granted for only one prefix: CJC or CHS.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** CHS 3200

## CJC 3800 - Federal Law Enforcement

**Credits:** 3

**Prerequisite(s):** CJC 1010 and CJC 2210 OR CJC/CYB 2500

**Description:** Students in this course will examine the United States federal law enforcement system by focusing on the various federal agencies and their relationships with the criminal justice system, including historic foundations and emerging issues. The relationships between federal and local/state/private law enforcement are presented within the context of administrative partnerships, collaborative efforts, and unified missions that pertain to domestic and international crime threats, homeland security collaborations, and delivery of services to include technological advances.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** HSP 3800

## CJC 3810 - Hate Crime

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** Students examine the historical and contemporary concept of hate crimes. Specifically students will examine the causes, manifestations, and consequences of crimes committed against people of color, sexual orientation, minorities, women, religious sects, and other marginalized groups. How hate crime is addressed and controlled through social, legal, and political methods is also explored.

## CJC 3820 - Study Abroad: Criminal Justice and Criminology

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** This is a variable topics course and involves study and visitation of distinct, selected international criminal justice systems. Students will have an opportunity to compare these systems to the Criminal Justice System in the United States through travel, site visits, and lectures about these comparative law enforcement, courts, prisons, gangs, and counterterrorism groups.

*Note:* This course may be repeated 3 times for a maximum of 9 credit hours. 6 of these credit hours may be used to fulfill CJC coursework.

## CJC 3980 - Internship in Criminal Justice and Criminology

**Credits:** 1-6

**Prerequisite(s):** Major in Criminal Justice and Criminology or Cybersecurity; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit and students may repeat the course for a total of 6 credit hours. Credit will be granted for only one prefix.

**Cross Listed Course(s):** CYB 3980

## CJC 4050 - Criminal Justice Professional Seminar: Variable Topics

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** A variable titled course focusing on the synthesis of concepts and skills present in the criminal justice system. Designed to provide the criminal justice professional with theories and their application to criminal justice policy implementation.

*Note:* This course may be repeated for credit under different titles.

## CJC 4160 - Human Trafficking

**Credits:** 3

**Prerequisite(s):** GWS 1001, or AAS 1010, or CJC 1010, or HSP 1010, or SWK 1010; upper-division standing; or permission of instructor

**Description:** This course explores human trafficking on international and local levels. A review of multidisciplinary perspectives on labor and sex trafficking provides comprehensive understanding of this human rights issue. Students examine the tactics used by traffickers to recruit and control victims and the effects of abuse on victims. This course provides an overview of U.S. federal and local laws to curb trafficking, including federal Trafficking Victims Protection Act. Finally, students evaluate global and local efforts of the current anti-trafficking movement, including ways to be involved.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** AAS 4160, GWS 4160, HSP 4160, SWK 4160

## CJC 4220 - Criminal Justice and the Elderly

**Credits:** 3

**Prerequisite(s):** CJC 1010 with a minimum grade of C

**Description:** This course focuses on criminal justice issues related to the elderly as victims, elder abuse, neglect, elder crime prevention programs, old age and crime, elder crime patterns, aging prisoners, and rehabilitative programs. State agencies and other groups involved with crime and the elderly are examined. It is designed to provide a theoretical approach to criminal justice professionals in the application of criminal justice policy implementation.

## CJC 4230 - The Female Offender

**Credits:** 3

**Description:** This course examines the nature and causes of female criminality and the responses to female offending by all areas of the criminal justice system e.g. policing, courts and prisons. It blends an in-depth analysis of historical methods of addressing female

criminality with an intersectional approach to finding solutions to modern-day problems that can influence criminality among girls and women such as intimate partner violence, poverty, mental illness, and the feminization of work. Topics will include gender norms, girl fights, women who kill, prostitution, human trafficking, women's prisons and women on death row. The course will also address methods for correcting and preventing female criminality from an intersectional approach.

*Note:* Credit will be granted for only one prefix: CJC or GWS.

**Cross Listed Course(s):** GWS 4230

## **CJC 4240 - Gender and Violence**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or GWS 1200 or GWS 1550 or CJC 1010 or PSC 1020 or SOC 1010 or permission of instructor

**Description:** Students analyze key patterns and structures of gender and sexual violence, with a special focus on the diverse experiences of women, queers and gender-variant people. Students draw from disciplines such as queer/trans theory and transnational feminism to illuminate iterations of and resistance to gender-based violence, including how 'safety' and 'precarity' are distributed unevenly across groups due to various social formations. Topics in this course include sexual violence, interpersonal violence, family violence, trafficking, state violence (including carceral, medical and military violence), among others.

*Note:* Credit will be granted for only one prefix: CJC, GWS, PSC, or SOC.

**Cross Listed Course(s):** GWS 4240, PSC 4240, SOC 4240

## **CJC 4250 - Community Policing**

**Credits:** 3

**Prerequisite(s):** CJC 1010 with a minimum grade of C

**Description:** This course examines the historical evolution and implementation of Problem and Community Oriented Policing. The roles of the police and community are analyzed. A case study approach is utilized in which students solve current community issues from a community and problem oriented policing perspective/approach.

## **CJC 4260 - Media, Crime, and Culture**

**Credits:** 3

**Prerequisite(s):** CJC 1010 with a minimum grade of C

**Description:** The course will examine the relationship between the mass media, crime and criminal justice with special emphasis placed on the social construction of crime and criminal justice. Other topics of inquiry will include the portrayal of crime and criminal justice in the entertainment and news media, the influence of the media on attitudes toward crime and justice, and the use of news media in the courts. Criminological theories and their relationship to how crime and criminal justice are reported in the media will also be discussed.

## **CJC 4430 - Comparative Criminal Justice**

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** Students engage in a survey of worldwide criminal justice philosophies, systems and practices. They also examine contemporary criminal justice organizations and legal systems in major and emerging nations.

## **CJC 4650 - Ethics for the Criminal Justice Professional**

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** This course offers an in-depth analysis of ethical issues which confront the criminal justice professional. It includes an examination of the issues of covert surveillance, regulation of morals, equity and fairness, "blowing the whistle," and public interest versus private freedom.

## **CJC 4700 - Capstone Seminar in Criminal Justice and Criminology**

**Credits:** 3

**Prerequisite(s):** CJC 1010, Senior Standing

**Description:** This course is designed to provide criminal justice majors and minors with a capstone experience emphasizing integration of knowledge acquired in previous courses on the institutions, policies, and practices of criminal justice and criminology. The course seeks to synthesize learning with exercises that promote critical thinking, the application of theory, and the critique of current practices in criminal justice and criminology. Students will also be asked to verify their expertise through the completion of a senior project.

**University Requirement(s):** Senior Experience

## **Culturally and Linguistically Diverse Education**

### **CLD 2890 - Second Language Acquisition: K-12 Educational Implications**

**Credits:** 3

**Description:** This course examines the intricate web of variables that interact in the process of acquiring a second language and the instructional implications for K-12 students. These variables include linguistic, cognitive, social, cultural, and political factors. The course will examine each of these factors and consider the educational implications of how they work together to foster or inhibit successful second language learning and academic success for second language learners in K-12 public schools.

### **CLD 3290 - Literacy Development for Culturally and Linguistically Diverse Students K-12**

**Credits:** 3

**Prerequisite(s):** CLD 3510 or CLDM 5510

**Description:** This course in literacy development and instructional techniques is designed to extend elementary and secondary educators' knowledge of literacy instruction to Culturally and Linguistically Diverse students. Through this course students will gain a knowledge base which will enable them to develop the language and literacy of the culturally and linguistically diverse learners in their classrooms. Students will create and implement lesson and unit plans encompassing the knowledge obtained in the course, and will reflect upon the effectiveness of their teaching. This course contributes to the essential knowledge and dispositions required of teachers who work with elementary and secondary English language learners, and serves as a foundation for further study in the field of English language acquisition theory and teaching techniques.

### **CLD 3310 - Integrated Methods of Teaching English as a Second Language**

**Credits:** 3

**Prerequisite(s):** CLD 3510 or CLDM 5510

**Description:** This course will focus on content area methodologies to develop the linguistic, academic, social, and cognitive skills of K-12 English Language Learners (ELL). This course will also emphasize the process of selecting the most appropriate methods and materials, as well as planning for the most effective use of resources. Students will demonstrate an understanding of the basic premises of language program development and instructional strategies for supporting content area learning.

### **CLD 3510 - Perspectives in Education for Culturally and Linguistically Diverse Learners**

**Credits:** 3

**Description:** This is an introductory course in language acquisition and teaching theory with emphasis on the culturally and linguistically diverse learner. The course includes historical perspectives, philosophical frameworks, legal implications, subject matter methodologies, assessment, classroom instruction, parent involvement, and current issues that affect culturally and linguistically diverse students and the school programs serving them.

### **CLD 3910 - Assessment of English Language Learners**

**Credits:** 3

**Prerequisite(s):** CLD 3510 or CLDM 5510

**Description:** This course is designed to familiarize teacher candidates with various assessment issues and strategies specific to English language learners. Through this course teacher candidates will gain a current knowledge base which will enable them to effectively assess English language learners and report assessment results to students, parents, other educators, the school district, and other appropriate entities. Teacher candidates will learn various formal and informal assessment techniques and will be able to use the results of assessments to create appropriate and effective instruction.

### **CLD 3930 - Spanish Bilingual Education Theory and Research**

**Credits:** 3

**Prerequisite(s):** CLD 3510 or CLDM 5510

**Description:** Students will examine current theory and research in the field of bilingual education and create a research proposal. Students will be introduced to the major research traditions, design components, and methodologies of qualitative, quantitative and mixed-methods research. They will apply this knowledge of research in the creation of a bilingual education research proposal. This course will be taught in English.

### **CLD 3940 - Spanish Bilingual Language and Literacy Development**

**Credits:** 3

**Prerequisite(s):** CLD 3510 or CLDM 5510; this course is taught in Spanish and requires instructor approval for registration

**Description:** This course in Spanish literacy development and instructional techniques is designed to extend elementary and secondary educators' knowledge of Spanish literacy instruction for emerging bilingual students. Students will create and implement literacy lessons and a literacy unit plan encompassing the knowledge obtained in the course. This course will be taught in Spanish.

### **CLD 3950 - Spanish Bilingual Methods and Materials**

**Credits:** 3

**Prerequisite(s):** CLD 3510 and this course is taught in Spanish and requires instructor approval for registration

**Corequisite(s):** CLD 3951

**Description:** This course prepares students to teach Spanish speaking students, specifically in the content areas (Social Studies, Science & Math). Strategies, methods, materials, and resources are shared to plan content instruction in two languages for emerging bilingual students. This course will be taught in Spanish. Further, translanguaging pedagogy will be utilized to support the planning and implementation of bilingual lessons. For elementary students, a 1 credit field experience (CLD 3951) must be taken concurrently with this course. Modern Language Spanish majors will take this course concurrently with LANG 4961. An observation of a lesson taught in Spanish will be scheduled during the classroom field experience.

### **CLD 3951 - Spanish Culturally and Linguistically Diverse (CLD) Bilingual Education Specialist K-12 Added Endorsement Field Experience**

**Credits:** 1

**Prerequisite(s):** CLD 3510 or CLDM 5510

**Corequisite(s):** CLD 3950

**Prerequisite(s) or Corequisite(s):** Oral Proficiency Interview

**Description:** This one-credit course is the required 30-hour field experience for students seeking the Spanish Culturally &



Linguistically Diverse (CLD) Bilingual Education Specialist K-12 Added Endorsement. This field experience is for Elementary Education, Special Education and Early Childhood Education majors or licensed teachers.

## **CLD 4115 - CLD Residency I**

**Credits:** 3-7

**Prerequisite(s):** EDU 4011, EDU 3666, EDU 3665, EDU 3550

**Corequisite(s):** RDG 4444

**Description:** This clinical residency in a classroom with culturally and linguistically diverse (CLD) learners requires at least three full, sequential instructional days per week in an assigned accredited public or private elementary classroom with English Language Learners. The CLD residency and accompanying seminar includes opportunities to synthesize content from all previous coursework, including concentration coursework for serving CLD students: methods for teaching CLD learners; professionalism; designing, implementing, and assessing instruction for diverse learners; student motivation and engagement; and collaboration with colleagues and families, particularly diverse families. The teacher candidate is an active participant in the elementary school community through close observation of the mentor teacher, collaborative practice with the mentor teacher, and/or supervised independent practice. Concepts and skills learned in RDG 4444 are a particular focus in this residency; however, residents are engaged in all content areas.

## **CLD 4225 - CLD Residency II**

**Credits:** 3-9

**Prerequisite(s):** RDG 4444; EDU 4115 and/or CLD 4115 or a combination of EDU 4115 and CLD 4115

**Corequisite(s):** EDU 4222; EDU 4225

**Description:** This culminating, full-time clinical residency will place the teacher candidate in an assigned, accredited public or private elementary school. Close collaboration between the candidate and mentor teacher will occur in a variety of ways, including the candidate taking the role of lead teacher. The candidate will assume responsibility for all functions of the classroom, including overall design and implementation of instruction and assessment in all curricular areas, maintenance of a productive classroom environment tailored to the needs of diverse learners, communication with colleagues and families, and integration of technology to improve student learning. Knowledge and skills gained in the corequisite EDU 4222 course concerning assessment, data, and use of specific instructional strategies for identified needs are practiced, and the teacher candidates evaluate these practices in light of class and individual academic achievement. Candidates participate in all content area instruction. CLD Residency II includes a seminar.

**University Requirement(s):** Senior Experience

## **CLD 4520 - Field Experience in Culturally and Linguistically Diverse Education**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** Successful completion of all

course work for the Culturally and Linguistically Diverse Education Endorsement; or permission of instructor.

**Description:** This course provides candidates for the Culturally and Linguistically Diverse Education Endorsement the opportunity to develop and practice effective instructional strategies for English language learners in a K-12 classroom setting. Students are required to spend fifty-five hours of field experience in a culturally and linguistically diverse classroom and attend seminars to consider and reflect on practice.

## **CLD 4590 - Culturally and Linguistically Diverse: ESL Student Teaching and Seminar**

**Credits:** 6

**Prerequisite(s):** Successful completion of all requirements of the major, minor, Culturally and Linguistically Diverse Endorsement courses, teacher licensure program, and general studies. Satisfaction of all student teaching application requirements by the required deadline. Passage of the Initial Licensure Area PLACE exam.

**Corequisite(s):** EDU 4190 or EDS 4290 or ECE 4390 with a cooperating teacher in the student's initial licensure area.

**Description:** This course is a supervised, full-time, eight-week, student-teaching experience in an accredited public or private school. The experience provides increasing responsibility for the teaching, supervision, and direction of an identified group of English language learners, K -12. Teacher candidates must attend seminars conducted by college supervisors of student teaching. Teacher candidates are required to demonstrate proficiency in Performance Based Standards for Colorado Teachers, as well as Colorado Culturally and Linguistically Diverse Endorsement Standards.

## **Cybersecurity**

### **CYB 2001 - Cyber Laws and Regulations**

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** Students in this course will define current cyber laws and regulations as they relate to cybersecurity and cybercrime. Students will examine the legal aspects of forensic computer science, privacy issues, constitutional protections, and will review related state, federal and international laws and regulations. Students will also examine the challenges in the investigation and prosecution of cybercriminals as well as the constitutional issues applicable to the presentation of cybercrime evidence. Students will examine the legal and ethical implications created in cyberspace.

### **CYB 2500 - Criminal Investigation**

**Credits:** 3

**Prerequisite(s):** CJC 1010

**Description:** Students in this course will define and explain the relationship between law enforcement and the investigative process. These investigative processes will be further analyzed in the context of defining and categorizing criminal behavior alongside the

increased need for technological advances. Law enforcement agencies and their evolving techniques will also be examined from the perspective of the challenges these agencies regularly face.

*Note:* Credit will be granted for only one prefix: CYB or CJC

**Cross Listed Course(s):** CJC 2500

## **CYB 3900 - Open-Source Intelligence**

**Credits:** 3

**Description:** This course teaches students primarily how to use open source intelligence (OSINT) to gather information and intelligence for law enforcement. Media as well as Internet in general are the main open sources to be used in this course. These sources use non-sensitive intelligence while still providing valuable information to law enforcement. Other topics such as the use of open source intelligence by private entities and non-governmental organizations will also be discussed. After taking this course, students will be able to research and evaluate open source information as well as produce valuable intelligence for prediction, prevention, investigation, and prosecution of criminals.

## **CYB 3980 - Internship in Criminal Justice and Criminology**

**Credits:** 1-6

**Prerequisite(s):** Major in Criminal Justice and Criminology or Cybersecurity; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit and students may repeat the course for a total of 6 credit hours. Credit will be granted for only one prefix

**Cross Listed Course(s):** CJC 3980

## **CYB 4990 - Capstone Seminar in Cybersecurity**

**Credits:** 3

**Prerequisite(s):** CJC 3210, CJC 3420, and CJC 3800; CIS 4550; CSS 3752; Senior Standing 90 hours posted; per instructor's permission

**Description:** Students in this course will integrate their knowledge acquired in previous courses on the institutions, policies, and practices of computer information systems, computer sciences and criminal justice. The students will synthesize interdisciplinary learning with exercises that promote critical thinking, including the development of a system plan with a focus on addressing encryption issues and best practices data protection. Students will critique current practices in criminal justice and cybersecurity. Students will evaluate the computer science of detecting infiltrated computer system networks and portable devices, with an extension towards a

security conscious system and software development practices and testing activities, which includes discussion of ethical hacking.

**University Requirement(s):** Senior Experience

## **Dance**

### **DANC 1010 - Dance Appreciation**

**Credits:** 3

**Description:** Students investigate fundamental aspects of dance as a cultural and artistic practice - its organizational principles, purpose, function, and aesthetic features. They consider how dance has developed differently in different cultures and how societal perceptions of 'the body' within a culture impact the types of dances that develop in it. Students examine the purposes of dancing, including ritual, political, social, and theatrical. By discussing sociocultural attitudes about dance, and through exposure to classical and contemporary dance traditions, students develop a vocabulary for describing and interpreting dance and an understanding of the art form's significance and development in a variety of contexts.

Although most course activities do not involve the physical practicing of dance, one physical participation assignment is included so students have an opportunity to practically apply their knowledge.

**General Studies:** Arts and Humanities

### **DANC 1015 - Introduction to Dance Techniques and Forms**

**Credits:** 3

**Description:** In this course, students study a variety of dance forms, according to instructor expertise. Students read about the dance forms, their history, and their cultural contexts, and are assessed based on that knowledge. Students also practice the dance forms themselves, using embodied learning to execute the movement at a beginning level in a classroom setting. In movement practice, students are assessed based on effort, tenacity, personal progress, and adhering to the traditions of the forms.

**General Studies:** Arts and Humanities

### **DANC 1020 - Ballet Folklórico**

**Credits:** 2

**Description:** This course will serve as an introduction to Ballet Folklórico through an exploration of the technique, music, culture, and philosophy associated with this dance tradition.

**Cross Listed Course(s):** ESSA 1020

### **DANC 1101 - Hip Hop I**

**Credits:** 2

**Description:** This course will incorporate hip hop dance techniques, popular hip hop moves, terminology, history and various styles of hip hop will be learned. The class will consist of warm up, center floor work, across the floor, and dance combinations.

*Note:* This course may be taken twice for a total of 4 credits.

**Cross Listed Course(s):** ESSA 1101

## **DANC 1110 - Belly Dance I**

**Credits:** 2

**Description:** Belly dancing, an ancient cultural dance, is a creative and joyous art of self-expression and a way to fitness and wellbeing.

*Note:* This course may be taken twice for a total of 4 credits.

**Cross Listed Course(s):** ESSA 1110

## **DANC 1120 - African Dance and Drumming**

**Credits:** 2

**Prerequisite(s):** Department Approval

**Description:** This course will serve as an introduction to African Dance and Drumming through an exploration of movement, music, culture, and philosophy associated with that tradition.

## **DANC 1130 - Ballet Level I**

**Credits:** 2

**Description:** Intended for adults with minimal or no experience, this course presents basic steps, positions, and movements of classical ballet, stressing correct body placement.

**Cross Listed Course(s):** ESSA 1130

## **DANC 1150 - Ballroom Dance**

**Credits:** 2

**Description:** This course provides instruction and practice in ballroom dance with a focus on traditional dances. Dance mixers and ice breakers will also be included in this class.

**Cross Listed Course(s):** ESSA 1150

## **DANC 1160 - Jazz Level I**

**Credits:** 2

**Description:** This course is designed to teach fundamental techniques of jazz dance for fitness, endurance, strength, alignment and to help the student discover different movement patterns.

**Cross Listed Course(s):** ESSA 1160

## **DANC 1180 - Modern Dance I**

**Credits:** 2

**Description:** This course is designed for students with minimal or no dance experience. A basic modern dance foundation stressing alignment, strength and coordination will be covered.

**Cross Listed Course(s):** ESSA 1180

## **DANC 1210 - Improvisation and Choreography**

**Credits:** 3

**Description:** This course explores introductory dance improvisation and composition through creative problem solving and choreographic exercises. It is organized into sequences, expressing a variety of themes.

**Cross Listed Course(s):** ESSA 1210

## **DANC 1240 - Tap Dance I**

**Credits:** 2

**Description:** This course is designed to provide an introduction to tap dance, as well as the physical, social and emotional benefits derived from regular participation in this activity.

**Cross Listed Course(s):** ESSA 1240

## **DANC 2201 - Hip Hop II**

**Credits:** 2

**Prerequisite(s):** DANC 1101 or ESSA 1101 or Instructor Approval

**Description:** Students will gain a physical and intellectual understanding of intermediate hip-hop as they are exposed to hip-hop terminology, history, and a variety of hip-hop styles.

**Cross Listed Course(s):** ESSA 2201

## **DANC 2210 - Belly Dance II**

**Credits:** 2

**Prerequisite(s):** DANC 1110 or ESSA 1110 or permission of instructor

**Description:** Belly dancing, an ancient cultural dance, is a creative and joyous art of self-expression and a way to fitness and wellbeing. Belly Dancing Level II will delve deeper into the emotional, physical and spiritual components of Belly Dancing. Students will learn to dance with increased fluidity and depth, explore floor work and create an original dance.

*Note:* This course may be taken twice for a total of 4 credits.

**Cross Listed Course(s):** ESSA 2210

## **DANC 2230 - Ballet II**

**Credits:** 2

**Prerequisite(s):** DANC 1130 or ESSA 1130 or Instructor Approval

**Description:** This course is designed for students with beginning ballet skills. It will cover low intermediate level classical ballet exercises, stressing performance quality and proper alignment.

**Cross Listed Course(s):** ESSA 2230

## **DANC 2240 - Tap Dance II**

**Credits:** 2

**Prerequisite(s):** DANC 1240 or ESSA 1240

**Description:** This course is designed for low-intermediate level tap dance students. It introduces intermediate techniques of tap for fitness, health, rhythmic and performance skills.

**Cross Listed Course(s):** ESSA 2240

## **DANC 2260 - Jazz II**

**Credits:** 2

**Prerequisite(s):** DANC 1160 or ESSA 1160

**Description:** This course is for students with beginning level jazz dance experience. This course covers low intermediate Jazz Dance techniques focusing on alignment and performance presence.

**Cross Listed Course(s):** ESSA 2260

## **DANC 2280 - Modern Dance II**

**Credits:** 2

**Prerequisite(s):** DANC 1180 or ESSA 1180

**Description:** This course is designed for students with beginning modern dance experience. A low intermediate movement foundation stressing alignment, syncopation and performance presence will be covered.

**Cross Listed Course(s):** ESSA 2280

## **DANC 3040 - MSU Denver Dance Ensemble**

**Credits:** 3

**Prerequisite(s):** 6 credits of dance technique or instructor approval

**Description:** As an ensemble, students create, learn, and perform dances in various community settings. Off-campus travel is required.

## **DANC 3301 - Hip Hop III**

**Credits:** 2

**Prerequisite(s):** ESSA 1101 or DANC 1101 and DANC 2201 or Instructor Approval

**Description:** This course is for students with intermediate hip-hop dance experience. Students develop strength, control, endurance, coordination, weight shift, performance presence, rhythm, and syncopation as they work towards an advanced intermediate movement foundation in Hip Hop. This course incorporates the culture of Hip Hop into a movement experience based within the techniques, terminology and history of various styles.

## **DANC 3330 - Ballet III**

**Credits:** 2

**Prerequisite(s):** DANC 2230 or ESSA 2230 and Instructor Approval

**Description:** This course is designed for students with low intermediate ballet skills. Intermediate level ballet exercises, stressing quality, artistry, alignment and efficiency of movement are covered.

**Cross Listed Course(s):** ESSA 3330

## **DANC 3360 - Jazz III**

**Credits:** 2

**Prerequisite(s):** DANC 2260 or ESSA 2260 and Department Approval

**Description:** This class is for students with low intermediate level jazz dance experience. This course covers intermediate Jazz Dance

focusing on, alignment, and performance presence.

**Cross Listed Course(s):** ESSA 3360

## **DANC 3380 - Modern Dance III**

**Credits:** 2

**Prerequisite(s):** DANC 2280 or ESSA 2280 and Department Approval

**Description:** This course is for students with low intermediate modern dance experience. Students will build an intermediate movement foundation stressing alignment, syncopation, weight and performance presence.

**Cross Listed Course(s):** ESSA 3380

## **DANC 3391 - Cleo Parker Robinson International Summer Dance Institute I**

**Credits:** 1

**Prerequisite(s):** 4 credits of Modern, Jazz or Ballet and instructor approval

**Description:** This course is for students with low intermediate dance experience. An intermediate movement foundation stressing alignment, strength, weight and performance presence will be covered.

## **DANC 3392 - Cleo Parker Robinson International Summer Dance Institute II**

**Credits:** 2

**Prerequisite(s):** 4 credits of Modern, Jazz or Ballet and instructor approval

**Description:** This course is for students with low intermediate dance experience. An intermediate movement foundation stressing alignment, strength, weight and performance presence will be covered.

## **DANC 3410 - Skills and Methods of Teaching Dance Technique**

**Credits:** 3

**Prerequisite(s):** 4 credits in modern, jazz, ballet, tap, hip hop, or world dance forms, Junior standing or instructor approval

**Description:** This course will prepare students to teach dance technique classes to a range of ages, populations, and skill levels.

*Note:* Some sections of this course may be taught as Service Learning.

## **DANC 3420 - Skills and Methods of Teaching Improvisation and Choreography**

**Credits:** 3

**Prerequisite(s):** DANC 1210

**Description:** This course is designed to prepare the student to teach improvisation, choreography, and creative dance in schools, studios, and other settings.

## **DANC 3440 - Dance Production**

**Credits:** 3

**Prerequisite(s):** ESSA 1210 and Sophomore standing

**Description:** This course is designed to teach dance students how to produce a performance. Students gain practical experience through the production of a dance-based performance.

## **DANC 3750 - Study Abroad: Human Performance and Sport**

**Credits:** 3

**Prerequisite(s):** Sophomore standing, 2.5 GPA

**Description:** This is a variable topics course and involves study and visitation to historical and culturally rich selected international human performance and sport programs and locations. Students will compare international approaches to human performance and sport through a combination of the following: travel, site visits, tours, interactive educational activities, research in libraries of local institutions and lectures. Lectures may highlight current scientific and cultural themes, governance, management, marketing, sport operations & development, health & fitness initiatives, protocols, and collective sport activities.

**Cross Listed Course(s):** ESS 3750

## **DANC 3810 - Embodying Pop Culture: Dance and Identity in U.S. Popular Culture**

**Credits:** 3

**Prerequisite(s):** ENG 1020 OR ENG 1021

**Description:** Students in this lecture course explore and contextualize dance in popular culture through a sociocultural and historical lens. Surveying two broad topics, social dance and dance on screens, students investigate how hegemonic cultural ideologies are propagated and/or subverted through dancing bodies. Students explore how positionality affects the perceived value and influence of various dance practices and how movement shifts as it migrates to different locations and spaces. Critical analysis reveals the ability of dance to impact and be impacted by culture, as students explore the context of dance they encounter in everyday life. Through viewing, reading, and discussion, students interrogate the ways in which dance teaches consumers about the world around them, even as it entertains.

**General Studies:** Arts and Humanities

## **DANC 3835 - African Drum and Dance Ensemble**

**Credits:** 1

**Description:** This ensemble introduces the varied and rich musical traditions of Africa and the African diasporas through participation and performance. The course focuses on the development of a variety of drumming and dance techniques, while cultivating a program of pieces for performance at the end of the semester. No previous musical experience is required, and it is a non-auditioned ensemble and open to all students regardless of their major.

*Note:* This course may be repeated for credit.

**Cross Listed Course(s):** ESS 3835, MUS 3835

## **DANC 3905 - Dance Repertory**

**Credits:** 3

**Prerequisite(s):** 4 credits in either Modern, Jazz, or Ballet or instructor approval

**Description:** Students learn and perform dances choreographed by faculty members, community members, their peers, and/or the repertory of historic contemporary choreographers.

## **DANC 3910 - Dancing Histories in a Global Context**

**Credits:** 3

**Prerequisite(s):** ENG 1010 OR both ENG 1008 and ENG 1009, AND ENG 1020 (or the Honors Program course, ENG 1021)

**Description:** Considering dance as a reflection of culture, students examine the history of various dance practices from around the globe, informed by religious, sociopolitical, economic, and cultural contexts.

## **DANC 3920 - Dance Entrepreneurship**

**Credits:** 3

**Prerequisite(s):** Junior standing or instructor approval

**Description:** Through an overview of dance career management tools, students will learn entrepreneurship skills and strategies to create opportunities in dance-related businesses.

*Note:* Some sections of this course may be taught as Service Learning.

## **DANC 3930 - Choreography II**

**Credits:** 3

**Prerequisite(s):** ESSA 1210

**Description:** This course develops students' choreographic skills as they explore non-traditional and multidisciplinary compositional forms, creating original choreography for a dance concert performed outside of class.

## **DANC 3940 - Experiential Movement, Somatics and Injury Risk Reduction for Dance Artists**

**Credits:** 3

**Prerequisite(s):** 4 credits in Modern, Jazz or Ballet, OR instructor approval

**Description:** In this course, students use experimental/sensory activities and dance movement explorations to facilitate the kinesthetic experience of anatomy, planes of motion, alignment and biomechanics.

## **DANC 3950 - Dance Film: Choreography, Camera, Action**

**Credits:** 3

**Prerequisite(s):** ESSA 1210 or DANC 1210 and Sophomore

standing or permission of department

**Description:** This course teaches dance makers to enhance their creative vision through the art of dance film creation, as well as enables filmmaking students to enrich their work by collaborating with dancers to create a higher sensitivity to movement on screen.

### **DANC 3980 - Internship for Dance**

**Credits:** 3-9

**Prerequisite(s):** Minimum of 10 credits in dance and consent of instructor

**Description:** The internship is an applied experience with a dance organization, providing students with opportunities to utilize acquired dance knowledge and skills in a non-class setting.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at c2hub@msudenver.edu.*

### **DANC 3990 - Dance Field Experience**

**Credits:** 1-3

**Prerequisite(s):** Permission of the instructor

**Description:** This course enables students to apply a range of concepts from the field of dance in a practical, hands-on learning experience. Students may earn from 1 to 3 credit hours through this field experience by working with a specific dance organization or project.

*Note:* This course may be repeated for up to 12 credits.

### **DANC 4010 - Advanced/Professional Company Class**

**Credits:** 2

**Prerequisite(s):** 4 credits of upper division Modern, Jazz or Ballet and instructor approval

**Description:** Intended for advanced intermediate dance students, this course provides advanced movement foundations stressing varying concepts each semester, including alignment, strength, weight, dynamics, and performance presence.

### **DANC 4430 - Ballet IV**

**Credits:** 2

**Prerequisite(s):** ESSA 3330 and Department Approval

**Description:** This course is designed for students with intermediate ballet skills. This course will cover advanced intermediate level ballet, stressing quality, artistry, efficiency and alignment.

**Cross Listed Course(s):** ESSA 4430

### **DANC 4460 - Jazz IV**

**Credits:** 2

**Prerequisite(s):** ESSA 3360 and Department Approval

**Description:** This class is for students with intermediate level jazz dance experience. This course covers advanced intermediate Jazz

Dance, focusing on alignment and performance presence.

**Cross Listed Course(s):** ESSA 4460

### **DANC 4480 - Modern Dance IV**

**Credits:** 2

**Prerequisite(s):** ESSA 3380 and Department Approval

**Description:** This course is for students with intermediate modern dance experience. An advanced intermediate movement foundation stressing alignment, strength, weight and performance presence will be covered.

**Cross Listed Course(s):** ESSA 4480

### **DANC 4500 - Motor Learning and Development**

**Credits:** 3

**Description:** Students in this course will examine theories of human motor development and motor learning and apply them to practical situations in the fields of physical education, exercise science, dance, and various other health and wellness professions. Perceptual motor control and environmental factors affecting skill acquisition are emphasized in the course content.

**Cross Listed Course(s):** ESS 4500

### **DANC 4910 - Dance and Interdisciplinary Performance in the 20th Century and Beyond**

**Credits:** 3

**Prerequisite(s):** ESSA 1210 and DANC 3930

**Description:** This course investigates dance and interdisciplinary performance since 1960. Projects explore multidisciplinary collaboration and culminate in a public showing of creative works outside of class.

### **DANC 4920 - Community-Based Dance and Social Change**

**Credits:** 3

**Prerequisite(s):** DANC 2420, 4 credits in modern, jazz, ballet, tap, hip hop, or world dance forms, and Junior standing or instructor approval

**Description:** Students will experiment in creatively engaging communities and explore the facilitation and manifestation of community-based dance projects aimed at social transformation.

*Note:* Some sections of this course may be taught as Service Learning.

### **DANC 4990 - Dance Senior Experience**

**Credits:** 3

**Prerequisite(s):** Senior standing, completion of General Studies requirements, completion of a minimum 36 credits within major, 2.8 GPA in major

**Description:** This course provides Dance students the opportunity to synthesize knowledge gained from their undergraduate studies

through an independent project or internship and weekly seminar.  
**University Requirement(s):** Senior Experience

## Data Science and Machine Learning

### DSML 3850 - Cloud Computing

**Credits:** 4

**Prerequisite(s):** CS 3250

**Description:** In this course students learn how to utilize the on-demand delivery of IT resources provided by Cloud Computing to quickly set up software services and applications. Through assignments and projects students create the necessary data and software services to run applications in diverse domains including data science and machine learning. Additional topics covered include virtualization, security, load balancing, redundancy, auto scaling, and serverless computing.

### DSML 4220 - Deep Learning

**Credits:** 4

**Prerequisite(s):** CS 3120

**Description:** Deep learning, or deep neural networks, are machine learning models able to take advantage of huge volumes of data and abundant computing resources to solve problems that traditional methods could not. In this course students are exposed to the basic concepts behind early neural networks and develop an understanding of the mathematical concepts and computational techniques needed design, train, and utilize modern deep neural network architectures. The ethical implications and appropriate usage of these models is also discussed extensively.

### DSML 4360 - Senior Experience in Data Science and Machine Learning

**Credits:** 4

**Prerequisite(s):** Senior standing, completion of all lower-division courses required for the BS DSML degree, DSML 3850, MTH 3270, DSML 4220, JMP 2610, PHI 3370, and (COMM 1010 or COMM 1100), all with grades of "C-" or better; or permission of instructor.

**Description:** This senior-level capstone course reflects a culmination of learning and an opportunity to develop and apply knowledge in the areas of Data Science, Computer Science, Statistics, and Machine Learning to a specific domain. Students will identify and engage in semester-long projects that require a synthesis of the knowledge and skills acquired from earlier courses, and that will require planning and communication on the phases and progress of the project. Some projects may be solicited from constituents within MSU Denver or externally, and progress evaluated in conjunction with constituent representatives.

**University Requirement(s):** Senior Experience

## Early Childhood Education

### ECE 2100 - Introduction to Early Childhood Education

**Credits:** 3

**Description:** This survey course provides an overview of early childhood care and education, including historical and cultural perspectives, organization structure, programming, and developmentally effective culturally appropriate practices. The course includes an overview of the eight key areas of professional knowledge: Child Growth and Development; Developmentally Appropriate Practices; Guidance; Family and Community Relationships; Diversity; Health, Nutrition and Safety; Professionalism; Administration and Supervision.

### ECE 2310 - Families and Communities: Advocacy and the Law

**Credits:** 3

**Description:** The family, the community and the school as partners in the education of children is the focus of the course and includes planning and activities that encourage family and community involvement. The course includes the history of parent education, the family unit, culture and community, communication skills, parent-teacher conferences, mandated reporting of child abuse, and parental rights and responsibilities.

### ECE 2330 - Creativity and Expressive Arts for the Young Child

**Credits:** 3

**Prerequisite(s):** ECE 2100

**Description:** Students learn how creativity is defined, its importance, and how creative thinking in children (birth-age 8) can be promoted in a developmentally effective early childhood environment. Theories of artistic development in the visual arts, creative movement and dance, dramatic arts, and music are studied. Students learn pedagogy related to fostering cross-cultural understanding and respect, and integration of the expressive arts across the early childhood curriculum.

### ECE 2345 - Administration of Early Childhood Programs

**Credits:** 4

**Description:** This course provides an overall view of program administration and specific concepts applicable in a variety of early childhood settings: preschools, child care, infant/toddler care, and after-school programs. It also examines personnel management, program development, fiscal administration, marketing, and fund-raising.

### ECE 2360 - Infants and Toddlers I

**Credits:** 3

**Prerequisite(s):** ECE 2100

**Description:** This course focuses on infant/toddler curriculum and expanding quality in infant/toddler care. The importance of relationships, cultural diversity, nurturing environments, health and safety, and children with special needs is presented. The course provides a review of theories and emphasizes their applications and issues pertinent to infant and toddler development in group and/or family settings. It includes state requirements for licensing, health, safety and nutrition issues.

### **ECE 2370 - Curriculum for the Young Learner**

**Credits:** 3

**Prerequisite(s):** ECE 2100

**Description:** Students will analyze the underlying theories and perspectives used in the design of effective early childhood preschool curriculum models. Using National Association for the Education of Young Children (NAEYC) guidelines, students will identify components of developmentally effective, research-based, culturally responsive curriculum. Students will participate in 15 hours of unsupervised field experience.

### **ECE 2400 - Development and Characteristics of Early Learners**

**Credits:** 3

**Description:** In this course, students examine the field of child development (prenatal - age 8) and developmental changes across domains. Students are exposed to the major theories of child development and their perspectives on the physical, cognitive, and socio-emotional development of young children. An emphasis is placed on understanding the implications of child development research and theory on classroom practice and the creation of supportive learning environments.

### **ECE 2500 - Health, Safety and Nutrition**

**Credits:** 3

**Description:** This course focuses on health, safety, and nutrition as key factors for optimal growth and development of young children. The course is required for director qualification of a large childcare center and includes information about health practices, requirements and record keeping; safety requirements and developmentally appropriate activities to facilitate safety consciousness in young children; nutrition guidelines, menu planning and food preparation for childcare settings; effective communication with families concerning health, safety, and nutrition recommendations sensitive to socio-cultural differences; and policies and practices for developing and managing a safe early childhood environment.

### **ECE 2600 - The Exceptional Child**

**Credits:** 3

**Prerequisite(s):** ECE 2100

**Description:** An overview of critical elements related to the education of young children with exceptionalities in the early childhood setting will be presented. Topics include the foundations of

early childhood special education, a historical perspective of the field, typical and atypical child development, an overview of the various exceptionalities, legal requirements and implications for practice, research based practices related to inclusion, natural settings, and least restrictive environments, family-professional collaborations, and accommodations and adaptations.

### **ECE 2950 - Developmentally Effective Practice (DEP) I: The Intentional Preschool Teacher**

**Credits:** 3

**Prerequisite(s):** ECE 2100

**Description:** Principles underlying curriculum development and program planning to promote social competence in young children are the focus of this course. Course content includes knowledge of the three core requirements of developmentally effective practice: knowledge of child development, observation of individual children, and an awareness of socio-cultural influences. Students in this class will begin to organize and assemble a professional portfolio. Students will participate in a 45-hour, supervised practicum divided between two different early childhood settings and age groups (birth-age 3 and age 3-5). Students will conduct guided observations that focus on teacher behaviors and decision-making, intentional teaching, curriculum development and program planning to promote social competence in young children.

### **ECE 2970 - Supporting Social Emotional Competence**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ECE 2100

**Description:** This introduces learners to strategies and techniques related to classroom management, positive guidance strategies, building self-esteem, and promoting social and emotional development in children. Topics include approaches to promoting social emotional competence, guiding children's behavior, creating rules and setting limits, providing support for children, interacting through play and developing friendships.

### **ECE 3120 - Early Literacy Development: Birth to Age 5**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ECE 2950

**Description:** Students will examine the relationship between the developmental trajectories of young children's language and literacy development and the factors that impact them. Effective literacy classroom materials, routines, environments, assessments, and practices will be analyzed and developed. Students are required to spend ten hours outside of class time in order to read with young children and administer appropriate early literacy assessments.

### **ECE 3140 - Math and Science: Birth to Age 5**



**Credits:** 3

**Prerequisite(s):** ECE 2950

**Description:** Principles, methods, and materials for teaching math and science to young children, birth to 5 years, are the focus of this course. Included are opportunities for intentional planning, lesson implementation and assessment of standards-based content, processes and materials appropriate in a child-centered environment. Students will explore pedagogy related to inquiry-based science and mathematics processes, and they will learn how to maximize children's learning by integrating mathematical and scientific concepts into other areas of the early childhood curriculum. Students are required to spend 10 hours outside of class time in a math and/or science related observation or working directly with young children.

### **ECE 3150 - Developmentally Effective Practice II: Planning for Beginning Readers**

**Credits:** 4

**Prerequisite(s):** ECE 2950

**Description:** Students will examine intentional planning and management of effective literacy instruction for children in early primary (K - 1) classrooms. Students will analyze the characteristics of literacy development of emerging, early, and fluent readers and learn to make effective decisions that facilitate knowledge, skills, strategies, attitudes, and behaviors requisite for greatest success in children becoming proficient readers and writers. The use of ongoing assessment to inform instruction and flexible grouping is emphasized. This course includes a 45 hour practicum in a designated early primary (K- 1st grade) classroom under the supervision of a cooperating teacher and a university supervisor.

### **ECE 3155 - Teaching Writing in ECE: Ages 5-8**

**Credits:** 2

**Prerequisite(s) or Corequisite(s):** ECE 3150

**Description:** In this course students will plan, implement, and reflect on the developmentally effective methodology for emerging and developing writers ages 5 - 8. Effective instructional approaches to support the teaching, learning, and assessment of various written genres will be introduced, practiced, and evaluated. Students will analyze the writing of beginning writers, apply knowledge of research, and utilize appropriate literacy standards to design effective writing lessons. Students will also investigate classroom management strategies and environmental design.

### **ECE 3250 - Advocacy in Early Childhood Education**

**Credits:** 3

**Prerequisite(s):** ECE 2100

**Description:** Students in the Advocacy in Early Childhood course gain a comprehensive understanding of the importance of advocacy in the field of early childhood education. Students explore various advocacy strategies and develop the necessary skills to become effective advocates for young children and their families. Through a combination of theoretical knowledge and practical application,

students gain the tools needed to create positive change in early childhood education policies and practices.

### **ECE 3350 - Documentation and Assessment in Early Childhood Education**

**Credits:** 3

**Prerequisite(s):** ECE 2950

**Description:** Emphasis in this course will be on the foundations of documentation, assessment and decision-making to facilitate young children's (birth to age 8) growth and development across all domains. Authentic, play-based, and observational methods will be addressed, along with portfolio development and standardized assessments. Students will observe and assess infants, toddlers, preschoolers, and primary age children for the purpose of planning developmentally effective curriculum. Students will learn to use various forms of technology to document children's development.

### **ECE 3360 - Infants and Toddlers II**

**Credits:** 3

**Prerequisite(s):** ECE 2360

**Prerequisite(s) or Corequisite(s):** PSY 3240

**Description:** The focus of the course is on infant/toddler responsive caregiving and curriculum. The importance of relationships, cultural diversity, nurturing environments, health and safety, and children with special needs are emphasized. Students are required to complete 30 hours of observation/practicum: 12 hours in an approved infant setting, 12 hours in an approved toddler setting and 6 hours of observation in different infant/toddler settings or models.

### **ECE 3460 - Assessment and Planning for the Exceptional Child (Birth - age 5)**

**Credits:** 3

**Prerequisite(s):** ECE 2400, ECE 2600

**Description:** Students will identify and analyze the theories and implications of formal and informal assessment methods in Early Childhood/Early Childhood Special Education (birth - age 5). Informed and appropriate decision-making in the administration of assessment instruments such as standardized testing and diagnostic screening tools will be introduced, with attention to rationale, limitations, suitability, benefits and challenges of both conventional and authentic measurement approaches. The critical relationship of assessment results and developmentally effective interventions will be emphasized.

### **ECE 3500 - Teaching with Children's Literature**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ECE 3150 or ECE 3120

**Description:** Students will learn to identify and evaluate quality literature for young children ages birth through 8. Students will explore and analyze various genres while considering perspectives related to censorship and anti-bias curriculum. Students will gain pedagogical knowledge to effectively engage children with quality

children's literature for instructional purposes, including research, reading and writing instruction, and independent reading practice.

## **ECE 3600 - Curriculum in Inclusive Settings 0 to 5**

**Credits:** 3

**Prerequisite(s):** ECE 2600

**Prerequisite(s) or Corequisite(s):** PSY 3240

**Description:** In this course students will analyze and implement strategies for assessing children in naturalistic settings, designing curriculum, and using effective instructional strategies for children with exceptionalities in inclusive environments. Students will examine an overview of curricular approaches in early childhood special education, Birth to age 5, in order to demonstrate and apply learning in a 30 hour required field experience. The course builds on the content presented in previous courses and focuses on specific exceptionalities. Guidelines for adapting activities for young children with special needs, record keeping, collaborating with families, and working with assessment teams are included.

## **ECE 3610 - Teaching for Social Justice**

**Credits:** 4

**Description:** Students will engage in an initial study of issues related to life in poverty and its impact on teaching and learning. Course content will include the critical impact of family and community partnerships; curriculum design; instructional strategies and assessment; relationship-driven classroom management; and teachers as learners, leaders and advocates related to issues of social justice and equity. Students are required to participate in a 45 hour field experience located in a high-needs community-based program serving young children and families.

## **ECE 3620 - Collaborative Partnerships in Early Childhood Special Education**

**Credits:** 3

**Prerequisite(s):** ECE 2600

**Description:** The course provides the knowledge and skills required as part of a multidisciplinary team to provide comprehensive services for young children with special needs. Students will investigate working collaboratively within the educational settings using various models. The course will highlight techniques to work with and support family members. In addition, students will explore strategies for collaborating with community service providers for therapies, health services, early childhood mental health, and adaptive/assistive technology. Teachers will develop skills in effective team-building, leadership development, communication, problemsolving, advocacy and decision-making.

## **ECE 3650 - Curriculum in Inclusive Settings: K-3rd**

**Credits:** 3

**Prerequisite(s):** ECE 2400, ECE 2600, SED 3650

**Description:** In this course students will examine the skills necessary

to accommodate and support students in Kindergarten through 3'd grade with special needs using a variety of approaches in early childhood special education. Students will demonstrate these skills in a required 30 hour field experience placement. The course builds on the content presented in previous courses and focuses on the creation of appropriate accommodations, the integration of accommodations into a general education classroom, the legal requirement for accommodations, and the roles of the general and special education teachers within the Least Restrictive Environment (LRE) in primary (K-3) inclusive settings. Guidelines for writing IEPs, adapting activities for young children with special needs, record keeping, collaborating with families, assessment teams, and general education teachers are included.

## **ECE 3750 - The Young Culturally and Linguistically Diverse Learner**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ECE 3150 or ECE 3120

**Description:** The course is designed to provide a practical and theoretical knowledge base to support the literacy and language acquisition of children (preschool to age 8) who speak English as an additional language. Students will learn to design developmentally effective curriculum, instruction and assessment for learners who are culturally and linguistically diverse. Students will also engage in focused video observation and participation sessions, which allow students to view and assess language development within an authentic learning environment.

## **ECE 3860 - Cultural Socialization of Children**

**Credits:** 3

**Description:** Students review and analyze ethnic communities represented by African Americans, Asian Americans, Hispanic Americans and Native Americans. Utilizing theoretical foundations, practical strategies, and critical reflection, students examine historical factors and present-day institutional policies and actions that contribute to racialized inequities in child and family outcomes. Students examine how socialization in each of these communities affects children's development, family systems, educational practices, child discipline, beliefs, traditions, identities, and values. Students engage with a comprehensive exploration of the intersection between early childhood education and social justice. Students delve into the principles of anti-bias education, teaching students how to recognize and challenge stereotypes, biases, and prejudices in early childhood settings.

**University Requirement(s):** Ethnic Studies & Social Justice

## **ECE 4000 - Differentiation of Literacy Instruction**

**Credits:** 3

**Prerequisite(s):** ECE 3150

**Description:** This course is designed to extend students' knowledge of differentiated literacy instruction, literacy proficiencies, and effective teacher-student mediation for whole class and individual reading and writing lessons. Students will learn to make decisions

about the use of evidenced-based assessment and instructional strategies for young children in K-2 classrooms. The components of proficient literacy and their relationships to instructional decision-making will be emphasized. Students will learn to plan authentic and engaging literacy instruction that contributes to all children's identities as engaged and successful readers and writers.

### **ECE 4330 - Science, Health, and Mathematics for the Young Child**

**Credits:** 3

**Prerequisite(s):** PSY 1800; completion of General Studies requirements in Quantitative Literacy and Natural and Physical Sciences; and junior standing.

**Description:** This course emphasizes the practical application of methods used by teachers of young children to build appropriate knowledge and conceptual foundations for science, health, and mathematics. Students will make decisions regarding planning, implementing, and evaluating lessons and activities appropriate for children through the third grade by utilizing the Colorado model content standards.

### **ECE 4340 - Math and Science: Ages 5-8**

**Credits:** 3

**Prerequisite(s):** ECE 3140

**Description:** In this course, students will develop a comprehensive understanding of effective mathematics and science instruction for children ages 5 - 8. This course will build on student understanding of mathematics and science content to include research-based teaching practices appropriate for addressing the needs of young children in elementary school. It includes analysis of state and national mathematics and science standards in order to align instruction that supports and promotes children's understanding.

### **ECE 4350 - Senior Experience in Early Childhood Education**

**Credits:** 6

**Prerequisite(s):** ECE 3150

**Description:** This culminating course is designed to prepare an Early Childhood professional in the non-licensure concentration of the major. Students will learn about the purpose and procedures of Early Childhood action research. This course presents an opportunity for the student to demonstrate an in-depth understanding of a self-selected area of study relevant to the field via internship within a local organization supporting early childhood education initiatives. Students will design and implement a project that supports their professional development in the field of Early Childhood Education.

**University Requirement(s):** Senior Experience

### **ECE 4360 - Cultural Influence on the Socialization of Children**

**Credits:** 3

**Description:** This course examines the socialization of children using a multidisciplinary approach, e.g., anthropology, psychology, sociology, biology, and education. Emphasis is on the study of human attachment, modeling and social learning theory. From this base the student analyzes the effect that cultural and socialization patterns have on the family and the individual's development.

### **ECE 4370 - Developmentally Effective Practice III: Teaching in the Content Areas**

**Credits:** 4

**Prerequisite(s):** ECE 3150

**Description:** In this course, students use state and national standards, technology, and available resources to develop a sequenced, cohesive, and developmentally effective learning segment integrating content areas of the primary curriculum. Classroom management and organization considerations, appropriate use of technology, varied assessments, and considerations for children's diverse needs will be examined and integrated into the learning segment plan. Developmentally effective teaching strategies will be analyzed for implementation appropriate to the context of each lesson. Social studies and science content areas will provide the foundational theme of the learning segment. This course includes a 45-hour practicum in a designated primary classroom under the supervision of a cooperating teacher and a university supervisor.

### **ECE 4390 - Student Teaching and Seminar: Early Childhood (Preschool through Third Grade)**

**Credits:** 6,12

**Prerequisite(s):** Completion of all requirements of the major, Early Childhood licensure program and general studies. Initial sign-off on the program requirement by the education advisor is required.

**Description:** This course requires student teaching assignments in an accredited public or private school as follows: One assignment in either pre-K or K grade levels for 8 weeks and one assignment in either 1st, 2nd or 3rd grade levels for 8 weeks for a total of 16 weeks. Both student teaching experiences require increasing responsibility for the teaching, supervision and direction of a group of learners. Teacher candidates are required to complete a teacher work sample, documenting impact on student learning and attend 15 hours of seminars. College supervisors provide regularly scheduled observations, seminars and conferences which support work sample development and standards-based proficiency. Upon completion of this course, teacher candidates must be minimally rated as "proficient" in all Performance Based standards for Colorado teachers to receive MSU Denver recommendation for licensure.

**University Requirement(s):** Senior Experience

### **ECE 4395 - Student Teaching and Seminar: Early Childhood Special Education (Preschool through Third Grade)**

**Credits:** 6 or 12

**Prerequisite(s):** ECE Teacher licensure candidates must have

successfully completed SED 3750, ECE 3650, and all other course and field experience requirements of the Early Childhood Special Education endorsement program, and have Senior Standing.

**Description:** Supervised student teaching requires a 16-week placement in which the student assesses, plans, and implements learning environments and instructional support for young children, birth to eight years old with exceptionalities. Candidates apply and synthesize theory and pedagogy while demonstrating best practices and skills in early childhood settings. University supervisors provide regularly scheduled observations, seminars and guidance on the development of the Teacher Work Sample or other MSU Denver OCEP-approved final evaluation project.

**University Requirement(s):** Senior Experience

### **ECE 4415 - Early Childhood Residency I**

**Credits:** 7

**Prerequisite(s):** ECE 3150, ECE 3610

**Prerequisite(s) or Corequisite(s):** ECE 3350, ECE 3750, ECE 4340

**Description:** This clinical residency requires three full instructional days per week in an assigned accredited public or private early childhood classroom. The residency includes opportunities to synthesize content from all previous coursework, including: professionalism; designing, implementing and assessing instruction; student motivation and engagement; and collaboration with colleagues and families. Application of this content is enhanced by the sequential teaching experience. The teacher candidate is an active participant in the school community through close observation of the mentor teacher, collaborative practice with the mentor teacher, and/or supervised independent practice. Concepts and skills learned in concurrent coursework are a particular focus in this residency.

### **ECE 4425 - Early Childhood Residency II**

**Credits:** 9

**Prerequisite(s):** ECE 4415

**Corequisite(s):** ECE 4370

**Description:** This culminating clinical residency requires four full instructional days per week in an assigned accredited public or private early childhood classroom. Close collaboration between the candidate and mentor teacher will occur in a variety of ways, including the candidate taking the role of lead teacher. The candidate will assume responsibility for all functions of the classroom, including overall design and implementation of instruction and assessment in all curricular areas, maintenance of productive classroom environment tailored to the needs of diverse learners, communication with colleagues and families, and integration of technology to improve student learning. Knowledge and skills gained in the corequisite ECE 4370 course concerning content integration and the use of specific instructional strategies for developing cultures of thinking in the classroom are practiced, and the teacher candidate evaluates these practices in light of student achievement.

**University Requirement(s):** Senior Experience

## **Economics**

### **ECO 1040 - A Citizen's Guide to Economics**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on the reading, writing, and mathematics preassessment placement tests

**Description:** This course introduces students to basic economic concepts and reasoning. Course topics include market analysis, the role of the government in the economy, the monetary system, and international economics. A key feature of the course is the application of economic reasoning to real-world problems.

**Guaranteed Transfer:** GT-SS1

### **ECO 1776 - Global Economic History: The Origins of Growth**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 or with instructor approval

**Description:** In this course, students investigate the roles that geography, religion, culture, technology, and government play in shaping why some countries have become wealthy while others have not. Students apply economic ways of thinking to historical events to see how incentives and constraints affect global wealth disparities. Leveraging the historical concept of institutions allows students to highlight the impact institutions have had on global economic growth and social coordination.

**General Studies:** Historical, Global Diversity

### **ECO 1985 - Introduction to Business Careers Internship**

**Credits:** 3

**Description:** Approved internships introduce the specific field of business as well as provide an opportunity to gain practical, hands-on professional work experience. Students will learn about the profession, explore related career paths, and increase professionalism. *Note:* The Internship must be approved by the department using the C2 Hub process.

**Cross Listed Course(s):** ACC 1985, CIS 1985, FIN 1985, MGT 1985, MKT 1985

### **ECO 2010 - Principles of Macroeconomics**

**Credits:** 3

**Description:** In this course, students are introduced to the 'economic way of thinking,' enabling them to analyze macroeconomic phenomena, both historical and contemporary, and to evaluate their implications for societal well-being. They discover how to measure economic performance, inflation, and unemployment. Additionally, students investigate the factors underpinning long-run economic growth. Emphasis is placed on recognizing the role, limits, and implications of macroeconomic policies, including the monetary policies of the Federal Reserve and the government's fiscal policies.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS1

## ECO 2020 - Principles of Microeconomics

**Credits:** 3

**Description:** In this course, students apply economic principles to understand and analyze choices made by both individual actors and collective groups within the economy. Students are introduced to the 'economic way of thinking', enabling them to comprehend the complex actions and interactions among consumers, businesses, and the government. Integral to the course is the ability to identify both market and government failures, along with proposing potential solutions. Concluding the course, students will be able to analyze current events and evaluate economic policy discussions through the economic lens.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS1

## ECO 2150 - Quantitative Methods in Economics

**Credits:** 3

**Prerequisite(s):** MTH 1310 or MTH 1110 or MTH 1400; AND either ECO 2010 or ECO 2020. A grade of "C-" or better is required for all prerequisites.

**Description:** This course studies the quantitative methods that are commonly used to develop, understand, and apply economic analysis. The course will combine economic theory with quantitative tools to give students a deeper understanding of economic modeling.

## ECO 3010 - Intermediate Microeconomics

**Credits:** 3

**Prerequisite(s):** ECO 2020; AND either MTH 1110 or MTH 1111 or MTH 1310 or MTH 1311 or MTH 1400 or MTH 1410

**Description:** This course analyzes production, price, and distribution theory within a microeconomic framework. Studies include value and distribution theories under conditions of varying market structures. Topics will also include consumer theory; competitive, oligopoly, and monopoly pricing and output behavior; as well as pricing of factors of production and welfare theory.

## ECO 3020 - Intermediate Macroeconomic Theory

**Credits:** 3

**Prerequisite(s):** ECO 2010 with a grade of "D" or better

**Description:** The course is a survey of major aggregate economic models. Emphasis is on the role of consumption, investment, and government decisions on aggregate economic activity. Topics include an analysis of consumption and investment decisions, income determination models, monetary and fiscal policy, and economic growth.

## ECO 3100 - Money and Banking

**Credits:** 3

**Description:** The study of money as a policy variable affecting economic activity. Money is examined both in its role in exchange and as an instrument of economic policy. The Federal Reserve

System, money supply, money demand, and their respective effects on macroeconomic activity are stressed.

## ECO 3150 - Econometrics

**Credits:** 3

**Prerequisite(s):** ECO 2010 or ECO 2020; and MTH 1210 or CIS 2320

**Description:** This course applies mathematical techniques to problems in economics. Emphasis is on application rather than computational methods of mathematical rigor. The problems of acquiring, measuring, and using economic data are examined.

## ECO 3160 - Business and Economic Forecasting

**Credits:** 3

**Prerequisite(s):** ECO 2010 or ECO 2020; and MTH 1210 or CIS 2320

**Description:** This course is designed to cover the forecasting process and the techniques in order to prepare you adequately in accordance with the growing need for such skills in the real-world. We will first start with econometric theories behind the techniques. You will learn how to examine the data and how to prepare data prior to forecasting. Various useful forecasting techniques will be introduced to improve the quality of forecasting.

## ECO 3200 - Economic History of the U S

**Credits:** 3

**Description:** This course examines historical trends in American economic organizations and institutions and their development from colonial times to the present. Topics include problems of national and regional industrial development, economic stability, and trends in income distribution.

## ECO 3250 - Labor Economics

**Credits:** 3

**Description:** The study of the topics related to the supply of labor, the allocation of labor among uses, the extent and incidence of unemployment, and the determination of wages. Concentration is on application of economic theory to understand the behavior of labor and problems of labor markets.

## ECO 3384 - Urban Economics

**Credits:** 3

**Description:** This course covers the economics of cities and urban planning. Why do cities exist? What makes for a flourishing city? Why do some cities deteriorate in a matter of decades, while others continue to flourish after centuries of existence? Using the tools and insights of economics, we will explore some of these questions. We will discuss the role of government in city planning. We will investigate efforts to mitigate climate change, encourage public health and sanitation, manage urban spaces, and plan transportation. But more than this, we will investigate the absence of planning by

exploring the possibility and extent to which cities can prosper without excessive oversight from central authorities. The goal of this class is to be able to make use of economic tools to sort through some of the popular fallacies surrounding urban economics and urban planning. In addition, we will seek to understand the history, origin, and evolution of cities.

### **ECO 3397 - Culture and Economy**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ANT 1310 or ANT 2330 or ECO 2010 or ECO 2020

**Description:** In this course, students are introduced to the relationship between culture and economic behavior. Using production, consumerism, and social exchange as a point of departure, students examine the dynamics of community perceptions, cultural trends and social identities built around economic enterprise. The topics students review include public choice, non-market decisions, economics of globalization, colonial and local systems of economy and challenges, cultural norms of economic relations, sharing, exchange and consumerism, informal economy, economy of tourism, and economic movements, among others.

*Note:* The course is crosslisted. Credit will be granted for only one prefix, ANT or ECO.

**Cross Listed Course(s):** ANT 3397

### **ECO 3450 - Environmental Economics**

**Credits:** 3

**Description:** An economic analysis of the causes and consequences of environmental degradation and of public policy measures designed to preserve, protect, and enhance human environments.

### **ECO 3459 - Policy Debates in the History of Economic Thought**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course, students will study the influence of economic ideas on social and political policy from the 17th century to the present day. The course explores the ideas of seminal thinkers including Adam Smith, Karl Marx, and F.A. Hayek. Students will discover how economic ideas impacted major policy debates and historical events, such as the Bolshevik Revolution, the New Deal, and the 2008 Financial Crisis. Through reading, writing, and discussion, students will gain a nuanced understanding of the relationship between economic ideas and real-world historical events. The course also aims to provide students with useful analytical tools to consider contemporary policy challenges like environmental regulation, urban planning, and income inequality.

**General Studies:** Social and Behavioral Sciences

### **ECO 3500 - Managerial Economics**

**Credits:** 3

**Description:** This course applies economic theory to the decision-making process faced both by private and public enterprise. The major emphasis is to provide the theory and tools essential to the analysis and solution of those problems which have significant economic consequences, both for the firm and the society at large.

### **ECO 3550 - Global Economics and International Trade**

**Credits:** 3

**Description:** The course looks at the fundamental economic concepts needed for understanding international economic relationships. Topics addressed include international trade theory, capital movements, international monetary institutions, balance of payments adjustments, and the impact of trade policies on economic development and growth.

### **ECO 3600 - Economics of Social Justice**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course, students apply the tools of economic analysis to issues affecting marginalized groups (as determined by, for example, race, ethnicity, socioeconomic status, age, and ability) in the United States. Students examine labor market disparities and how factors such as racism and sexism affect outcomes in these markets. Students also explore the role of institutions and social and cultural norms in creating and maintaining disparities in economic outcomes. In particular, students analyze disparities in education, the criminal justice system, and housing and wealth from the economic perspective. Across all topics, students learn how power and privilege intersect across different racial, ethnic, sexual, and class identities. Finally, students use economic tools to evaluate policies and strategies that promote social justice.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** GWS 3650

### **ECO 3700 - Political Economy of the Middle East and North Africa**

**Credits:** 3

**Description:** This course covers the economic development issues facing the Middle East and North Africa. Students learn about the social, political, and economic issues that are relevant to this region as well as its importance as an energy source to the rest of the world. The course examines how instability in this region can spill over into the global economy through higher oil prices.

### **ECO 3790 - The Political Economy of Immigration**

**Credits:** 3

**Description:** This course studies the fundamentals of the political economy of immigration, with a focus on immigration's effects on global wealth creation, and the parallels between international trade in goods and international trade in labor. The course also explores

immigration's net fiscal effects, cultural effects, and political effects, and explores a wide range of possibilities for immigration reform.

## ECO 3800 - Development Economics

**Credits:** 3

**Description:** This course provides a comprehensive framework for analyzing the issues of development from an economic perspective. Students examine the components of development that economists typically study, including economic growth, income inequality, poverty, population growth, and the intersections between growth and the environment, education, and health. Additionally, students explore the special characteristics of land, labor, and credit markets in rural areas of developing countries.

**General Studies:** Social and Behavioral Sciences, Global Diversity

## ECO 3850 - Geopolitics and Economics of World Oil Markets

**Credits:** 3

**Description:** The Geopolitics and Economics of World Oil Markets will cover and stress the importance of oil in the global economy from the early days to the present. The world economy has gone through a number of oil shock, some demand and some supply driven, and has adjusted but not without a cost. In the recent past, oil prices reached levels that surpassed the peaks of the late 1970s and crashed again to the low 30s. The volatility in global oil markets impacts the US and the world economy and can lead to sudden capital flows that reverberates through the global financial markets. The geopolitics of oil is a complex mix of economics and politics which impacts the oil producing and consuming nations. The course will also explore the surge in US oil production due to shale and fracking which upended the status quo and established the US as an emerging force in world oil markets and looks at the economics of alternatives and to what extent they can displace oil.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** PSC 3850

## ECO 3980 - Internship in Economics

**Credits:** 1-15

**Prerequisite(s):** Major in Economics; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## ECO 4100 - Sports Economics

**Credits:** 3

**Description:** This course applies basic price theory principles to US and international professional sports and intercollegiate sports. Supply and demand for sports is examined with an emphasis on sport market outcomes, such as league formation and the desirability of competitive balance. Students will understand how different market structures determine franchise revenues and player salaries. Students will recognize how collective bargaining theory applies to professional athletics. Public policy is evaluated as it relates to tax/publicly-financed stadiums and franchise subsidies. An understanding of the workings of intercollegiate athletics is emphasized.

## ECO 4200 - Game Theory

**Credits:** 3

**Description:** This course provides students with a basic understanding of game theory as it applies to economics, politics, biology, and everyday life. Game theory uses quantitative analysis to model and evaluate circumstances of interdependent decision-making: how one's actions affect others, other's actions affect you, and anticipating each other's actions. Emphasis will be placed on using game theory tools to analyze various issues and to help students understand how the real world can be explained using these tools.

## ECO 4300 - Public Finance

**Credits:** 3

**Description:** This course analyzes the effects of taxation, government expenditures, fiscal policy, and public debt on the resource allocation and income distribution of society. Topics included in the course are taxation, pricing of public services, intergovernmental fiscal relations, and macroeconomic issues in public finance.

## ECO 4400 - Industrial Organization and Public Policy

**Credits:** 3

**Description:** The course examines the structure, conduct, and performance of American and foreign industries. Questions of public policy in dealing with problems created by industrial concentration, including the regulation of public utilities, are examined. Industries are measured against the yardstick of the public interest.

## ECO 4450 - International Macroeconomics

**Credits:** 3

**Prerequisite(s):** ECO 3550 or ECO 3020

**Description:** The course will use general equilibrium analysis to provide the foundation for international finance, the composition of international transactions, and the determination of real national income and its distribution among factors of production. This theoretical framework is then applied to a host of economic problems. The alternative approaches to balance of payments equilibration are then explored in depth.

## ECO 4650 - Advanced Macroeconomics

**Credits:** 3

**Prerequisite(s):** ECO 3020 or ECO 3100

**Description:** The course analyzes monetary models and money as a policy determinant and its place in national and international economics. Topics include the importance of interest rates, the effectiveness of monetary and fiscal policy, the examination of portfolio balance models, and international models.

## ECO 4700 - Law and Economics

**Credits:** 3

**Description:** This course focuses on the interaction between economics and the law. Topics include the effect of economic theory on the development of common law, the economic analysis of property, contract, and tort law, and the effect of legal analysis on economic and political institutions.

## ECO 4750 - The Economic Approach to Politics

**Credits:** 3

**Description:** The course will focus on the use of economic theory to analyze political decision making. This rational choice theory approach will examine such topics as voting rules and behavior, legislatures, bureaucracies, courts, interest groups and public policy outcomes.

## ECO 4800 - Economic Policy Analysis

**Credits:** 3

**Prerequisite(s):** ECO 3010 AND ECO 3020; ECO 3150 or ECO 3160; and Senior Standing

**Description:** This course exposes students to the tools of economic policy analysis by applying these tools to a specific field of economics such as, for example, monetary and fiscal policy, international economics, development economics, law and economics, or public economics. The course describes the scientific method in economics: developing a testable research question, writing a literature review, collecting data, testing the hypothesis, and writing the results. To illustrate this scientific research process, students are exposed to scholarly work in the specific field of economics that the course is covering that semester. In this course, students write an exhaustive scholarly literature review on a topic that fits within the specific field of economics that is covered that semester. This literature review is meant to be a capstone experience that synthesizes the student's prior learning and applies it to evaluate the literature on a specific economic policy research question.

**University Requirement(s):** Senior Experience

## Educational Technology

### EDT 2050 - Instructional Design Thinking

**Credits:** 3

**Description:** This course serves as an introduction to instructional design theories and practices. It introduces different instructional design models, management, assessment, curriculum design & development, and instructional design pathways. Design thinking process is integrated throughout the course. It also includes intensive study of both practical instructional design processes and applications in order to solve real world instructional challenges.

*Note:* This course is NOT designed to meet teacher licensure technology requirement.

### EDT 2060 - Digital Life and Learning

**Credits:** 3

**Description:** Digital Life and Learning explores the vast landscape of instructional design issues and considerations that span beyond established development models and theories. This course empowers students through the study of responsible digital citizenship, social media, a deep understanding of how changing modalities affects design strategies, and the complexities of developing instruction in a digital landscape. The course culminates with real world application of gained knowledge and skills through the creation a digital portfolio, resume, and practicing interview skills.

*Note:* This course is not designed to meet the teacher licensure technology requirement.

### EDT 2100 - Fundamentals of Instructional Technologies

**Credits:** 3

**Prerequisite(s):** Literacy and software application skills equivalent to CMS/CSS 1010 or 1080 (as evidenced by previous coursework in high school or college, work, personal experience, or Permission of instructor)

**Description:** This course is designed to provide preservice teachers with skills and experiences that will allow them to effectively and appropriately integrate technology into teaching and learning activities. This course will focus on actively participating in projects that model effective technology integration, researching and developing classroom lessons and activities that utilize emerging technologies, and using technology to support professional development activities.

### EDT 2200 - Fundamentals of Networked Learning Environments

**Credits:** 2

**Prerequisite(s):** EDT 2100 or Permission of instructor

**Description:** Students enrolled in this course will focus on the concepts and terminologies of multi-platform (MacOS and Windows) networked learning environments for the purpose of instruction in K-12 educational and instructional training settings. Participants will learn networking concepts, terminology, vocabulary, and structures which will enable communication among teaching and technical professionals. Students will learn to apply critical thinking to situations and scenarios which hamper the implementation and



utilization of networks in learning environments. Students will be exposed to copyright law and fair-use guidelines including the implementation and enforcement of Acceptable Use Policies (AUPs). This course will also explore legal and ethical usage of networks, including accessibility issues with adaptive software.

### **EDT 3010 - Integrating Educational Technology into Teaching**

**Credits:** 3

**Description:** This course is designed to give prospective teachers an overview of the advancement of technology in this digital age and its impacts on K-12 education. Students will explore emerging educational technologies and survey guidelines for selecting, managing, and evaluating technology tools to enhance teaching and learning. In addition to gaining skills in making multimedia projects, creating a web-based learning environment and using interactive technologies such as interactive whiteboard, students will also learn about issues such as copyrights, e-plagiarism, cyber-bullying, and security, etc. Students who finish this course successfully will become leaders in disseminating innovative ways of integrating technology in schools and through personal learning networks (PLNs).

### **EDT 3020 - Educational Technology for Early Childhood Educators**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ECE 2950

**Description:** An overview of the appropriate use and application of educational technology in a digital-aged early childhood classroom is provided. Students will learn the theories, skills, strategies, and tools that support the use of educational technology to facilitate effective teaching, learning, and assessment. Students will apply knowledge of child development and developmentally effective practice to develop instructional lesson plans that incorporate various types of technologies that have been shown to increase student engagement and learning. Effective use of interactive boards will be integrated throughout the course.

### **EDT 3040 - Interpreting and Developing Instructional Visuals**

**Credits:** 3

**Prerequisite(s):** EDT 2050

**Description:** Students in this course explore the theories and principles of design of instructional visuals in the educational and professional settings. Students learn how to read and interpret meanings of existing instructional visuals by applying visual design theories and principles, and further to select and develop their own instructional visuals to enhance learning and communication. This course also includes basic theories of visual processing, perception, digital accessibility, and learning, which provides a foundation for interpreting, selecting, and developing effective instructional visuals.

### **EDT 3050 - Games, Applications, and Instructional Interaction**

**Credits:** 3

**Description:** This course explores effective and structured procedures for conceptualizing, designing and incorporating game-based applications into the process of instructional design across formal and informal environments. Students will learn about game-based theory and trends, and acquire the foundational design and development skills necessary for deploying applications in a range of professional and educational settings.

*Note:* This course is not designed to meet the teacher licensure technology requirement.

### **EDT 3060 - Instructional Multimedia**

**Credits:** 3

**Description:** This course guides students through the process of applying design principles and multimedia learning theories to the design and development of effective digital multimedia instruction. Through the context of real world application, students explore principles of multimedia learning, design processes, typography, graphic design, audio and video production, as well as theoretical foundations, and multimedia design processes.

*Note:* This course is not designed to meet the teacher licensure technology requirement.

### **EDT 3610 - Applications of Educational Technology**

**Credits:** 2

**Prerequisite(s):** Literacy and software application skills equivalent to CIS/CSS 1010 and CIS/CSS 1080 or permission of the instructor.

**Description:** This course is designed to prepare teacher candidates to make decisions regarding the role of technology in support of content standards, learning, and assessment in P-12 education. Teacher candidates select, operate, and use media, computing, Internet, electronic interactive whiteboard, and related technologies to facilitate teaching/learning, communication, professional development, and productivity to meet the educational needs of diverse groups of learners.

### **EDT 3620 - Applications of Interactive Whiteboards in Education**

**Credits:** 1

**Prerequisite(s):** Literacy and software application skills equivalent to CIS/CSS 1010 or CIS/CSS 1080, as evidenced by previous coursework in high school or college, work, personal experience, or permission of the instructor.

**Description:** This course is designed to equip teacher candidates with knowledge and skills of interactive whiteboards in order to create effective and interactive lessons and activities that enhance teaching and learning in the K-12 classrooms, as well as to meet the need of most K-12 schools. Students will learn the basics and applications of interactive whiteboards, including SMART Board and Promethean Board commonly used in K-12 schools. Students will

also apply the knowledge and skills of interactive whiteboards to creating interactive lessons, activities, and assessments.

## **EDT 3850 - Fiscal Resources for Learning Environments**

**Credits:** 3

**Prerequisite(s):** Literacy and software application skills equivalent to CMS/CSS 1010 or 1080 (as evidenced by previous coursework in high school or college, work, personal experience, or permission of instructor)

**Description:** In this course, students will work collaboratively to write funding proposals for a current request for proposal (RFP). Participants will learn how to write a persuasive narrative, supported by a strong needs analysis, plan for implementation, budget, and evaluation. Special attention will be given to formative and summative evaluations, focusing on evaluation of implementation as well as impact of the proposed project. At the end of the semester, students will submit their proposals to funding sources.

## **EDT 4010 - Practical Instructional Design**

**Credits:** 3

**Prerequisite(s):** EDT 2050

**Description:** Students in this course delve into sophisticated methodologies and strategies for crafting effective instructional materials and experiences. Students apply advanced instructional design models and learning theories, with a focus on integrating emerging technologies and adaptive learning systems. Through hands-on projects, students gain expertise in designing complex learning environments that inclusively meet the needs of diverse learners and contexts. The course emphasizes critical analysis, iterative design processes, and the application of best practices in creating impactful educational interventions.

## **EDT 4020 - Project Management and Human Performance Technology in Instructional Design**

**Credits:** 3

**Prerequisite(s):** EDT 2050

**Description:** Students in this course are provided a comprehensive overview of project management principles and human performance technology (HPT) as they apply to instructional design. Students learn how to manage and execute instructional design projects effectively, including planning, scheduling, budgeting, and evaluating project outcomes. The course also includes the HPT framework, focusing on diagnosing performance issues, designing targeted interventions, and measuring the effectiveness of instructional solutions. By the end of the course, students are equipped with the skills to lead projects, align instructional strategies with organizational goals, and drive performance improvements.

## **EDT 4050 - Emerging Issues and Innovation**

**Credits:** 3

**Description:** This course examines current trends and issues relating

to the everyday practice of instructional design, including the application of universal design. Students are provided opportunities to review published instructional design research, thought leadership, and job descriptions in K-12, Higher Education, and corporate settings, as well as debate findings with practicing instructional designers in order to understand key trends in the field. This course also guides students to examine instructional design best-practice and apply one or more theories/models to real-world instructional projects in an effort to innovatively evolve/redefine instructional design and/or the role of instructional designers.

*Note:* This course is not designed to meet the teacher licensure technology requirement.

## **EDT 4060 - Capstone for Instructional Design and Technology**

**Credits:** 3

**Prerequisite(s):** EDT 2050, EDT 2060, EDT 3060

**Description:** This capstone course is intended to provide students with the opportunity to develop and implement instructional design learning experiences and processes. As a fundamental component of the Capstone course, students will be responsible for completing a capstone project that demonstrates their understanding of the topic they select for their project with the multicultural, accessible, and diversity considerations as well as how the topic can be applied to real life practices. The capstone project also provides the opportunity for students to demonstrate independence and originality, to plan and organize a project over a period of time, and to put into practice some of the concepts and skills introduced in all other courses of the program.

## **EDT 4090 - Instructional Prototyping**

**Credits:** 3

**Prerequisite(s):** EDT 2050, EDT 2060

**Prerequisite(s) or Corequisite(s):** EDT 3050, EDT 3060, EDT 4050

**Description:** This capstone course is intended to provide students with exposure to a professional work setting related to instructional design. Students will complete 135 hours working in the field of instructional design. Students will assist a professional instructional designer or design team in order to gain insight and experience. Students will also reflect on their experience and demonstrate their learning outcome through a portfolio.

*Note:* This course is not designed to meet the teacher licensure technology requirement. This course is designed for students enrolled in Instructional Technology post-baccalaureate certificate program.

## **Electrical Engineering**

### **ELE 1001 - Introduction to Electrical Engineering**

**Credits:** 3

**Prerequisite(s):** High school algebra

**Description:** Students gain an understanding of the basic concepts in Electrical Engineering and the different career opportunities in this field. Students also develop an understanding of the physical

foundations of electricity, electronics, and computers, through hands-on application of theory. Students also gain an understanding of Engineering ethics and the effect of technological changes on modern society.

### **ELE 3110 - Signals and Systems**

**Credits:** 4

**Prerequisite(s):** CEE 1150, CEE 1155, and MTH 2420 with grades of "C" or better

**Corequisite(s):** MTH 3420

**Description:** Students learn advanced-level circuit analysis and the use of classical ordinary differential equations combined with mathematical transforms to solve complex electronic networks. They also learn how to use MATLAB, or equivalent, software as a tool for circuit analysis throughout the course.

### **ELE 3120 - Advanced Analog Electronics**

**Credits:** 4

**Prerequisite(s):** CEE 2145, ELE 3110 with grades of "C" or better

**Description:** Students develop an understanding of advanced analog electronics course with emphasis on the operational amplifier and other advanced analog circuits. They utilize advanced mathematical techniques and computer simulations as they analyze complex electronic circuits.

### **ELE 3410 - Electric Machines**

**Credits:** 3

**Prerequisite(s):** MTH 2410 and ELE 2145 with grades of "C" or better

**Description:** Students develop an understanding of motors and generators as well as their applications. Topics include: magnetism and magnetic circuits, voltage and torque generation, DC motors, DC generators, single and three phase transformers, and synchronous alternators.

### **ELE 3420 - Electric Power Distribution**

**Credits:** 3

**Prerequisite(s):** MTH 2410 and either CEE 2145 or CEE3010 with grades of "C" or better

**Description:** Students develop an understanding of the techniques and equipment employed in electric power distribution and control.

### **ELE 3430 - Power Electronics**

**Credits:** 3

**Prerequisite(s):** MTH 2410 and CEE 2145 with grades of "C" or better

**Description:** Students gain an understanding of the fundamentals of power devices and power electronic circuits. The students also learn power converter topologies such as those used in DC-to-DC converters, rectifiers, and power source inverters. After completing

this course, students are able to analysis these circuits, as well as design them for a specific application.

### **ELE 3630 - Electromagnetic Fields**

**Credits:** 3

**Prerequisite(s):** ELE 3110, MTH 2420, MTH 3210, and MTH 3420 with grades of "C" or better

**Description:** Students develop an understanding of the mathematical concepts of static and dynamic electromagnetic fields. Topics include: planewave propagation in lossless and lossy media, waveguide propagation, and radiation principles.

### **ELE 3715 - Control Systems Analysis**

**Credits:** 4

**Prerequisite(s):** ELE 3110 and ELE 3120 with a grade of "C" or better

**Description:** Students analyze classical, linear, continuous-time control systems. Topics include: Laplace transform, Bode plots, stability, transient response, steady-state response, and the design of PID, lag, and lead compensators. The laboratory portion of the course uses the classical approach to the analysis and design of control systems.

### **ELE 3730 - Process Control Systems**

**Credits:** 2

**Prerequisite(s):** ELE 1150 or EET 2000 with a grade of "C" or better

**Description:** Students develop an understanding of Proportional, Integral, & Derivative (PID) controllers and their applications in the process control industry. Topics include: structure of feedback, sensors, controllers, control valves, process dynamics, timing, piping and instrument drawing.

### **ELE 3740 - Programmable Logic Controllers**

**Credits:** 2

**Prerequisite(s):** CEE 1150 or EET 2000 with a grade of "C" or better

**Description:** Students develop an understanding of Programmable Logic Controllers (PLC) and their programming using ladder diagrams. Topics include: PLC usage, types, advantages and disadvantages, system overview, ladder logic programming command language and applications, networking PLC systems, and installation and troubleshooting techniques.

### **ELE 4320 - Digital Filters**

**Credits:** 3

**Prerequisite(s):** CEE 2350 and ELE 3110, with grades of "C" or better

**Description:** Students develop an understanding of digital filters as applied in digital signal processing and sampled data control systems. This course introduces digital filters as applied in digital signal processing and sampled data control systems.

## ELE 4620 - RF and Microwave Design

**Credits:** 3

**Prerequisite(s):** CEE 3620 with a grade of "C" or better

**Description:** Students develop an understanding of Microwave and RF design principles, simulation, and testing. The emphasis will be on the "real world" use of these fundamental principles in RF, microwave, and wireless systems. Simulation is an integral part of the course since students learn to use a Finite Element simulation tool to develop a better understanding of structures and devices covered in the course.

## Electrical Engineering Technology

### EET 1040 - Introduction to Engineering

**Credits:** 3

**Prerequisite(s):** Minimum performance standard score on math placement test

**Description:** This course is an introductory engineering course exposing students to a cross section of topics in contemporary civil, electrical and mechanical engineering disciplines to assist them with their education career choices. Students are taught to work in teams, introduced to the design process, utilize math and computer programs to analyze raw data and properly display their results in a presentation to their peers. The history of the engineering profession and its relation to current national, social, industrial, ethical, and international issues and problems will be discussed.

*Note:* Credit will be granted for only one prefix: CET, EET, or MET.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC2

**Cross Listed Course(s):** CET 1040, MET 1040

### EET 1140 - Circuits I

**Credits:** 4

**Prerequisite(s):** An intermediate algebra course or one and one-half years of secondary school algebra or equivalent and appropriate score on the mathematics preassessment placement test or higher level math course, with a grade of "C" or better.

**Description:** This course covers DC circuit analysis, including mesh analysis, nodal analysis, Thevenin conversion, Norton conversion, power, magnetism and magnetic circuits, capacitance, and inductance. An introduction to electrical laboratory procedures and the measurement of basic circuit parameters is also included.

### EET 1150 - Circuits II

**Credits:** 4

**Prerequisite(s):** EET 1140 and (MTH 1120 or MTH 1400 or higher level math course), with grades of "C" or Better

**Description:** This course is a continuation of EET 1140, using trigonometry and complex algebra. Studies include single-time constant circuits, phasors, and the j operator, RLC circuits with sinusoidal, steady-state sources, impedance and admittance, AC formulation of classic network theorems, complex network equations,

complex power, frequency response, transformers, and two-port network models.

## EET 2000 - Electric Circuits and Machines

**Credits:** 3

**Prerequisite(s):** MTH 1120 or MTH 1400, PHY 2020 or PHY 2331, with grades of "C" or better

**Description:** This course introduces electric circuits for non-EET majors. It covers DC and AC circuits, generators, motors, transformers, elementary electronic devices, and circuits.

### EET 2145 - Electronics

**Credits:** 3

**Prerequisite(s):** EET 1150 or EET 2000, and CHE 1100 or CHE 1800, with a grade of "C" or better for all prerequisites

**Corequisite(s):** EET 2165

**Description:** Students in this course will study the theory, modeling and application of semiconductor based electronic circuits. Devices studied include: diodes, bipolar junctions transistors, MOS field effect transistors, thyristors and operational amplifiers. The student will learn to integrate electronic devices in applications such as filtering, amplification, and oscillation.

### EET 2165 - Electronics Laboratory

**Credits:** 1

**Prerequisite(s):** EET 1150 or EET 2000, and CHE 1100 or CHE 1800, with a grade of "C" or better for all prerequisites

**Corequisite(s):** EET 2145

**Description:** The student will develop the laboratory skills necessary for integration of electronic devices in applications such as filtering, amplification, and oscillation. The student will integrate the lecture content of EET2145 in the practical, hands-on laboratory exercises developed in this course.

### EET 2310 - Digital Circuits I

**Credits:** 3

**Prerequisite(s):** An intermediate algebra course or one-and-one-half years of secondary school algebra or equivalent and appropriate score on the mathematics preassessment placement test or higher level math course, with a grade of "C" or better

**Description:** This course covers the analysis and design of logic circuits using Boolean algebra and Karnaugh maps. Adders, comparators, decoders, encoders, multiplexers and other logic circuits are also studied. Flip-flops, memories, analog-to-digital (ADC) and digital-to-analog converters (DAC) are used to design simple digital circuits. Computer architecture is introduced.

### EET 2340 - Technical Programming

**Credits:** 3

**Prerequisite(s):** MTH 1400 or (MTH 1110 and MTH 1120) or higher level math course, with a grade of "C" or better

**Description:** This is a beginning-level course using programming and coding techniques focusing on solving engineering problems from various areas of engineering technology. The two selected high-level programming languages, MATLAB and Python, are the platforms used to introduce code structures, programming flow and syntax rules. Students will solve problems efficiently and produce non-trivial graphical depiction of the solutions, using reduced number of lines of code.

### **EET 2350 - Advanced Technical Programming**

**Credits:** 3

**Prerequisite(s):** MTH 1400 (or MTH 1110 and MTH 1120) (or a higher level math course), and EET 2340 with a grade of "C" or better

**Description:** This is an advanced-level programming course using C programming and C++ languages. Methods for general solving circuit, electronics and general engineering problems using the two programming languages are studied.

### **EET 3010 - Industrial Electronics**

**Credits:** 4

**Prerequisite(s):** EET 1150 or EET 2000 with a grade of "C" or better

**Description:** This course covers the application of transistors, op amps, and other electronic devices, both analog and digital. This course is for Mechanical Engineering Technology majors, EET certificates, and EET minors. This course does not count towards a major in EET.

### **EET 3330 - Digital Circuits II**

**Credits:** 3

**Prerequisite(s):** EET 2310 with a grade of "C" or better

**Description:** This course is a continuation of EET 2310. It covers the analysis and design of sequential (counters and shift registers) logic circuits. Programmable Logic Devices (PLD) and associated Computer Aided Design (CAD) software are used to implement digital circuits using the schematic design entry method.

### **EET 3370 - Digital Circuits for Advanced Manufacturing**

**Credits:** 3

**Prerequisite(s):** An intermediate algebra course or one and one-half years of secondary school algebra or equivalent and appropriate score on the mathematics placement test or higher level math course, with a grade of "C" or better

**Description:** This course covers the analysis and design of logic circuits using Boolean algebra and Karnaugh maps. Combination logic elements such as adders, comparators, decoders, encoders, multiplexers and other logic circuits are also studied. Next, Flip-flops, and sequential (counters and shift registers) logic circuits are studied and used to design simple digital circuits utilizing Programmable Logic Devices (PLD) and associated Computer Aided

Design (CAD) software employing the schematic design entry method. Computer architecture is introduced.

### **EET 3380 - Technical Programming for Advanced Manufacturing**

**Credits:** 3

**Prerequisite(s):** MTH 1400 or (MTH 1110 and MTH 1120) or higher level math course, with a grade of "C" or better

**Description:** This is an upper-level programming course using the C programming language and National Instruments Lab View virtual instrumentation software. Methods for solving engineering problems using the C programming language are studied. The use of Lab View for the creation of virtual instrumentation in simulations and data acquisition is introduced.

### **EET 3620 - Analog and Digital Communications**

**Credits:** 3

**Prerequisite(s):** MTH 2410 and either EET 2145 or EET 3010 with grades of "C" or better

**Description:** This course is an introduction to communication systems. Topics include: information theory, channel capacity, A/D and D/A techniques, modulation (AM, FM, and digital), noise sources, quantization, and transmission lines including Smith Charts.

### **EET 3670 - Measurements for Communications Systems**

**Credits:** 3

**Prerequisite(s):** EET 2340, EET 3620, and MTH 2410 with grades of "C" or better

**Description:** Students learn to perform measurements on communication circuits, including SNR, noise figure, impedance, admittance, phase, power, frequency, spectrum analysis, and fields at high frequencies.

### **EET 3690 - Fiber Optics**

**Credits:** 3

**Prerequisite(s):** EET 2145 and MTH 2410 with grades of "C" or better

**Description:** Fiber optics is studied, including ray propagation, emitters, detectors, connectorization and systems, FDDI, and SONET.

### **EET 3980 - Internship in Electrical Engineering Technology**

**Credits:** 2

**Prerequisite(s):** Major in Electrical Engineering Technology; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be

established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at c2hub@msudenver.edu.*

*Note: This course is repeatable for a maximum of four semester hours.*

## **EET 4020 - Digital Circuits III - Hardware Description Language**

**Credits:** 3

**Prerequisite(s):** EET 2350 or CSS 2227 or permission of instructor; and EET 3330 with grades of "C" or better

**Description:** This course covers a Hardware Description Language (HDL) which is used to design and simulate very large scale digital integrated circuits.

## **EET 4100 - Senior Project I**

**Credits:** 1

**Prerequisite(s):** JMP 2610, EET 3120, and EET 4370 all with grades of "C" or better; and senior standing

**Description:** This is a Senior Experience, capstone course designed to teach engineering design skills to students through project based learning. The course will focus on team project incorporating the application of fundamental engineering knowledge and skills. Projects requires planning and design in consultation with faculty advisors and industry contacts. Through this course the students will learn the design process in a hands on way through conceptualization, construction, testing and presenting a deliverable project.

**University Requirement(s):** Senior Experience

## **EET 4110 - Senior Project II**

**Credits:** 2

**Prerequisite(s):** COMM 1010, EET 4100, and EET 4340 with grades of "C" or better

**Description:** In this course, the student completes the project he or she started in EET 4100. The project is built, tested, and demonstrated. Written technical reports and oral presentations on the project are required. Part of this course involves the student working with a faculty member who acts as a consultant.

**University Requirement(s):** Senior Experience

## **EET 4330 - Data Communications**

**Credits:** 3

**Prerequisite(s):** EET 2310, with a grade of "C" or better

**Description:** This course covers methods of local and distant digital communications including: systems, standards, and hardware used for transmitting digital data either synchronously or asynchronously.

## **EET 4340 - Interface Techniques**

**Credits:** 3

**Prerequisite(s):** EET 3330 and EET 4370 with grades of "C" or better

**Description:** This course covers interfacing techniques between computers, peripherals, and other digital circuits.

## **EET 4370 - Microcontrollers**

**Credits:** 3

**Prerequisite(s):** EET 2350 and EET 3330 with grades of "C" or better

**Description:** This course teaches microcontroller design. Topics include: programming, monitor functions, hardware configurations, timing, analog-to-digital conversion, parallel I/O, and serial I/O.

## **EET 4700 - Special Topics in Electrical Engineering Technology**

**Credits:** 3

**Prerequisite(s):** EET 3120 with a grade of "C" or better

**Description:** This course identifies and researches current and emerging trends, topics, and developments in the field of electrical engineering to determine their impact on society and to identify changes in the society that could result from these new developments.

## **EET 4710 - Digital Control Systems Design**

**Credits:** 4

**Prerequisite(s):** EET 3710 or EET 3715 with a grade of "C" or better

**Description:** Students in this course will learn the process and theory of the design of digital control systems, using classical and modern control theory. State variable feedback control laws and observers are designed.

## **EET 4730 - Robotics**

**Credits:** 3

**Prerequisite(s):** MTH 2410, EET 3740, and EET 2145 or EET 3010 with grades of "C" or better

**Description:** This course covers the basics of design, analysis, modeling and control of robots. The topics covered include: robot kinematics, inverse kinematics, kinetics, sensors, actuators, and the industrial applications of robotics.

## **Elementary Education**

### **EDU 1111 - Education within Diverse Communities**

**Credits:** 3

**Description:** This course is designed to increase awareness of the diverse contexts in which elementary education is situated, given our global society. Cultural and individual variances, including sociocultural factors such as language, gender, and socioeconomic status, are investigated in order to develop respect for all elementary students, families, and school communities. The course includes

examining institutional policies and practices as well as personal attitudes and beliefs that influence what occurs in elementary schools. The role of the teacher/educator in equity-oriented education is explored.

**University Requirement(s):** Ethnic Studies & Social Justice

## **EDU 2111 - Becoming an Elementary Teacher**

**Credits:** 3

**Description:** This introductory course focuses on the role of the teacher in a 21st Century classroom. Students further develop critical thinking skills to examine the realities of schools in light of contemporary trends in education. Students explore expectations of professional elementary teachers in connection to state standards, state and federal regulations, and teacher evaluation trends. Topics include teachers' current roles as instructional leaders and advocates in diverse communities as well as historical, philosophical, financial, and societal foundations in elementary education. Educational and instructional innovations in elementary education are overarching themes in the course.

## **EDU 3120 - Education of Chicano Children**

**Credits:** 3

**Prerequisite(s):** CHS 2000

**Description:** This course presents the Chicano perspective on current public education policy and its implementation in the schools.

Examines learning and teaching differences in students and teachers.

*Note:* Credit will be granted for only one prefix: EDU or CHS.

**Cross Listed Course(s):** CHS 3300

## **EDU 3222 - Developing Differentiated Learning Environments**

**Credits:** 3

**Description:** This course examines features of effective K-6 learning environments and management strategies designed to facilitate learning. Practices of student motivation and discipline are covered. Students are introduced to the strategies of differentiation to enhance elementary students' individual learning that contribute to all students' success. Technology as a tool for maximizing instruction in the classroom will be integrated into course work. Lesson planning is introduced, with an emphasis on differentiating both instruction and learning environments.

## **EDU 3444 - Instructional and Assessment Practices in Differentiated Classrooms**

**Credits:** 3

**Corequisite(s):** EDU 3445

**Prerequisite(s) or Corequisite(s):** EDU 3222 or EDS 3130

**Description:** This course is designed to assist teacher candidates in understanding the important relationship between effective instructional practice and assessment in the differentiated elementary classroom. Modifications of curriculum and instruction are emphasized on the basis of individual student interests, strengths and

needs. Informal and formal assessment techniques are examined along with the commonalities between classroom assessments and larger scale local, district and state mandated assessments. Emphasis is placed upon collecting and utilizing assessment data to drive instruction in differentiated classrooms. Professional communication regarding assessment and instruction is also a focus of this course.

## **EDU 3445 - Field Experience: Assessment Practices in Differentiated Classrooms**

**Credits:** 1

**Corequisite(s):** EDU 3444

**Prerequisite(s) or Corequisite(s):** EDU 3222 or EDS 3130

**Description:** This field experience, as a partner with EDU 3444, requires 45 hours of field work in an assigned elementary school. Field work involves assisting the classroom teacher and implementing appropriate classroom instruction and assessment. Teaching multiple small group and whole class lessons is a focus of this experience. Assessments data is used to inform instructional design and implantation of lessons.

## **EDU 3460 - Introduction to the Education of the Gifted and Talented**

**Credits:** 3

**Prerequisite(s):** SED 3600

**Description:** This class focuses on the history, myths, and characteristics of gifted and talented students as learners. It presents procedures for identification and service models, as well as teaching and learning models for appropriate curriculum.

## **EDU 3550 - Teaching Elementary School Science and Health**

**Credits:** 3

**Prerequisite(s):** EDU 3444 or SED 3820; EDU 3445 or SED 3050; SCI 2600

**Corequisite(s):** EDU 3665, EDU 3666

**Prerequisite(s) or Corequisite(s):** MTL 3600 or SED 3950; AND SCI 2610

**Description:** This course focuses on teaching science and health to K-6 students, with an emphasis on concepts and processes, and the methods pertinent to the construction of elementary science and health content. This course provides the opportunity to use assessment data to guide science and health instruction to meet the needs of diverse learners. Emphasis is placed on critical thinking, problem solving and decision making skills by exploring these ideas through hands-on experiences. Development of positive attitudes towards science and health is examined. Teacher candidates implement these instructional practices in the co-requisite field experience.

## **EDU 3665 - Field Experience: Teaching Science, Health and Mathematics**

**Credits:** 1

**Prerequisite(s):** EDU 3444 or SED 3820; EDU 3445 or SED 3050; SCI 2600

**Corequisite(s):** EDU 3550, EDU 3666

**Prerequisite(s) or Corequisite(s):** MTL 3600 or SED 3950; AND SCI 2610

**Description:** This field experience, paired with EDU 3550 and EDU 3666, requires 45 hours of field experience at an assigned elementary school. This field work includes teaching multiple small group and whole class lessons while implementing differentiated instructional practices in mathematics, science, and/or health. Emphasis is placed on active, hands-on lessons with discourse to facilitate constructing concepts. Data collection and analysis informs instruction.

## **EDU 3666 - Teaching Elementary School Mathematics**

**Credits:** 3

**Prerequisite(s):** EDU 3444 or SED 3820; EDU 3445 or SED 3050; SCI 2600

**Corequisite(s):** EDU 3550, EDU 3665

**Prerequisite(s) or Corequisite(s):** MTL 3600 or SED 3950; AND SCI 2610

**Description:** Teacher candidates apply appropriate academic standards and knowledge of K-6 student needs to plan evidence-based, mathematics instruction for diverse learners. Knowledge of K-6 mathematics concepts are applied to lessons designed to increase student achievement through stimulating problem solving, mathematical reasoning, and discourse. Formative and summative assessment data are utilized to plan instruction. Teacher candidates implement these practices in the co-requisite field experience.

## **EDU 3700 - Educational and Cultural Experience in Great Britain**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** SED 3600 and ECE 2340/2350 or SED 3750 or SED 3800

**Description:** This course focuses on first hand experiences with culture and the education system in Great Britain. Students will complete field hours in schools in Great Britain and participate in cultural experiences. The focus of the course will be to compare and contrast cultural beliefs and educational philosophies, methods, and outcomes of Great Britain to Colorado.

## **EDU 4010 - Education of African American Children**

**Credits:** 3

**Prerequisite(s):** AAS 1010

**Description:** This course analyzes the historical and contemporary factors that influence the education of African American children in the United States. Focus is on the knowledge, skills, and dispositions required by educational institutions, educators, and parents to provide an effective and equitable education for African American children. Practical application is integrated with theoretical research and conceptual information. Students who successfully complete this

course will receive introductory skills and experiences as effective practitioners, reflective decision makers, and resources for the community.

*Note:* Credit will be granted for only one prefix: AAS or EDU.

**Cross Listed Course(s):** AAS 4010

## **EDU 4011 - Teaching Elementary School Social Studies**

**Credits:** 3

**Prerequisite(s):** EDU 3444 or SED 3820; EDU 3445 or SED 3950

**Description:** This course focuses on concepts and instructional practices for teaching elementary social studies in powerful and purposeful ways. This includes methods for teaching history, geography, civics, and economics within a multicultural, global society. In addition, this course will explore the integrative nature of the social studies with an emphasis on disciplinary content, thinking, and literacy. These practices will be applied to the development of an inquiry learning experience that engages students in a series of curricular decisions that focus on instructional methods and their use in developing disciplinary content, thinking, and literacy-scaffolding pre-service teachers' knowledge development of powerful and purposeful methods for teaching the social studies.

## **EDU 4115 - Residency I**

**Credits:** 3-7

**Prerequisite(s):** EDU 3666, EDU 3665, EDU 3550, RDG 3222, RDG 3333, RDG 3335

**Corequisite(s):** RDG 4444

**Prerequisite(s) or Corequisite(s):** EDU 4011

**Description:** This clinical residency requires at least three full, sequential instructional days per week in an assigned accredited public or private elementary classroom. The residency and accompanying seminar include opportunities to synthesize content from all previous coursework, including: professionalism; designing, implementing, and assessing instruction; student motivation and engagement; and collaboration with colleagues and families. The teacher candidate is an active participant in the elementary school community through close observation of the mentor teacher, collaborative practice with the mentor teacher, and/or supervised independent practice. Concepts and skills learned in RDG 4444 are a particular focus in this residency; however, the resident engages in all content areas.

**University Requirement(s):** Senior Experience

## **EDU 4116 - CLD Residency I**

**Credits:** 3-7

**Prerequisite(s):** EDU 3665, EDU 3666, EDU 3550, RDG 3222, RDG 3333, RDG 3335

**Corequisite(s):** RDG 4444

**Prerequisite(s) or Corequisite(s):** EDU 4011

**Description:** This clinical residency in a classroom with culturally and linguistically diverse (CLD) learners requires at least three full, sequential instructional days per week in an assigned accredited



public or private elementary classroom with English Language Learners. The CLD residency and accompanying seminar includes opportunities to synthesize content from all previous coursework, including concentration coursework for serving CLD students: methods for teaching CLD learners; professionalism; designing, implementing, and assessing instruction for diverse learners; student motivation and engagement; and collaboration with colleagues and families, particularly diverse families. The teacher candidate is an active participant in the elementary school community through close observation of the mentor teacher, collaborative practice with the mentor teacher, and/or supervised independent practice. Concepts and skills learned in RDG 4444 are a particular focus in this residency; however, residents are engaged in all content areas. *Note:* Students are required to earn a C- or higher in order to be recommended for licensure.

**University Requirement(s):** Senior Experience

## **EDU 4190 - Elementary Student Teaching and Seminar: K-6**

**Credits:** 6,12

**Prerequisite(s):** Successful completion of all requirements of the major and the elementary licensure program

**Description:** This is a supervised, full-time field experience in an accredited public or private elementary school, providing increasing responsibility for the teaching, supervision, and assessment of learners (grades K-6). Ten hours of seminar are required (five hours for six credit course). To pass this course, and be recommended for licensure, teacher candidates must be minimally rated as proficient in all Performance-Based Standards for Colorado Teachers. Each student teacher is required to complete the Teacher Work Sample with all requirements rates as proficient or higher.

**University Requirement(s):** Senior Experience

## **EDU 4222 - Designing Instruction For All Learners**

**Credits:** 3

**Prerequisite(s):** EDU 4115 or EDU 4116; RDG 4444

**Corequisite(s):** EDU 4225 or EDU 4226

**Description:** This course focuses on the knowledge and skills of data literate teachers, who can select and create valid and reliable assessments, critically analyze resultant assessment data, and plan instruction utilizing varied differentiation models to increase academic achievement for students with diverse learning needs. Attention is given to grouping strategies and management of the classroom environment for successful whole group, small group and individual instruction. Tracking individual and class performance through multiple measures and analyzing the success of differentiated instructional sequences is included. Teacher candidates apply these techniques in the co-requisite Residency II and reflect upon successes, challenges, and adaptations in practice with course peers.

## **EDU 4225 - Residency II**

**Credits:** 9

**Prerequisite(s):** EDU 4115 or EDU 4116

**Prerequisite(s) or Corequisite(s):** EDU 4222 and RDG 4444

**Description:** This culminating, full-time clinical residency will place the teacher candidate in an assigned, accredited public or private elementary school. Close collaboration between the candidate and mentor teacher will occur in a variety of ways, including the candidate taking the role of lead teacher. The candidate will assume responsibility for all functions of the classroom, including overall design and implementation of instruction and assessment in all curricular areas, maintenance of a productive classroom environment tailored to the needs of diverse learners, communication with colleagues and families, and integration of technology to improve student learning. Knowledge and skills gained in the corequisite EDU 4222 course concerning assessment, data, and use of specific instructional strategies for identified needs are practiced, and the teacher candidates evaluate these practices in light of class and individual academic achievement. Seminar accompanies Residency II.

**University Requirement(s):** Senior Experience

## **EDU 4226 - CLD Residency II**

**Credits:** 9

**Prerequisite(s):** RDG 4444; EDU 4115 or EDU 4116, all concentration coursework

**Corequisite(s):** EDU 4222

**Description:** This culminating, full-time clinical residency will place the teacher candidate in an assigned, accredited public or private elementary school. Close collaboration between the candidate and mentor teacher will occur in a variety of ways, including the candidate taking the role of lead teacher. The candidate will assume responsibility for all functions of the classroom, including overall design and implementation of instruction and assessment in all curricular areas, maintenance of a productive classroom environment tailored to the needs of diverse learners, communication with colleagues and families, and integration of technology to improve student learning. Knowledge and skills gained in the corequisite EDU 4222 course concerning assessment, data, and use of specific instructional strategies for identified needs are practiced, and the teacher candidates evaluate these practices in light of class and individual academic achievement. Candidates participate in all content area instruction. CLD Residency II includes a seminar.

**University Requirement(s):** Senior Experience

## **EDU 4590 - Linguistically Diverse Student Teaching and Seminar**

**Credits:** 6

**Prerequisite(s):** Successful completion of all requirements of the major, minor, linguistically diverse endorsement, teacher licensure program, and general studies

**Description:** Satisfaction of all student teaching application requirements by the required deadline. Passage of the Linguistically Diverse PLACE test. Corequisite: In addition to taking EDU 4590 students must complete eight weeks of student teaching (EDU 4190, EDS 4290, or ECE 4390) in an elementary, secondary, or early childhood classroom working with a cooperating teacher in their initial licensure area. This course is a supervised, full-time, eight-

week student-teaching experience in an accredited public or private school's linguistically diverse program. The experience provides increasing responsibility for the teaching, supervising, and directing of an identified group of English language learners, K-12. Teacher candidates must attend 10 hours of seminar conducted by college supervisors of student teaching. For this course, teacher candidates work with a linguistically diverse teacher and demonstrate proficiency in all phases of linguistically diverse classroom instruction. Teacher candidates are required to complete components of the teacher work sample and demonstrate proficiency in Performance Based Standards for Colorado Teachers as well as Colorado Linguistically Diverse Endorsement Standards. Proficiency required for recommendation for linguistically diverse endorsement includes ability to impact English language learners' academic success and to develop their English language proficiency.

## **EDU 4700 - Substitute Teacher Workshop**

**Credits:** 1

**Prerequisite(s):** Bachelor's degree or permission of instructor

**Description:** This course provides the background knowledge, methods, techniques and materials for substitute teachers at the elementary and middle school levels to be more confident and competent substitute instructors.

## **English**

### **ENG 1001 - Writing Studio A**

**Credits:** 1

**Prerequisite(s):** Appropriate score on the First Year Writing placement

**Corequisite(s):** ENG 1010

**Description:** This one-hour lab provides supplemental academic instruction with an emphasis on the relationship of reading and grammar to writing.

### **ENG 1002 - Writing Studio B**

**Credits:** 2

**Prerequisite(s):** Score of 50 or above on Sentence Skills Accuplacer and secondary placement

**Corequisite(s):** ENG 1008 or ENG 1009

**Description:** This two-hour lab provides supplemental academic instruction for international students or students who have completed their high school education outside the United States. This course emphasizes the relationship of reading and grammar to writing. It also explores the conventions of American academic writing and writing classes.

### **ENG 1008 - Stretch Composing Arguments A**

**Credits:** 3

**Prerequisite(s):** Appropriate score on the First Year Writing placement.

**Description:** Engage in the process of writing and revising texts in a variety of genres in order to enhance your ability to write effectively at the college level. Through a mix of lectures, discussions, workshops, and one-on-one conferences, you'll develop skills to read critically, summarize ideas, and compose effective arguments. In addition, you'll practice writing using a variety of digital tools, preparing you to communicate appropriately to a range of diverse audiences.

This semester is the first half of a two-semester sequence (ENG 1008 and ENG 1009) that is taught by a single professor and is a prerequisite for ENG 1020. This two-semester sequence is a study-and-process-intensive equivalent to ENG 1010. Students must receive a D or better to continue into ENG 1009.

### **ENG 1009 - Stretch Composing Arguments B**

**Credits:** 3

**Prerequisite(s):** D- or better in ENG 1008.

**Description:** Explore argumentative writing at a deeper level, expanding on what you've learned so far in ENG 1008. You'll continue to practice writing and revising texts in a variety of genres in order to enhance your ability to write effectively at the college level. Through a mix of lectures, discussions, workshops, and one-on-one conferences, you'll develop skills to read critically, summarize ideas, and compose effective arguments. In addition, you'll practice writing using a variety of digital tools, preparing you to communicate appropriately to a range of diverse audiences.

ENG 1009 is the second half of a two-semester sequence (consisting of ENG 1008 followed by ENG 1009) that is taught by a single professor and is a prerequisite for English 1020. This two-semester sequence is a study- and process- intensive equivalent to ENG 1010. Students must receive a C- or better to earn General Studies, Composition credit. This semester is the second half of a two-semester sequence: ENG 1008 prepares the student for ENG 1009, and the two courses together serve as a prerequisite for English 1020.

**General Studies:** Written Communication

**Guaranteed Transfer:** GT-CO1

### **ENG 1010 - Composing Arguments**

**Credits:** 3

**Prerequisite(s):** SAT Evidence-Based Reading and Writing 470 or SAT Verbal 430 or ACT English 18 or Appropriate score on the First Year Writing placement.

**Description:** Learn how to write effectively at the college level by engaging in the process of writing and revising texts in a variety of genres. Through a mix of lectures, discussions, workshops, and one-on-one conferences, you'll develop skills to read critically, summarize ideas, and compose effective arguments. In addition, you'll practice writing using a variety of digital tools, preparing you to communicate appropriately to a range of diverse audiences.

*Note:* Students must receive a grade of "C-" or better to earn course credit.

**General Studies:** Written Communication

**Guaranteed Transfer:** GT-CO1

### **ENG 1020 - Research and Argument Writing**

**Credits:** 3

**Prerequisite(s):** C- or better in ENG 1009 or C- or better in ENG 1010 or Appropriate score on the First Year Writing placement or ACT English 27 or SAT Evidence-Based Reading and Writing 620 or SAT Verbal 570

**Description:** Engage in the process of crafting extended essays that are supported by thoughtful research. You'll explore research methods, sharpen your skills in critical reading and thinking, and practice writing for a variety of academic fields. Over the course of the semester, you'll learn how to effectively integrate source material and navigate the conventions of MLA and APA documentation styles. Shorter writing and research projects will guide you toward creating a longer, polished, research-based essay. The course also introduces multimodal composing, giving you the chance to practice combining text, visuals, and media to enhance your message and connect with different audiences.

*Note:* ENG 1020 requires a grade of C- or better to fulfill the General Studies requirement.

**General Studies:** Written Communication

**Guaranteed Transfer:** GT-CO2

## ENG 1021 - Honors Research and Argument Writing

**Credits:** 3

**Prerequisite(s):** C- or better in ENG 1009 or C- or better in ENG 1010 or Appropriate score on the First Year Writing placement or ACT English 27 or SAT Verbal 570 or SAT Evidence-Based Reading and Writing (620) AND Student in the Honors program or approval by the Honors Director

**Description:** Engage in the process of crafting extended essays that are supported by thoughtful research in this Honors Program course. You'll explore research methods, sharpen your skills in critical reading and thinking, and practice writing for a variety of academic fields. Over the course of the semester, you'll learn how to effectively integrate source material and navigate the conventions of MLA and APA documentation styles. Shorter writing and research projects will guide you toward creating a longer, polished, research-based essay. The course also introduces multimodal composing, giving you the chance to practice combining text, visuals, and media to enhance your message and connect with different audiences.

*Note:* ENG 1021 requires a grade of C- or better to fulfill the General Studies requirement.

**General Studies:** Written Communication

**Guaranteed Transfer:** GT-CO2

## ENG 1100 - Introduction to Literature

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** This is a general studies course in the understanding and analysis of literary genres, including fiction, drama, and poetry.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH2

## ENG 1150 - Introduction to Folklore

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** In this textual studies course, students explore how people use informal and traditional culture, called folklore, to sustain their cultural identities and resist or reinforce social norms. Since folklore has existed throughout history and across cultures around the world, students may study a wide-range of folklore, including but not limited to: storytelling, folk poetry, jokes, memes, conspiracy theories, slang, proverbs, folk song, prayers and blessings, customary behaviors, performances, and folk art.

*Note:* Credit will be granted for only one prefix.

**General Studies:** Arts and Humanities, Global Diversity

**Guaranteed Transfer:** GT-AH2

**Cross Listed Course(s):** ANT 1400

## ENG 2000 - Introduction to Textual Studies

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course, students study diverse texts in literature, film, graphic novels, linguistics, and rhetoric from a critical perspective appropriate to the large field of English studies and aimed at developing critical thinking skills for new reading and writing situations emerging in the twenty-first century. Students learn to analyze forms and uses of language across a variety of media, employing strategies of close textual explication and application of critical perspectives, while exploring the impact of written and visual discourses in shaping ideas, identities, and social values.

## ENG 2001 - Introduction to English Careers

**Credits:** 1

**Description:** In this course, students learn about the value and benefits of a major in English and begin to explore pathways, skills, and competencies toward employment readiness in English careers.

## ENG 2025 - Reading and Writing Popular Culture

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** Students critically read and write about popular culture, as it is currently represented in a range of genres and media, composing relevant, academically appropriate analyses and arguments. Students use scholarly frameworks, such as cultural studies, to critically read, analyze, and critique popular culture artifacts, from memes and film to music and media. Students practice writing effectively about popular culture, developing skills in locating and evaluating secondary sources, critically reading scholarly and theoretical writing, and using rhetorical strategies to construct a persuasive argument.

**General Studies:** Written Communication

**Guaranteed Transfer:** GT-CO3

## ENG 2100 - Introduction to Literary Studies

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course designed primarily for English majors and minors, students are introduced to the practice of literary studies. Students learn the terminology, analytical skills, and critical approaches of the discipline. Students read, discuss, and write about literature from a variety of cultures and identities (including national, ethnic, gender, and LGBTQ+).

### ENG 2170 - Medieval Mythologies

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course, students study mythologies of the world as circulated in the period 500-1500, including stories about the Asian Monkey King, the Aztec Quetzalcoatl, Arthur and the Knights of the Round Table, Japanese samurai, and Arabian jinn. It considers these legends in their sacred contexts and looks at transmission and changes across cultures and across time-many of these mythologies are part of contemporary culture.

**General Studies:** Arts and Humanities, Global Diversity

### ENG 2210 - American Literature: Beginnings through the Civil War

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021 and ENG 2000 or ENG 2100

**Description:** This course surveys literatures by diverse voices, written in America from the Pre-Colonial Era to the Civil War including poetry, drama, fiction, and non-fiction. Students read, analyze, and write about Pre-Colonial, Colonial, Enlightenment, Reform, Romantic, and Transcendental American literatures.

### ENG 2220 - American Literature: Civil War to Present

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021 and ENG 2000 or ENG 2100

**Description:** This course surveys literature by diverse voices written in America from the Civil War to the present, including poetry, drama, fiction, and non-fiction. Students read, analyze, and write about Realist, Naturalist, Modernist, and Postmodernist American literature.

### ENG 2230 - Hip-Hop as Poetry

**Credits:** 3

**Description:** In this course, students study hip-hop as poetry, a literary art form. Students are introduced to poetic terminology and literary devices to gain a better understanding and appreciation of lyricism through form and style. Additionally, students discuss sociohistorical, sociocultural, and sociopolitical influences on the creation of hip-hop songs, albums, and genres.

**General Studies:** Arts and Humanities

### ENG 2240 - Introduction to Native American Literature

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021 or NAS 1000

**Description:** Students study the oral and written literatures of Native Americans in their historical, political and social context. This course is suitable for non-English majors.

*Note:* Credit will be granted for only one prefix: ENG or NAS.

**Cross Listed Course(s):** NAS 2240

### ENG 2270 - Monsters and Monstrosity

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** This course offers an introduction to the practices of literary studies through the theme of monsters and monstrosity. Considering examples from different genres, media (such as literature, film, graphic novels), and time periods, students analyze the cultural significance of the monster in the many forms it may take and explore the ways in which creative works, through such figures as the monster, represent and rethink realities (social, cultural, scientific, human) through the blurring of the real and the imaginary.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH2

### ENG 2330 - British Literature: Late 1700s to the Present

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021 and ENG 2000 or ENG 2100

**Description:** This course covers the development of literary forms and themes of British literature from the late 1700s to the present. It includes innovations in literary style, the way literature articulates the philosophies and concerns of a culture, and the historical background of each period. Students develop skills in analyzing, discussing, and writing about Romantic, Victorian, Modern, Postmodern and Contemporary British literature.

### ENG 2360 - Comics and Graphic Novels

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** Students in the course examine the development of comics and the graphic novel, including the texts' blend of verbal and visual languages. Students develop visual literacy, reflecting on how images and writing function in relation to one another. Students read, analyze, and write about comics and graphic novels, with an introduction to literary and pictorial theory and research specific to the genre. Students will read, analyze, and write about superhero comics (such as Marvels and Kingdom Come) and "memoir" graphic novels (such as Maus and Fun Home) to explore how comics and graphic novels shape and reflect the cultures and communities in

which they were created.

**General Studies:** Arts and Humanities

## ENG 2400 - Disney Culture

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** Students study the cultural productions of Walt Disney and the Walt Disney Company, doing so via cultural, aesthetic, ideological, and historical analysis practices. Students analyze a historical trajectory of Disney cultural productions, from early hand-drawn cartoons to more contemporary live action and computer animated film and television productions, Disney theme parks, and texts in a variety of other media.

**General Studies:** Arts and Humanities

## ENG 2410 - Survey of Chicana/o Literature

**Credits:** 3

**Prerequisite(s):** CHS 1000 or ENG 1010 or permission of the instructor

**Prerequisite(s) or Corequisite(s):** ENG 1020 or permission of instructor

**Description:** This course is a review of major literary genres associated with Chicana/o and Latina/o creative expression from the 1800s to the present, including poetry, drama, and the novel. Students in this course examine themes related to the Chicana/o and Latina/o experience such as racism, colonialism, sexism, and other structural forms of oppression, and the social justice efforts to combat these systems of oppression.

*Note:* Credit will be granted for only one prefix: CHS or ENG.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH2

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** CHS 2010

## ENG 2450 - Contemporary Women's Literature

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Prerequisite(s) or Corequisite(s):** ENG 2000 or GWS 1001

**Description:** In this course, students study various texts by women writers with an emphasis on contemporary writing, or writing from the 20th Century to the present. Students read, analyze, discuss, and write about women's texts through gender studies and feminist studies theoretical lenses. Students focus on different sociocultural and sociopolitical issues that exist and surface in women's writing. Course content is themed around issues that are most relevant and prevalent to women and their stories.

*Note:* Credit granted for only one prefix: ENG or GWS.

**Cross Listed Course(s):** GWS 2450

## ENG 2460 - Introduction to Children's Literature

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 or permission of instructor

**Description:** This course is intended for students who have a general interest in the subject of children's literature, that is, writing intended for an audience ranging from pre-readers to early adolescents. The course surveys the genres and the history of such literature, including various oral traditions, children's fiction and poetry, and current issues concerning children's literature. Students develop their abilities to understand, analyze, appreciate, and critique children's literature.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH2

## ENG 2500 - Introduction to Creative Writing

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** Students write in a variety of genres (e.g., fiction, poetry, drama, and creative nonfiction), using a recursive process and a workshop setting to revise, edit, and polish their works to final drafts. Students study writing theory and sample texts to inform the structure, style, and literary qualities of their own writing.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH1

## ENG 2505 - Rhetoric of War

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course, students explore different representations of war and how these representations affect our views of soldiers, citizens, and society. Students analyze texts, such as letters, memoirs, art, film, poetry and literature, in order to discuss different forms of representation concerning war, and multiple perspectives of war.

**General Studies:** Arts and Humanities

## ENG 2510 - Introduction to Rhetoric and Composition

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021 or permission of instructor

**Description:** This course provides an introduction to written Rhetoric and Composition. Students are introduced to major theories, concepts, and historical figures in the field of written rhetoric and composition. Students consider the terminology, traditions, critical approaches, and controversies of written composition and rhetoric as the field evolves in the 21st Century.

## ENG 2512 - Social Media and Power

**Credits:** 3

**Description:** In this course students examine the everyday rhetoric of social media, focusing on how people use social media to engage in public discourse in various ways: spreading news, creating attention for important causes and matters of social justice, entertaining the masses, manipulating the public, and establishing online communities. Students analyze and create digital content through their own social media spaces. Through readings and social media

research, students assess and critique how social media posts are effective (or not), how they function rhetorically, and how they influence perceptions of power and truth.

**General Studies:** Arts and Humanities

### ENG 2513 - Disability Rhetorics

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1009 or ENG 1010

**Description:** Students examine the ways that (dis)ability is rhetorically constructed through discourse in literature, the arts, social media, popular culture, and more. Students study the intersections of (dis)ability and gender, gender identity, race, ethnicity, class, and sexual orientation. Students conduct ethnographic research on how rhetorical constructions of (dis)ability are shaped by and help shape larger systems of power, privilege, and oppression.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

### ENG 2580 - Climate Change Advocacy Writing

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course, students from all disciplinary backgrounds explore the world of climate change advocacy writing. Students examine effective advocacy writing in various genres, analyzing the powerful rhetorical strategies that cause readers to be persuaded. Students produce a piece of advocacy writing on a climate change topic, designing it with a real-world audience and purpose in mind.

**General Studies:** Arts and Humanities

### ENG 2810 - Vampire Films

**Credits:** 3

**Description:** In this course students learn about vampire traditions in Western cultures and how they have evolved from the late Middle Ages to the present in written and cinematic forms. The emphasis is on theatrical-released film representations of those traditions, including their intercultural origins and their transmission across national and cultural boundaries.

**General Studies:** Arts and Humanities, Global Diversity

### ENG 2850 - International Film

**Credits:** 3

**Description:** This course introduces the study of films, using classics of international cinema. Students study national cinemas, important movements, and critical trends, as well as themes, styles, and important figures relevant to each era/movement/national cinema. Students study representative films and the larger culture represented in those films. Students learn a film vocabulary that will enable them to articulate critical responses and write analytical, evaluative critiques.

**General Studies:** Arts and Humanities, Global Diversity

**Guaranteed Transfer:** GT-AH2

### ENG 2860 - Introduction to Film and Media Studies

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021 or permission of the instructor

**Description:** In this course students study cinema as culture and art form, both on-screen and in written critique. The emphasis is on learning the fundamentals of film language, including mise-en-scene, cinematography, editing, and sound, so that students can produce critical writing of their own. Films studied represent diverse perspectives, eras, styles, and nationalities; those films not from Anglophone cultures are screened with English subtitles.

### ENG 3001 - English Careers

**Credits:** 1

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course, students explore career options for English majors, learn to position themselves in the current job market, and acquire practical skills for job and graduate school application purposes.

### ENG 3100 - Chaucer, Shakespeare, Milton

**Credits:** 4

**Prerequisite(s):** ENG 2000 or ENG 2100 or permission of instructor

**Description:** Students will read, analyze, and write about major works by Geoffrey Chaucer, William Shakespeare, and John Milton. Students will study characteristics of Middle and Early Modern English, political and social environments in which the texts were written, and their critical legacies.

### ENG 3111 - Studies in Early Anglophone Literature

**Credits:** 4

**Prerequisite(s):** ENG 2000

**Description:** This course focuses on the study of literature in English within its historical and cultural contexts, examining characteristic writers responding to ideas and events in earlier Anglophone literature (before c. 1800). Readings include primary literature of the period as well as materials exploring the literature's contexts and may also include attention to examples of modern portrayals of the earlier period.

### ENG 3112 - Studies in Early World Literature

**Credits:** 4

**Prerequisite(s):** ENG 2000

**Description:** This course focuses on the study of world literature (non-Anglophone) within its historical and cultural contexts, examining characteristic writers responding to ideas and events in early world literature from its beginnings to c. 1600. Readings include primary literature read in translation as well as materials exploring the literature's contexts and may also include attention to examples of modern portrayals of the earlier period.

## ENG 3113 - Studies in Later Anglophone Literature

**Credits:** 4

**Prerequisite(s):** ENG 2000

**Description:** This course focuses on the study of literature in English within its historical and cultural contexts, examining characteristic writers responding to ideas and events in the modern period (c. 1800 to present). Readings include primary literature as well as materials exploring the literature's contexts.

## ENG 3114 - Studies in Later World Literature

**Credits:** 4

**Prerequisite(s):** ENG 2000

**Description:** This course focuses on the study of world literature (non-Anglophone) within its historical and cultural contexts, examining characteristic writers responding to ideas and events in world literature from c. 1600 to the present. Readings include primary literature of the period read in translation as well as materials exploring the literature's contexts.

## ENG 3120 - Literature and Film: Variable Topics

**Credits:** 4

**Prerequisite(s):** ENG 2000 or ENG 2860

**Description:** This course focuses on variable topics in the study of literature and film. The course addresses the development of specific themes (such as representational modes, schools of thought, or specific social issues) across written texts and visual media narratives, considering both the representations and explorations of the theme under study in individual works from various periods and/or contexts and differences in narrative and representational strategies between print texts and film texts.

*Note:* This course may be repeated under different topics two times.

## ENG 3130 - Literary Genre: Novel

**Credits:** 4

**Prerequisite(s):** ENG 2000 or 2100 or permission of instructor

**Description:** This course is an in-depth study of the novel as a literary form. In addition to reading and discussing novels, students address artistic, historical, cultural, and critical questions relevant to our understanding of the development of the novel, its defining features, structures, and variations. Representative texts in a given semester include multiple periods and subgenres but may focus on a particular theme.

## ENG 3140 - Literary Genre: Poetry

**Credits:** 4

**Prerequisite(s):** ENG 2000 or 2100 or permission of instructor

**Description:** This course provides an in-depth study of poetry as a literary form. In addition to reading and discussing a variety of poetry, students address poetic, aesthetic, historical, cultural, and critical questions relevant to our understanding of the development of poetry, its defining features, structures, and variations. Representative

texts in a given semester will include multiple periods and sub-genres but may focus on a particular theme.

## ENG 3160 - Literary Genre: Drama

**Credits:** 4

**Prerequisite(s):** ENG 2000 or ENG 2100 or permission of instructor

**Description:** Study of drama as a literary genre focuses on features of the form, important modes, tropes, themes, and relevant critical/theoretical approaches. Generic variations such as tragedy, comedy, realism, modernism, absurdism, etc., are examined and located in cultural history. Non-English texts are read in translation.

## ENG 3180 - Literary Genre: Narrative

**Credits:** 4

**Prerequisite(s):** ENG 2000 or ENG 2100 or Permission of Instructor

**Description:** Literary Genre: Narrative is an in-depth study of narrative as a literary form. In addition to reading and discussing narratives, we address artistic, historical, cultural, and critical questions relevant to our understanding of the development of narrative, its defining features, structures, and variations. Representative texts in a given semester will include multiple periods and subgenres but may focus on a particular theme. In this course students study oral narrative traditions as these traditions historically influence other narrative forms. Other forms of study include prose narratives, poetic narratives, short narratives, long narratives, fiction narratives, and non-fiction narratives.

## ENG 3240 - African American Literature

**Credits:** 4

**Prerequisite(s):** ENG 2000 or ENG 2100 or AAS 1010 or permission of instructor

**Description:** Students read, analyze, and write about various forms of literature produced by African Americans with consideration of historical and social contexts. Students explore and analyze texts from various literary eras beginning with oral traditions through contemporary literature and from various literary genres including fiction, drama, poetry, life writing, and hip-hop.

*Note:* Credit will be granted for only one prefix: ENG or AAS.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** AAS 3240

## ENG 3242 - Contemporary Native American Literature

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021 and ENG 2000 or ENG 2100 or NAS 1000

**Description:** Students read, analyze, and write about various forms of literature produced by and about the Native American experience with consideration of historical and social contexts. Students read important contemporary Native American writers in a variety of cultures and critical readings on indigenous history and pertinent theory, and students explore how historical contingencies and

political debates inform literature, as well as how literature and culture can inform and challenge public and political opinion.  
*Note:* Note: Credit will be granted for only one prefix: ENG or NAS.  
**Cross Listed Course(s):** NAS 3242

### ENG 3250 - Black Women Writers

**Credits:** 3  
**Prerequisite(s):** AAS 1010 or ENG 1020  
**Description:** The course studies selected works chosen as representative of the issues and concerns of Black women worldwide as voiced by Black women writers from Africa and the Diaspora.  
*Note:* Credit will be granted for only one prefix: AAS, ENG, GWS  
**Cross Listed Course(s):** AAS 3250, GWS 3250

### ENG 3350 - Essential Shakespeare

**Credits:** 4  
**Prerequisite(s):** ENG 1020  
**Description:** Students read and analyze plays and selected sonnets that form the core of Shakespeare's continuing canonical status in texts, on stages, and in the classrooms of the English speaking world. Students analyze these works and their historical contexts, alongside current cultural concerns, including the maintenance of the canonical status of Shakespeare's works as well as the politics of race, gender, colonialism, and governance in his works. This course is available to English majors and non-English majors.

### ENG 3360 - LGBTQ+ Literature

**Credits:** 4  
**Prerequisite(s):** ENG 2000 or ENG 2100 or GWS 1200  
**Description:** Students read, analyze, and write about various forms of literature produced by and about the LGBTQ+ experience with consideration of historical and social contexts. Students read the work of important LGBTQ+ writers in a variety of literary periods and cultures and critical readings on LGBTQ+ history and pertinent theory, and students explore how historical contingencies and political debates inform literature, as well as how literature and culture inform and challenge public and political opinion.  
*Note:* Credit will be granted for only one prefix: ENG or GWS.  
**Cross Listed Course(s):** GWS 3430

### ENG 3420 - The English Bible as Literature

**Credits:** 3  
**Prerequisite(s):** ENG 2000 or ENG 2100 or permission of the instructor  
**Description:** This course is a critical study of the Bible in English translation with emphasis on the literary forms and cultural contexts of the books of the Bible from the Hebrew Bible through the New Testament. Students examines the historical contexts, narrative techniques, development of canonical versus non-canonical biblical text, and critical and theoretical evaluations of the Bible as a work of literature, with attention to locating and understanding literary

criticism appropriate to individual texts and using those resources in the writing of researched literary analysis.

### ENG 3430 - Classical Mythology

**Credits:** 4  
**Prerequisite(s):** ENG 2000 or ENG 2100 or permission of the instructor  
**Description:** Students read, analyze, and write about ancient Greek and Roman mythology as expressed in translations of enduring works of Classical literature. Students learn about historical contexts, narrative techniques, and critical evaluations of Classical mythology. Students locate, study, and apply literary criticism appropriate to individual texts in written literary analysis.

### ENG 3440 - Myth and Literature

**Credits:** 4  
**Prerequisite(s):** ENG 2000 or ENG 2100 or permission of instructor  
**Description:** In this course students examine major mythological texts, including Greek, Roman, Hebrew, Christian, and non-Western, and their influences on literature. Students consider the intertextuality of myths and their reinterpretations in later literature. Students also study relevant literary theory and criticism.

### ENG 3461 - Analyzing Children's Literature

**Credits:** 3  
**Prerequisite(s):** ENG 2000 or ENG 2100 or permission of instructor  
**Description:** This course studies various levels and types of children's literature with attention to applying literary theory to the analysis of children's literature. The course traces the connected historical development of concepts of childhood and children's literature. Students analyze and critique various works of children's literature across a number of time periods, modes, and genres.

### ENG 3465 - Anti-Racist Children's Literature

**Credits:** 3  
**Prerequisite(s):** ENG 1020 or ENG 1021 or permission of instructor  
**Description:** This course is designed to help students learn more about a wide array of inclusive, anti-oppressive, anti-racist, anti-sexist, anti-xenophobic, and intersectional children's literature and authors. Students explore anti-racist children's literature, such as picture books, novels, poetry, graphic novels, and non-fiction for adolescents, analyzing the works through cultural, historical, ideological, and aesthetic lenses, and thus become more adept at understanding the cultural power of children's literature.  
**General Studies:** Arts and Humanities  
**University Requirement(s):** Ethnic Studies & Social Justice

### ENG 3470 - Young Adult Literature

**Credits:** 4  
**Prerequisite(s):** ENG 2000 or ENG 2100  
**Description:** This course provides a comprehensive critical survey of



various types and genres of contemporary young adult literature. It focuses on issues relating to selection, culture, gender, diversity, and response to and analysis of literature in both print and non-print forms.

## ENG 3475 - Literature of the Oppressed

**Credits:** 4

**Prerequisite(s):** ENG (2000 or 2100) AND (junior or senior)-level standing OR permission of the instructor

**Description:** In this course, students study critical literary theories as an inroad into reading and discussing literary depictions of oppressed populations. Students study a variety of literary genres including canonical and non-canonical works written by and about various oppressed populations. Genres of study include but are not limited to: novels, short stories, narrative essays, young adult literature, and film.

## ENG 3480 - The Chicano Novel

**Credits:** 3

**Prerequisite(s):** CHS 2010 or Permission of instructor

**Description:** This course deals with origins, themes, and techniques that characterize the Chicano novel. It is an in-depth study of the best examples of literary production in both Spanish and English.

*Note:* Credit will be granted for only one prefix: ENG or CHS. Suitable for non-English majors.

**Cross Listed Course(s):** CHS 3400

## ENG 3501 - Studies in Rhetoric and Writing: Style

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** This course focuses on the rhetorical, social, cultural, and political contexts of writing styles and style guides. Coursework may incorporate lectures, selected textual studies, group discussion, workshops, and supervised projects.

## ENG 3503 - Rhetoric and Visual Literacy

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** The course is a study on visual literacy and writing through the analysis of how text, through rhetoric, both cultivates and restricts the formation of power, identity, and community. Students analyze the material environment, such as film and new media, clothes, furniture, food, music, signage, tools, toys, and other objects, as rhetorical fields of persuasive appeals and how they influence, liberate, and constrain the formation of identity and community.

## ENG 3505 - Concepts of Authorship

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** This course examines Western concepts of authorship and originality. Topics include copyright and intellectual property

law, collaborative authorship, theories of invention, and contemporary challenges to the idea of solitary authorship, including the Internet, the writing workshop, writing centers, and workplace writing practices.

## ENG 3506 - Introduction to Editing

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** Students learn the principles of editing for acquisition, development, and copy editing. Students work with a variety of documents, including public-facing and workplace genres, to explore how editing shapes texts with regard to content, format, style, tone, grammar, punctuation, and mechanics. Students learn to work collaboratively with diverse authors to help them achieve their purposes and retain their voice.

## ENG 3507 - Writing Reviews and Criticism

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course, students learn the basics of writing reviews and criticism, focusing on purposes, conventions, and techniques. Emphasis is placed on writing literature reviews, book reviews, and reviews of other cultural artifacts, including film, food, and art, for both scholarly and popular audiences.

## ENG 3508 - Rhetoric of Humor: Parody, Satire, and Comedy

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** Students explore how humor persuades, considering comedic texts and performances as rhetorical. Students examine the relationship between writer and audience, the purposes of humor, and the rhetorical techniques and strategies comedic writers use. Humorous texts in a variety of genres are studied, and students also produce their own humorous texts.

## ENG 3510 - Composition Studies: Theories and Practice

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021 and junior standing, or permission of instructor

**Description:** This class is a study of the theoretical foundations of writing and writing processes, focusing on writing as both a personal and a social act. Students apply theories of writing to their own processes and in turn learn how writing works. Students develop their own theory of composing based on reading and practical application in composition studies.

## ENG 3513 - Race Talk

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course, students examine the history and contemporary use of racial, racialized, and racist language in the United States of America through the lens of rhetorical studies. Students explore how racial discourses reflect, embody, create, and can contribute to dismantling social relations and power dynamics, including white supremacy. The course focuses on how language shapes perceptions of race and how the material conditions of race in the United States shape the language and narratives about race/ethnicity.

**Content Acknowledgement:** This course includes texts with racist language and discussion of that language.

**General Studies:** Arts and Humanities

**University Requirement(s):** Ethnic Studies & Social Justice

## ENG 3520 - Research Methods in Rhetoric and Composition

**Credits:** 4

**Prerequisite(s):** ENG 2510

**Description:** This course introduces students to the types of research methods used in rhetoric and composition. Students explore what types of questions are answered by different types of research methodologies and how empirical studies in rhetoric and composition are designed. Methodological issues such as data collection, coding, validity, and reliability are considered, as well as participant rights and protections and other ethical issues. Students design an empirical study.

## ENG 3521 - Poetry Writing Workshop

**Credits:** 4

**Prerequisite(s):** ENG 2500 or permission of instructor

**Description:** Students in this writing workshop will be introduced to the major conventions of poetry writing while writing their own poems. Students will practice generating, drafting, editing, polishing, and revising each poem. The class will include peer workshops and poetry readings.

## ENG 3522 - Fiction Writing Workshop

**Credits:** 4

**Prerequisite(s):** ENG 2500 or permission of instructor

**Description:** Students will learn, develop, and practice fiction writing. Writing assignments will focus on the development of plot, character, theme, setting, and voice. The course will focus not only on the craft necessary to develop a marketable narrative, but also on the tools needed to build a challenging and supportive workshop environment.

## ENG 3523 - Drama Writing Workshop

**Credits:** 4

**Prerequisite(s):** ENG 2500 or THE 2210 or permission of the instructor

**Description:** In this course, students are introduced to the basics of playwriting style and structure. Students complete writing assignments focused on crafting dialogue, developing characters, and structuring effective plots, with emphasis placed on the collaborative nature of playwriting, with its ultimate goal of public performance.

*Note:* Credit will be granted for only one prefix: ENG or THE.

**Cross Listed Course(s):** THE 3523

## ENG 3524 - Creative Nonfiction Writing Workshop

**Credits:** 4

**Prerequisite(s):** ENG 2500 or permission of instructor

**Description:** This class includes the study and writing of creative nonfiction and its subgenres, e.g., literary memoir, personal essay, literary journalism, nature writing, and literary travel writing, through group discussions and supervised workshops, developing their writing processes. Students in this writing workshop will be introduced to the major conventions of creative nonfiction while writing their own pieces and participating in peer workshops.

## ENG 3525 - Scholarly Writing

**Credits:** 3

**Prerequisite(s):** ENG 1020, ENG 1021 and Junior or higher standing

**Description:** Students study the expectations that shape scholarly writing in their various academic disciplines. Students draw on research appropriate for discipline-specific peer-reviewed publications and/or conference presentations. During this course, students learn to transform their written work into submission-ready artifacts with the guidance of instructor feedback and peer review. This course is ideal for students who plan to attend graduate school or are in writing-intensive degree programs.

**General Studies:** Written Communication

**Guaranteed Transfer:** GT-CO3

## ENG 3526 - Writing in the Sciences

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 and Junior or higher standing

**Description:** Students explore the expectations that shape scientific writing in their various scientific disciplines and employ the correct forms, interpret and synthesize the literature and present their researched writing to various audiences. Students draw on research appropriate for discipline-specific publications and/or conference presentations. During this course, students transform their work into publishable/presentable texts with the guidance of instructor feedback and peer review. This course is ideal for students who are majoring in a science discipline.

**General Studies:** Written Communication

**Guaranteed Transfer:** GT-CO3

## ENG 3527 - Professional Writing

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 and Junior-level standing

**Description:** This course introduces key concepts and practices of professional writing, including various written genres, research, document design and visual rhetoric, and use of style guides. Students explore the expectations that shape professional writing such as how to employ the correct forms, interpret and synthesize the literature and present their researched writing to various audiences. During this course, students learn to transform their work into sharable documents with the guidance of instructor feedback and peer review. This course is ideal for students to develop and polish writing skills that will be needed for their career.

**General Studies:** Written Communication

**Guaranteed Transfer:** GT-CO3

## ENG 3535 - Essentials of Grant Writing

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** Students study the political and social aspects of grantwriting (understanding grant cycles, key players behind funding and stylistic necessities for winning grants) and practice the craft of grantwriting (researching pertinent RFPs, composing and submitting a proposal).

## ENG 3570 - Elements of Songwriting

**Credits:** 3

**Description:** This course provides students with the basic aesthetic and communicative concepts of songwriting with regard to tradition and to contemporary trends and enables students to articulate a conscious method appropriate to their own aesthetic approaches to songwriting in the context of traditional songwriting. The course includes composing original songs with various features (lyrics, melody, harmony, etc.) and document them so that each song may be communicated and performed in various different genres, styles, and situations.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** MUS 3240

## ENG 3610 - Theories of Literature

**Credits:** 3

**Prerequisite(s):** ENG 2000 or ENG 2100

**Description:** Students in this course read major texts in the history of literary criticism, from the Greeks to the present. Students learn to distinguish among various theories and critical strategies, and to apply them to literature. Course work includes advanced study of some literary work and critical writing about it. This course is required for English majors in the Literature concentration.

## ENG 3615 - Theory!

**Credits:** 4

**Prerequisite(s):** ENG 2000 OR ENG 2100 OR ENG 2860

**Description:** Students in Theory! will learn how theories of culture can be applied to literature, film and media. Readings will include theoretical essays on feminism, poststructuralism, racism, classism,

historicism, and psychoanalysis, with applications by students to exemplary works of literature, film and digital cinema, and to other popular media.

## ENG 3620 - Perspectives in Literary Criticism: Variable Topics

**Credits:** 3

**Prerequisite(s):** ENG 2000 or ENG 2100 and Junior-level Standing

**Description:** This course studies representative texts of a specific critical perspective (such as structuralism, historicism, materialist criticism, feminist/gender criticism, racial/ethnic identity) applied in literary analysis. Readings include critical and theoretical texts working in the selected critical mode, as well as primary literary texts representing a variety of contexts through which the particular critical perspective may be applied and explored.

## ENG 3621 - Gender Theory

**Credits:** 4

**Prerequisite(s):** ENG 2000 or ENG 2100 and Junior-level Standing

**Description:** In this course, students explore gender theory in literary studies, from its roots in feminist theory to the development of queer theory, considering differences and points of intersection between feminist, gender, and queer theory perspectives. Readings include critical and theoretical texts representative of the variety of approaches and issues that emerge within gender-related theory, as well as literary texts, from a variety of contexts, through which to consider the perspectives and issues of literary analysis based in questions of gender.

## ENG 3670 - Social Change and Writing Centers

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** Students explore how writing centers can function to promote social change or to reinforce the status quo. Students study how writing centers can both empower and oppress. Students conduct ethnographic research in writing centers, examining how race, sex, gender, sexual orientation, language, disability, and other aspects of identity come into play in writing tutoring and writing center pedagogy. Students study and apply theories and methods from literacy studies, disability studies, and composition studies. Students who complete this course are qualified to work as peer consultants in the MSU Denver Writing Center.

**General Studies:** Social and Behavioral Sciences

## ENG 3671 - Writing Tutoring

**Credits:** 1

**Prerequisite(s):** ENG 1020 or ENG 1021 or permission of instructor

**Description:** In this course, students learn the basic practices of writing tutoring in one-on-one settings. Students study and practice a variety of tutoring methods for working with diverse populations. Students apply what they have learned by observing, analyzing, and

reflecting on tutoring sessions and processes.

*Note:* Course cannot be taken if ENG 3670 has been taken.

## ENG 3672 - Research in Writing Centers

**Credits:** 1

**Prerequisite(s):** ENG 3670

**Prerequisite(s) or Corequisite(s):** ENG 3671

**Description:** Students learn how to conduct empirical research in a writing center setting. Topics include human subjects research protections, formulating research questions, qualitative research study design, data collection and management, and data analysis and interpretation.

## ENG 3673 - Future Applications of Writing Tutoring Skills

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** ENG 3670 or ENG 3671

**Description:** This course provides the opportunity for Writing Center peer consultants to synthesize the experiences they've had on the job. Students analyze the transformative outcomes of their peer consultant experiences to prepare for post-graduate possibilities such as interviews, internships, and graduate school applications.

## ENG 3710 - Film History

**Credits:** 4

**Prerequisite(s):** ENG 2860

**Description:** In this course, students learn about the history of cinema from its 19th-century origins to the present, including the major film movements, important films and filmmakers, and the technical aspects that propelled the art form forward. Some of the major movements include the silent cinema, German Expressionism, Italian Neorealism, the French New Wave, the European Art Cinema, the Chinese Fifth Generation, Bollywood, the American Independents, and Classic Hollywood Cinema.

## ENG 3711 - History of Film I

**Credits:** 3

**Prerequisite(s):** ENG 2860

**Description:** This course examines the history of cinema from its 19th-century origins until the introduction of sound films in the 1920s through 1938. Students explore important developments and influences in American and international cinema, including the creation of realistic and fantastic styles, the formation of Hollywood narrative, the impact of vaudeville and stage theatre, the emergence of film genres, melodrama, the contributions of women in early cinema, the place of race film, and the evolution of classical editing and dialectical montage.

## ENG 3712 - History of Film II

**Credits:** 3

**Prerequisite(s):** ENG 2860 or permission of instructor

**Description:** This course examines the history of cinema from 1939 to the present. Students explore important developments and influences in American and international cinema, including Classical Hollywood Cinema, Italian Neorealism, Film Noir, the French New Wave, European Art Cinema, New German Cinema, the Hollywood transition years, the emergence of other important national cinemas, and the influence of new technologies, including special effects and digital filmmaking.

## ENG 3720 - Film and Media Studies Topics: Variable Topic

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021 and ENG 2860

**Description:** In this course students examine a grouping of cinematic and/or other visual media productions in their historical, cultural, national, regional, and/or other general contexts. Films and/or other visual media are grouped based on considerations such as national cinemas (e.g., Indian Cinema); regional cinemas (e.g., African Cinema); type (e.g., short films, TV series, other visual media); category (e.g., film trilogies, TV, other visual media); and other topics as defined by the specific syllabus. Films and other visual media are screened during laboratory hours or online. This course may be repeated under different topics.

*Note:* This course may be repeated under different topics for up to 9 credits.

## ENG 3721 - Cinema of India

**Credits:** 3

**Prerequisite(s):** ENG 2860 or permission of instructor

**Description:** In this course, students examine what makes the movies of India distinctive. Although the emphasis is on films associated with the term *Bollywood*, some Indian films from outside the mainstream Bollywood tradition are also included, such as an independent film, a Bengali regional film, a diasporic IndoCanadian film, a documentary film, an animated film. Studies include readings in film criticism that address issues of cinematic form and cultural context. ENG 2860 recommended.

## ENG 3722 - Native American Cinema

**Credits:** 4

**Prerequisite(s):** NAS 1000

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** Students examine films in several contexts, including the use of film by the dominant society as a means of creating a national identity, socializing Indians, and reinforcing power relationships in the political arena; the use of films by Native American filmmakers as an affirmation of identity and a mechanism for presenting an indigenous view of history, culture and political relationships with the dominant society. Students explore a range of genres, narrative and non-narrative films, live-action films,

documentaries, experimental film, and animation. Students examine a broad range of topics, including film form (mise-en-scène, cinematography, editing, and sound); the use of film as a modern storytelling medium and as a mechanism for bridging cultural divides; film theory; and historical, cultural, economic, and theoretical aspects of each film/cinematic area.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** NAS 3722

### **ENG 3725 - Studies in Cinema: Gender in Mainstream American Film**

**Credits:** 4

**Prerequisite(s):** ENG 2860 or permission of instructor

**Description:** In this course, students explore the expression of gender in American film from the origins of cinema to the present day. Students examine such elements as the influence of the "gaze," the depiction of gender-specific subject matter, and the changing depictions of gender, from heteronormative to queer, over time. Students apply film theory in analysis of and writing about the films.

### **ENG 3750 - Cinema Genre: Variable Topics**

**Credits:** 4

**Prerequisite(s):** ENG 2860 or Permission of instructor

**Description:** In this course students will examine a grouping of cinematic productions in their historical, cultural contexts. Films will be grouped based on considerations such as nation of origin (for example, German Cinema), content (for example, Silent Comedy), or style (for example, Film Noir). Films will be screened during laboratory hours.

*Note:* This course may be repeated under different topics.

### **ENG 3770 - Multicultural Cinema**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** This course covers four areas of multicultural cinema, including African-American Cinema, Asian-American Cinema, Native-American Cinema, and Latinx-American Cinema. Each unit focuses on representations of those specific groups throughout the history of cinema, prominent actors and directors, and how/if representations change over the course of cinema history. The course includes films about each group made by members of each of the groups as well as films made by filmmakers outside of the groups. The course also examines the historical, cultural, economic, and theoretical aspects of each cinematic area.

**University Requirement(s):** Ethnic Studies & Social Justice

### **ENG 3800 - Creative Writing Bootcamp**

**Credits:** 1

**Prerequisite(s):** ENG 2500 or Permission of Instructor

**Description:** Bootcamp classes are one credit writing/workshop intensive courses built around the production of theme-oriented

(types of short story; opening and outlines of a novel; chapbook of poetry; etc.) work. The center of the bootcamp is a three-day weekend during which the students and professor meet to perform exercises, workshops, writing, and market identification, as well as discuss submission and/or performance strategies and materials.

### **ENG 3810 - Creative Writing Journal**

**Credits:** 4

**Prerequisite(s):** ENG 2500 or permission of instructor

**Description:** Students in this course participate in every aspect of the conception, development, and publication of a volume of The MSU Roadrunner Review, an online literary journal, focused on showcasing creative work, such as fiction, poetry, and creative nonfiction. As a collaborative unit, students create the identity of the volume; develop appropriate guidelines and criteria associated with a call for creative submissions; invite submissions; review those submissions; respond to those submissions; offer editorial input on accepted and/or provisionally accepted creative materials; finalize the order of presentation for accepted work; and, finally, launch an edition of the journal.

### **ENG 3820 - Writing Studio: Variable Topics**

**Credits:** 3

**Prerequisite(s):** ENG 2500 or permission of instructor. *Note:*

Variants of this course will require different prerequisites, aligning with the variable topic course content.

**Description:** This course offers specialized studios in the writing of a particular literary subgenre or expository form. Coursework will incorporate lectures, selected textual studies, group discussion, workshops, and supervised projects.

*Note:* This course may be repeated for credit under different topics for up to 9 credits maximum.

### **ENG 3821 - Poetry Studio**

**Credits:** 4

**Prerequisite(s):** ENG 2500 or permission of the instructor

**Description:** Students in this specialized studio further develop and practice writing techniques introduced in prerequisite/workshop courses, with a focus on poetry. This course attends not only to the craft necessary to produce a publishable poem or collection, but also to the tools needed to build a challenging and nurturing workshop environment. Students study models and workshop drafts, ultimately producing a submission suitable for publication and/or graduate school application.

### **ENG 3822 - Speculative Fiction Studio**

**Credits:** 4

**Prerequisite(s):** ENG 2500 or permission of the instructor

**Description:** Students in this specialized studio further develop and practice writing techniques introduced in prerequisite/workshop courses, with a focus on speculative fiction--including science fiction, fantasy, and horror. This course attends not only to the craft

necessary to produce a publishable story, but also to the tools needed to build a challenging and nurturing workshop environment. Students study models and workshop drafts, ultimately producing a submission suitable for publication and/or graduate school application.

### ENG 3823 - Screenwriting Studio

**Credits:** 4

**Prerequisite(s):** ENG 2500 or permission of instructor

**Description:** Students in this specialized studio further develop and practice writing techniques introduced in prerequisite/workshop courses, with a focus on screenwriting. This course attends not only to the craft necessary to produce a screenplay, but also to the tools needed to build a challenging and nurturing workshop environment. Students study models and workshop drafts, ultimately producing a submission suitable for production and/or graduate school application.

### ENG 3824 - Short Story Studio

**Credits:** 4

**Prerequisite(s):** ENG 2500 or permission of the instructor

**Description:** Students in this specialized studio further develop and practice writing techniques introduced in prerequisite/workshop courses, with a focus on short fiction. This course attends not only to the craft necessary to produce a publishable story, but also to the tools needed to build a challenging and nurturing workshop environment. Students study models and workshop drafts, ultimately producing a submission suitable for publication and/or graduate school application.

### ENG 3825 - Adaptation Studio

**Credits:** 4

**Prerequisite(s):** ENG 2500 or permission of the instructor

**Description:** Students in this specialized studio further develop and practice writing techniques introduced in prerequisite/workshop courses, with a focus on adaptation for stage and screen. This course attends not only to the craft necessary to produce an adaptation, but also to the tools needed to build a challenging and nurturing workshop environment. Students study models and workshop drafts, ultimately producing a submission suitable for production and/or graduate school application.

### ENG 3826 - Novel Studio

**Credits:** 4

**Prerequisite(s):** ENG 2500 or permission of the instructor

**Description:** Students in this specialized studio further develop and practice writing techniques introduced in prerequisite/workshop courses, with a focus on the novel. This course attends not only to the craft necessary to produce a publishable manuscript, but also to the tools needed to build a challenging and nurturing workshop environment. Students study models and workshop drafts, ultimately

producing a submission suitable for publication and/or graduate school application.

### ENG 3827 - Micro Narrative Studio

**Credits:** 4

**Prerequisite(s):** ENG 2500 or permission of the instructor

**Description:** Students in this specialized studio further develop and practice writing techniques introduced in prerequisite/workshop courses with a focus on texts such as flash fiction, scripts for short films, and short nonfiction. This course attends not only to the craft necessary to produce a publishable micro narrative, but also to the tools needed to build a challenging and nurturing workshop environment. Students study models and workshop drafts, ultimately producing a submission suitable for publication and/or graduate school application.

### ENG 3828 - Video Game Writing Studio

**Credits:** 4

**Prerequisite(s):** ENG 2500 or permission of instructor -

Recommended: ENG 3522 and/or ENG 382F

**Description:** In this course, students learn the basics of interactive game writing, with a foundation in video games. Students learn story structures, delivery methods, character building, and dialog unique to the video game writing genre. Writing in this course is focused on the unique, collaborative, interactive nature of game writing.

### ENG 3980 - Internship in English

**Credits:** 1-15

**Prerequisite(s):** Major in English; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

### ENG 4110 - Advanced Studies in Literature: Variable Topics

**Credits:** 4

**Prerequisite(s):** ENG 2000 or ENG 2100 and Junior-level standing; or permission of instructor

**Description:** This course studies literary works selected as significant expressions of a school, idea, or mode. The works may be drawn from one or more literary eras.

*Note:* This course may be repeated for credit under different topics for up to 9 credits maximum.

## ENG 4114 - Multi-Ethnic Women's Literature

**Credits:** 4

**Prerequisite(s):** ENG 2000 or ENG 2100 and Junior-level standing, or permission of instructor

**Description:** In this course, students study contemporary multi-ethnic literature of the United States written by women, focusing on Chicana, American Indian, African American, Asian and Pacific American authors. Students examine the ways in which the texts articulate and respond to cultural and historical contexts, especially in relation to agency and voice.

## ENG 4115 - Hip-Hop and Literature

**Credits:** 4

**Prerequisite(s):** ENG 2000

**Description:** Students historically and socially situate Hip-Hop as a part of the African American cultural experience in the United States. Students read, analyze, discuss, write about, and apply historical and contemporary context to their reading, analysis, and interpretation of Hip-Hop texts. In this course, students read both literary text and rap songs as Hip-Hop texts. Students focus on different sociocultural and sociopolitical issues that exist and surface in Hip-Hop texts. Course content is themed around issues that are most relevant and prevalent to African Americans, and which surface in their stories and in their songs.

## ENG 4116 - Harlem Renaissance

**Credits:** 4

**Prerequisite(s):** ENG 2000 or ENG 2100 and Junior-level standing or permission of instructor

**Description:** This course is a study of the African American literature that was part of the creative movement centered in Harlem, New York, from World War I through the 1930s.

## ENG 4130 - Writers and Their Worlds

**Credits:** 4

**Prerequisite(s):** ENG (2000 or 2100) or permission of instructor

**Description:** In this course, students explore the literary production of an individual author or group of authors, identifying the defining characteristics, themes, concerns, and innovations of their representative works. Groups of authors may be unified by thematic concerns and/or by a clearly demarcated period in literary history. Students consider the development of the author(s) within historical, cultural, and literary contexts and engage with relevant critical/theoretical approaches to the author's work. Non-English texts are read in translation.

## ENG 4131 - Jane Austen

**Credits:** 3

**Prerequisite(s):** ENG 2000 or ENG 2100 or permission of instructor

**Description:** This course is an in-depth study of the writing career of Jane Austen, pioneer writer of fictional narratives and still widely

read English novelist. Readings include some of the juvenilia, *Lady Susan*, *Northanger Abbey*, *Pride and Prejudice*, *Mansfield Park*, *Emma*, *Persuasion*, and *Sanditon*, as well as various essays about Austen and her works.

## ENG 4134 - Margaret Atwood

**Credits:** 3

**Prerequisite(s):** ENG 2000 or ENG 2100 and Junior-level standing or permission of instructor

**Description:** This course traces, in representative works, the artistic and intellectual development of Margaret Atwood (1939-).

## ENG 4135 - Sylvia Plath

**Credits:** 3

**Prerequisite(s):** ENG 2000 or ENG 2100 and Junior-level standing

**Description:** This course traces, in representative works, the artistic and intellectual development of Sylvia Plath (1932-1963).

## ENG 4137 - Chinua Achebe

**Credits:** 3

**Prerequisite(s):** ENG 2000 or ENG 2100 and Junior-level Standing or permission of instructor

**Description:** This course traces the artistic and intellectual development of Chinua Achebe (1930-2013), including representative works, historical and cultural contexts, critical theory, literary and other influences with special attention paid to the post-colonial movement.

## ENG 4138 - Toni Morrison

**Credits:** 3

**Prerequisite(s):** ENG 2000 or ENG 2100 and Junior-level Standing or permission of instructor

**Description:** This course traces the artistic and intellectual development of Toni Morrison through representative works. Students study selected novels and nonfiction, as well as contexts for Morrison's ideas about fiction, literary history, gender, and race. Students use various theoretical perspectives for writing literacy analyses.

## ENG 4500 - Senior Project

**Credits:** 4

**Prerequisite(s):** ENG 2000 or ENG 2100, and Senior-level standing and permission of instructor

**Description:** In this course, students complete their Senior Experience for the English Major concentration in Literature, Film and Media Studies, focusing on the production of a capstone project that synthesizes knowledge and skills acquired over the course of the student's undergraduate studies in English. Students employ critical analysis and reflect on the range of theoretical approaches, textual forms, authorial identities, orientations, and audiences encountered across the wide field of English and textual studies. Students also

consider the history of the field, underlying philosophical tenets, and current and emergent practices. The extended project requires research, close textual analysis, and application of a specific critical or theoretical perspective; it may include, along with the researched academic essay component, other forms of writing, including multi-modal and creative writing. Students also produce artifacts to support the finalization of plans and preparation for next steps for post-graduation success.

**General Studies:** Senior Experience

### ENG 4520 - Creative Writing Capstone

**Credits:** 4

**Prerequisite(s):** ENG 2500 and senior standing, or permission of instructor

**Description:** Students practice intensive writing and revision in a number of genres, culminating in a major, advanced project in one specific genre (fiction, poetry, drama, screenplay, literary nonfiction, essay, or other instructor-approved genre). Students participate in senior-level editing activities and peer workshops. Students also produce artifacts to support the finalization of plans and preparation for next steps for post-graduation success.

**University Requirement(s):** Senior Experience

### ENG 4540 - Professional Writing and Rhetoric Capstone

**Credits:** 4

**Prerequisite(s):** Senior Standing

**Description:** This course is the Senior Experience for the English Major with a Professional Writing and Rhetoric (PWR) concentration. Students produce a capstone project that synthesizes knowledge and skills acquired over the course of the student's undergraduate studies in English. Students critically analyze and reflect on the diversity of theoretical approaches, textual forms, authorial identities, orientations, and audiences encountered across the field of professional writing and rhetoric, considering also the history of the field, underlying philosophical tenets, and current and emergent practices. The capstone project may be multi-modal and may involve research and rhetorical analysis. Students also produce artifacts to support the finalization of plans and preparation for next steps for post-graduation success.

**University Requirement(s):** Senior Experience

### ENG 4600 - Teaching Literature, Communication, and Visual Literacy, 7-12

**Credits:** 3

**Prerequisite(s):** Junior standing and completion of ENG 2000 or ENG 2100. Minimum 3.0 GPA in the major.

**Prerequisite(s) or Corequisite(s):** ENG 3470

**Description:** This course is intended for students seeking a degree in English with a concentration in Secondary Education or for students seeking licensure to teach secondary English. Students will learn theories and techniques for teaching literature, understanding and responding to texts, and integrating spoken and written

communication into their lesson plans. The course will also address visual literacy, language diversity and cross-cultural communication.

### ENG 4601 - Methods in Secondary English I: Literacies and Literature

**Credits:** 4

**Prerequisite(s):** Junior Standing; Admission to Teacher Education Program

**Prerequisite(s) or Corequisite(s):** ENG 2000 or ENG 2100

**Description:** Learn techniques for teaching literature, analyzing texts, and integrating communication skills into lesson plans. Topics include young adult literature, visual literacy, language diversity, cross-cultural communication, and research in English Language Arts, with a focus on career-connected and problem-based learning. Student diversity, identity, and development are examined in relation to literature and literacy.

### ENG 4602 - Methods in Secondary English II: Writing and Assessment

**Credits:** 4

**Prerequisite(s):** Junior Standing; Admission to Teacher Education Program

**Prerequisite(s) or Corequisite(s):** ENG 2000 or ENG 2100

**Description:** Explore techniques for assessing student writing and reading while incorporating research-based strategies for teaching English Language Arts. Topics include contemporary composition theory, methods for teaching and assessing writing, and strategies for supporting student identity and diversity in the writing classroom.

### ENG 4620 - Teaching Composition, 7-12

**Credits:** 3

**Prerequisite(s):** Senior standing, 3.0 GPA in the major, and completion of ENG 2000 or ENG 2100, ENG 2500, ENG 3510, ENG 4600, or equivalent courses as determined by a Department of English advisor, or permission of instructor

**Prerequisite(s) or Corequisite(s):** ENG 3470

**Description:** This course is intended for students seeking a degree in English with a concentration in Secondary Education or for students seeking licensure to teach secondary English. This course integrates theory and research in composition with personal practice and pedagogical implementation. Students learn how to teach writing by practicing writing, examining contemporary theories of writing instruction, and making purposeful selection of pedagogical strategies.

### ENG 4630 - Cinema Director: Variable Topics

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** ENG 2860 or permission of instructor

**Description:** In this course, students examine the artistic development of a major director of cinema, including historical



influences that have contributed to the director's shaping of screen phenomena. Coursework includes the study of important films in the careers of such directors as Alfred Hitchcock, Mira Nair, or Pedro Almodovar. Films are screened during laboratory hours.

*Note:* This course may be repeated under different topics for up to 9 credits.

### ENG 4633 - Spike Lee

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021, ENG 2860

**Description:** In this course, students examine the body of work of Spike Lee as a film director, exploring the development of his cinematic technique over the course of his career, his cinematic innovations, recurring themes and motifs in his films, and his influences from and on film history. While paying particular attention to formulations and representations of race and identity in Lee's films, students also consider cinematic form and cultural context, Lee's role in advancing narrative cinema, his influence on other filmmakers, and theoretical applications.

### ENG 4640 - Teaching English, 7-12

**Credits:** 3

**Prerequisite(s):** Completion of at least 36 semester hours of courses, including ENG 3470 and ENG 4600, required for Secondary School Teaching-English concentration or equivalent courses as determined by a Department of English advisor for those students already possessing a degree in English. Completion of at least 15 semester hours of professional education courses for students seeking licensure through MSU Denver. Permission of instructor.

**Corequisite(s):** ENG 4641

**Prerequisite(s) or Corequisite(s):** ENG 4620

**Description:** This course is intended for students seeking a degree in English with a concentration in Secondary Education or for students seeking licensure through the Teacher Education Program to teach secondary English. Students seeking licensure should take this course during the semester prior to their student teaching. In this course, students preparing to teach English in grades 7 through 12 integrate knowledge and pedagogical strategies from earlier courses. Students address issues of diversity, adolescent development, integration of the English language arts, and their own professional development. Students apply concepts learned in this course to field placements in secondary school settings through ENG 4641.

**University Requirement(s):** Senior Experience

### ENG 4641 - Field Experience in Teaching English in Secondary Schools

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** ENG 4601 or ENG 4602

**Description:** Gain hands-on experience in secondary English classrooms, with a focus on designing, practicing, and improving instructional skills in English Language Arts. Learn

strategies to improve student literacy, assess student writing, and adapt content for diverse learners.

### ENG 4650 - Teaching Composition in Elementary School K-6

**Credits:** 3

**Prerequisite(s):** ENG 3510, at least junior standing, or permission of instructor

**Description:** This course incorporates the writing process, developmental growth and fluency of K-6 writers, writing skills and assessment, sequential composition curricula, and techniques and materials for teaching composition.

### ENG 4660 - Teaching Literature and Language K-6

**Credits:** 3

**Prerequisite(s):** Completion of General Studies requirements, LING 3020 and ENG 3461; Senior standing; or permission of instructor.

**Description:** This course focuses on the comprehension and teaching of literature and language for K-6 students, with emphasis on the elements, characteristics, and type of literature and on the forms, functions, and uses of language, grammar, and usage.

**University Requirement(s):** Senior Experience

### ENG 4670 - Cinema Theory and Criticism

**Credits:** 3

**Prerequisite(s):** ENG 2860 or permission of the instructor

**Description:** This course enriches students' understanding of a variety of theoretical models that have influenced contemporary critical practice in cinema studies. Students explore examples of theory and criticism from a range of periods and approaches, with a primary focus on key theories that have emerged in the last forty years. Students become familiar with some of the central debates that enliven contemporary film criticism and demonstrate their knowledge in class discussion and in appropriately documented, original essays.

*Note:* Credit will be granted for only one prefix: ENG or HON.

**Cross Listed Course(s):** HON 4670

### ENG 4850 - Undergraduate Research in English

**Credits:** 1-3

**Prerequisite(s):** ENG 2000, ENG 2100, LING 2010, ENG 3510, ENG 3520, or ENG 3670; and permission of instructor

**Description:** Students engage in a research project that involves the application of a recognized research methodology to a problem in English studies. Students engage in secondary and/or primary research; analysis, synthesis, and/or interpretation of data; and presentation of results or findings. Course may be repeated. A maximum of 4 hours of undergraduate research may be applied toward a major or minor in English or Linguistics.

## Entrepreneurship

## CFI 1910 - Creative Problem Solving

**Credits:** 3

**Description:** This introductory course focuses on creative problem-solving from an entrepreneurial perspective. Content will introduce students to the concepts of creative problem-solving, entrepreneurship, social entrepreneurship, generating innovative ideas, creating entrepreneurial ventures. It highlights practical aspects of opportunity recognition, and new venture creation. The instructor will utilize readings, workshops, guest entrepreneurs, and real-world projects to convey the theoretical underpinnings, as well as the practical realities of solving problems through entrepreneurial principles.

## CFI 1930 - Social Entrepreneurship

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, or MTH 1110, or SPE 1010, or permission of department

**Description:** This course provides an overview of social entrepreneurship, focusing on how it uses innovative business principles to address societal problems. Attention is paid to business model generation, the literature on social entrepreneurship, and the tools used to identify opportunities.

## CFI 2910 - New Venture Feasibility

**Credits:** 3

**Prerequisite(s):** CFI 1910; or permission of director

**Description:** This course determines whether a student's previously identified opportunities are suitable for the marketplace. Students apply feasibility concepts to the wide range of challenges encountered when launching commercial and non-profit ventures. Through experiential learning opportunities, students apply what they learn to develop a comprehensive plan for their own new venture.

## CFI 3910 - New Venture Creation I

**Credits:** 3

**Prerequisite(s):** CFI 2910; or permission of director

**Description:** This course provides first-hand experience working alongside entrepreneurs to facilitate the launch of student conceived business plans. The goal is to enable students to work with commercial and social/non-profit entrepreneurs to gain experience with the multiple facets of entrepreneurship. This course serves two main learning objectives. First, it provides the student with the opportunity to execute an entrepreneurial project which will encourage the integration of your knowledge. Second, it gives the student first hand exposure to the entrepreneurial process in order to understand the challenges associated with it. Coursework on fundamental business concepts and on developing and executing a business plan are excellent foundations for entrepreneurs, but they are different from facing the day-to-day challenges in a start-up. In this course, the student is immersed as an observer and participant of the entrepreneurial process.

## CFI 3920 - New Venture Creation II

**Credits:** 3

**Prerequisite(s):** CFI 3910; or permission of director

**Description:** This course is a continuation of CFI 3910 and provides first-hand experience working alongside entrepreneurs and facilitating the launch of student conceived business plans. This course serves two main learning objectives. First, it provides the student with the opportunity to execute an entrepreneurial project which will encourage the integration of the student's knowledge. Second, it gives the student first hand exposure to the entrepreneurial process in order to understand the challenges associated with it. In this course, the student is immersed as an observer and participant of the entrepreneurial process.

## CFI 3930 - Entrepreneurial Promotions

**Credits:** 3

**Prerequisite(s):** ECO 1040, or ECO 2010, or ECO 2020, or BUS 2250; or permission of department

**Description:** The purpose of this course is to present to the entrepreneur the fundamental theories of promoting a new business or social enterprise. Building from the start-up strategy of bootstrapping, students will learn vital aspects of guerrilla tactics such as minimedia, positioning, and preparing a small business promotional budget.

## CFI 3940 - Artrepreneurship

**Credits:** 3

**Prerequisite(s):** ARTH 1500, or MUS 1000, or THE 2210; or Major/Minor in Art; or permission of department

**Description:** The purpose of this course is to give students the tools, techniques and resources to turn their passion for art into a thriving business. Students will learn how open and operate galleries, own a business on the festival circuit, and retail, as well as alternative distribution channels such as online direct sales, direct sales, business to business and online galleries/representation. Upon completion of the course, each student will have the basics to move forward with building a successful art business.

## CFI 3980 - Internship in Entrepreneurship

**Credits:** 1-15

**Prerequisite(s):** Minor in entrepreneurship; junior or senior status; permission of instructor

**Description:** This course provides an internship experience in a for-profit or non-profit enterprise supervised by professionals with on-the-job experience in the field of entrepreneurship.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

# Environmental Engineering

## EVE 1040 - Introduction to Environmental Engineering

**Credits:** 3

**Description:** Students in this course are introduced to environmental engineering. They learn about the fundamentals of environmental engineering. An introduction to materials balances, environmental pollution, and water/wastewater treatment will be presented in this course. An overview of environmental impacts, sustainability, and life cycle assessment will be also discussed in this course. Students will be familiar with emerging trends in environmental engineering.

## EVE 1215 - Engineering Graphics: Solid Modeling

**Credits:** 3

**Description:** In this course students study solid modeling fundamentals, geometric constructions, multi-view projections, section views, and dimensioning using adequate CAD software.

**Cross Listed Course(s):** SSE 1215

## EVE 2000 - Analytical Methods of Water and Wastewater

**Credits:** 4

**Prerequisite(s):** EVE 1040, CHE 1800, CHE 1801

**Description:** Students learn the standard laboratory analysis of water and wastewater samples for the measurements of inorganic and organic contaminants. Students are prepared to analyze and monitor samples utilizing laboratory equipment. Laboratory data will be utilized to assess and evaluate the effective treatment and management of raw water to drinking water standards and the design of effective wastewater treatment systems.

## EVE 2150 - Mechanics of Static Systems

**Credits:** 3

**Prerequisite(s):** PHY 2311 and MTH 2410 with "C" or better, or permission of instructor

**Description:** In this course, students study the principles of mechanics of static systems in two- and three-dimensions: static equilibrium of particles and rigid bodies; section properties; internal forces in statically determinate trusses and beams; friction; and virtual work.

**Cross Listed Course(s):** SSE 2150

## EVE 2250 - International Engineering Project

**Credits:** 3

**Prerequisite(s):** (SSE 1040 or CET 2150) and (CET 1215 or EVE 1215 or SSE 1215) and (CET 2150 or EVE 2150 or SSE 2150) and permission of department

**Description:** This course will engage students with global engineering challenges and build awareness of engineering practices

abroad through participation in an international engineering project.  
*Note:* This course is repeatable for up to 6 credits.

## EVE 3000 - Concepts in Environmental Engineering

**Credits:** 3

**Prerequisite(s):** CHE 1800, CHE 1801, MTH 2410

**Description:** Students learn all aspects of pollution in the environmental media, assessing, controlling, eliminating, and remediating factors that contribute to air, water, and soil pollution. Introduction to environmental chemistry, environmental fate and transport processes, solid and hazardous waste management, and risk assessment. Students have group discussions on its fundamental concepts and environmental applications, providing solving skills for engineering problems.

## EVE 3110 - Thermodynamics

**Credits:** 3

**Prerequisite(s):** MTH 1410 AND PHY 2311 or permission of the instructor

**Description:** The fundamental laws of thermodynamics are studied. Basic energy concepts, the thermodynamic system, dimensions and units, and the ideal gas equation of state are studied. The course also covers closed and open systems and reversible and irreversible processes. Students explore applications of zeroth, first, and second laws of thermodynamics in environmental engineering.

## EVE 3135 - Strength of Materials

**Credits:** 3

**Prerequisite(s):** EVE 2150

**Description:** Students in this course are introduced to the fundamentals in the strength and deformation of engineering materials. Students focus on the development of constitutive relationships of materials under axial, torsion, transverse shear and bending loading conditions, and the engineering applications in the first part of the course. Students are introduced to beam-deflection and column-buckling theories and engineering solutions in the second part of the course.

## EVE 3160 - Mechanics of Dynamic Systems

**Credits:** 3

**Prerequisite(s):** SSE 2150 OR EVE 2150 with grades of "C" or better, or permission of instructor

**Description:** In this course, students are introduced to dynamics systems, including kinematics, and kinetics of particles and rigid bodies with engineering applications. Students also study the vibration systems in engineering applications.

**Cross Listed Course(s):** SSE 3160

## EVE 3185 - Fundamental Fluid Mechanics with Laboratory

**Credits:** 4

**Prerequisite(s):** SSE 3135 OR EVE 3135 with "C" or better, or permission of instructor

**Prerequisite(s) or Corequisite(s):** MTH 3420 and SSE 3160 OR EVE 3160; with "C" or better, or permission of instructor

**Description:** Students in this course are introduced to the basic principles of fluid mechanics and their use in hydraulic engineering. This course covers the properties of fluids and water, fluid statics, fluid kinematics, mass, energy, and momentum principles within fluid dynamics, dimensional analysis, and boundary layers. Students are introduced to the application of fluid mechanics principles to the analysis of flow in pipes and open channels, as well as forces on immersed bodies. This course contains a laboratory that reinforces fluid mechanics principles, such as hydrostatic forces and Bernoulli's equation, as well as introductory hydraulic engineering applications, including flow in pipes, head loss, and open channel flow.

**Cross Listed Course(s):** SSE 3185

## **EVE 3200 - Environmental Sustainability in Urban Context**

**Credits:** 3

**Prerequisite(s):** Junior standing, courses ENV 1200, ENV 2100, SSE 1040, and (EVE 1215 or SSE 1215) with grades C or better or permission of instructor.

**Description:** In this course, students are introduced to urban design from a global perspective. The course emphasizes the principles of environmentally sustainable city design through case-studies from around the world.

## **EVE 3320 - Environmental Impact Statements in Engineering**

**Credits:** 3

**Prerequisite(s):** Junior standing or permission of instructor

**Description:** In this course, students will study the physical and legal requirements of the environmental impact statement process. Students will research and document case studies on environmental impacts. Students will also address the role of engineering in the assessment of solutions to environmental issues including the roles of risk, uncertainty, and sustainability on alternative solutions.

## **EVE 3400 - Water and Wastewater Engineering**

**Credits:** 3

**Prerequisite(s):** EVE 3000

**Description:** Students learn all aspects of assessing, controlling, eliminating, and remediating factors that contribute to water pollution, from source reduction to controlling water quality, in every type of environmental media. Students explore fundamentals of physical, chemical and biological transformations in natural waters, identification of sources of pollution, and water and wastewater treatment methods are also covered. In addition, students practice wastewater treatment plant design along with its fundamental applications for wastewater treatment.

## **EVE 3500 - Fate and Transport of Contaminants in the Environment**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** EVE 3185

**Description:** Students apply the critical processes controlling contaminants and their movement in the environmental media. They apply models to predict contaminant distributions and transport amongst the environmental compartments. Quantitative problems concerning contaminant fate and transport in the environment, especially how contaminants are modeled, monitored, and quantified are covered in detail. In addition, students learn the environmental processes, evaluate uncertainty, and monitor chemical fate and transport. Students use problems given to illustrate model applications to surface waters, groundwater, and the atmosphere. They also review chemical (biotic and abiotic) fate and transport phenomena.

## **EVE 3730 - Environmental Risk Assessment**

**Credits:** 3

**Description:** The course (EVE 3730) covers handling risk and uncertainty through quantitative models and examines environmental and human impacts with uncertain parameters. Quantitative measures are applied to identify key issues in environmental risk. Additionally, case studies and discussion questions are provided. Risk assessments are practiced using environmental sampling data. Examples of risk characterizations and scenarios are illustrated, and students examine the factors relating to exposure and toxicity, human health, and risk.

## **EVE 3980 - Internship in Environmental Engineering**

**Credits:** 3

**Prerequisite(s):** EVE major, permission of instructor, Junior or Senior standing

**Description:** Internships provide experiential learning opportunities through practical, hands-on experiences in a professional field related to environmental engineering, and are supervised by a faculty member from the major's department, in conjunction with an industrial advisor. Internship placements must be established in consultation with university's internship office prior to enrollment in this course.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

## **EVE 4000 - Environmental Nanotechnology**

**Credits:** 3

**Prerequisite(s):** EVE 3000 or Permission of the instructor

**Description:** Students in this course learn the principles and applications of environmental nanotechnology. This undergraduate level course covers multidisciplinary areas including, but not limited to, environmental remediation, toxicology, environmental

microbiology, disinfection, energy sustainability, and analytical chemistry.

## **EVE 4160 - Geotechnical Engineering with Laboratory**

**Credits:** 4

**Prerequisite(s):** EVE 3135 with grade of "C" or better, or permission of instructor

**Prerequisite(s) or Corequisite(s):** EVE 3185 with grade of "C" or better, or permission of instructor.

**Description:** Students in this course are introduced to the basic principles of soil behavior and their use in geotechnical and geoenvironmental engineering. This course covers soil formation, soil characterization and classification, engineering properties of soil, compaction, fluid flow in soil, stresses in soil, consolidation and settlement, shear strength, and lateral earth pressures. Students are introduced to soil improvement and remediation strategies and the design of earth retaining structures. This course contains a laboratory that covers common geotechnical tests such as sieve analysis, Atterberg limits, hydraulic conductivity, and soil shear strength.

## **EVE 4200 - Environmental Policy in Engineering**

**Credits:** 3

**Prerequisite(s):** ENV 1200 and completion of General Studies

**Description:** This course provides an overview of environmental policy and major environmental laws in the U.S. the major statutes are analyzed in terms of purpose, scope, implementation, compliance requirements, and impact on land use. This course will also provide discussions on the role of risk, sustainability, and uncertainty associated with legislative solutions to address environmental impacts and concerns. Case studies are examined in a planning context.

## **EVE 4300 - Environmental Assessment of Plastic Particles**

**Credits:** 3

**Prerequisite(s):** EVE 3000 or Permission of the instructor

**Description:** Students learn the principles and applications of risk assessment of evolving plastics present in the environment. This undergraduate-level course covers multidisciplinary areas including toxicology, materials engineering, environmental remediation, microbiology, chemistry, and public health.

## **EVE 4400 - Water Resources Engineering**

**Credits:** 3

**Prerequisite(s):** EVE 3185

**Description:** Students in this course are introduced to water resources engineering. They learn about the fundamentals of water resources engineering. This course guides students in designing water distribution systems, drainage channels, hydraulic structures, stormwater collection systems, and pipeline networks. Students gain knowledge in terms of rainfall-runoff analysis and estimation of

evapotranspiration. They will be also familiar with emerging trends in water resources engineering.

## **EVE 4420 - Wetland Studies**

**Credits:** 3

**Prerequisite(s):** BIO 1080, CHE 1810, ENV 1200, and completion of General Studies

**Description:** This course offers a broad overview of wetland landscapes. Topics include: (1) Spatial distribution (local and national), (2) variations in wetlands topology (salt-water versus fresh-water and warmer versus colder climates), (3) relationships between wetlands (migratory flight paths), (4) wetlands ecosystems (5) human impacts on wetlands, (6) federal, state, and local wetlands regulations, and (7) international wetlands problems. Students will evaluate an engineered wetland and explore design, efficacy in nutrient removal and overall land use implications.

## **EVE 4450 - Wood in Engineering**

**Credits:** 3

**Prerequisite(s):** SSE 3135 with a grade of "C" or better or permission of instructor

**Description:** In this course students are introduced to applications of wood design in engineering. Analysis and design of wood structures is presented.

## **EVE 4500 - Solid and Hazardous Waste Engineering**

**Credits:** 3

**Prerequisite(s):** EVE 3000

**Description:** The course (EVE 4500) aims to cover solid-waste characteristics, recycling, landfilling, incineration, hazardous waste characteristics, prevention, and physical and chemical treatment. Characteristics of solid and hazardous wastes, sources, collection of solid waste, composting, waste conversion to energy, integrated waste management, and hazardous waste treatment methods are also covered in detail. In addition, problems that occurred in a field where waste management and treatment are practiced are addressed, and possible approaches will be suggested.

## **EVE 4611 - Senior Design Project I**

**Credits:** 1

**Prerequisite(s):** MTH 3210 and Senior Standing

**Description:** Students collaborate with industry partners in the environmental field (e.g., wastewater treatment systems). Students gain the principles and applications of physical unit operations, chemical unit processes, biological treatment processes, sludge treatment and disposal, advanced wastewater treatment, novel methods for sustainability, and environmental nanoscience.

**University Requirement(s):** Senior Experience

## **EVE 4612 - Senior Design Project II**

**Credits:** 2

**Prerequisite(s):** EVE 4611

**Description:** Students collaborate with industry partners in the environmental field. The major treatment methods of wastewater and plastic waste are evaluated and assessed. The results are to be communicated via an oral presentation and a final group report. In addition, conclusions and recommendations for further research into the selected sustainable approach are to be conveyed at the Senior Design Project Expo. Students gain experiential learning in the field through field trips.

**University Requirement(s):** Senior Experience

## **EVE 4700 - Open Channel Hydraulics**

**Credits:** 3

**Prerequisite(s):** EVE 4400 or permission of the instructor

**Description:** Students in this course are introduced to flow in open channels. They learn about the fundamentals of open channel hydraulics. This course guides students in designing irrigation canals. Students gain knowledge in terms of energy-depth relationships and various types of flow in open channels including uniform flow and gradually varied flow. They also learn about the critical slope, flow depths, and hydraulic jump. Additionally, students will be able to classify and analyze flow profiles.

## **EVE 4910 - Artificial Intelligence and Remote Sensing in Sustainability**

**Credits:** 3

**Prerequisite(s):** CPE 2350 or permission of the instructor

**Description:** Students explore applications of artificial intelligence (AI) and remote sensing (RS) in sustainability. This course emphasizes the importance of AI and RS in solving sustainable systems engineering problems. The course presents various abilities of AI and RS in addressing environmental, agricultural, and industrial challenges to meet sustainable development goals in the era of climate change and global warming.

## **Environmental Science**

### **ENV 1200 - Introduction to Environmental Science**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading, writing, and mathematics preassessment placement tests

**Description:** This course introduces students to environmental concepts and issues from an interdisciplinary approach. Students will gain an understanding of the scientific methods and techniques needed to understand and analyze environmental issues such as ecology, human population growth, soils and agriculture, deforestation, urbanization, air pollution, freshwater resources, ocean pollution, climate change, fossil fuels, alternative energy sources, waste disposal, as well as environmental ethics and policy. Course topics will be complemented with computer exercises.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC2

### **ENV 1540 - Geologic and Environmental Hazards-Denver and Vicinity**

**Credits:** 2

**Prerequisite(s):** GEL 1010 recommended

**Description:** This course examines the geologic and environmental hazards around the Denver region, including mass wasting, swelling clays, subsidence and flooding, as well as contamination and remediation efforts at the Lowry Landfill and the Rocky Mountain Arsenal. Future homeowners learn the meaning of "buyer beware."

*Note:* Students cannot take both ENV 1540 and ENV 3540 for credit.

### **ENV 2100 - Environmental Sampling and Analysis**

**Credits:** 3

**Prerequisite(s):** CHE 1800, CHE 1801, and ENV 1200 or EVE 1040

**Description:** Environmental data, including water, soil, and plant pollution testing and monitoring, is commonly used to indicate the health of an ecosystem. In this course, students learn and conduct variety of methods and techniques used in environmental sampling. Students collect environmental samples in the field, analyze their results, and summarize the implications of the results. Additionally, risk analysis and human subject testing are explored as they relate to environmental problems such as water quality taste testing, environmental pathogens, and setting environmental standards for air, water, and soil pollution. As part of this course, students learn the components of doing high impact environmental research.

### **ENV 3000 - Environmental Engineering Fundamentals**

**Credits:** 3

**Prerequisite(s):** CHE 1810, CHE 1811, MTH 2410, ENV 1200

**Description:** In this course, students are exposed to the interplay between humans, our activities, and the environment around us. Over the course of the semester, they will explore anthropogenic and natural effects on air and water quality, how these systems operate and the application of applied sciences (e.g., physics, chemistry, and biology) to the natural world.

*Note:* Credit will be granted for only one prefix: CET or ENV.

**Cross Listed Course(s):** CET 3000

### **ENV 3010 - Applied Pollution Science**

**Credits:** 3

**Prerequisite(s):** ENV 1200, CHE 1800, and CHE 1810, or permission of instructor

**Description:** This course introduces students to the abiotic and biotic processes within the soil/water/atmosphere continuum that affect the fate and transport of pollutants. The extent, fate, mitigation, and impact of environmental pollution are examined through applied examples and case studies.

### **ENV 3100 - Air Pollution**

**Credits:** 3

**Prerequisite(s):** ENV 1200 or MTR 2400

**Description:** This course examines the causes and control of air pollution. Topics include pollutant sources and sinks, regional and global-scale pollution problems, monitoring and sampling techniques, regulatory control, meteorological influences, and indoor air quality.

**Cross Listed Course(s):** MTR 3100

## ENV 3200 - Climate Change and Ecosystems

**Credits:** 3

**Prerequisite(s):** ENV 1200 or MTR 1600 or GEG 1100

**Description:** In this course, students examine ecosystem response to global climate change. Students explore the interconnections of earth systems that make up ecosystems, as well as how climate change is affecting these biomes. As a final project, students conduct an in-depth analysis of a specific ecosystem change and predict changes over the next 50 years.

## ENV 3250 - Colorado Water Law and Water Rights Administration

**Credits:** 3

**Prerequisite(s):** Completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy, and Junior Standing

**Description:** This course provides students with an in-depth study of the unique nature of Colorado water law and Colorado water rights administration. The course will survey the key issues surrounding the legal framework governing the allocation of water resources, administrative processes affecting water distribution, and policy considerations that influence decisions about the use and management of water resources in the state of Colorado. An overview of Colorado climate, geology and hydrology, as well as a review of Colorado's early water use and development will provide the context for the study of the legal system with which the state and its citizens allocate water.

*Note:* Credit will be granted for only one prefix: ENV or MGT.

**Cross Listed Course(s):** MGT 3250

## ENV 3300 - Principles of Ecological Restoration

**Credits:** 3

**Prerequisite(s):** ENV 1200 or GEG 1100 or MTR 1600 or GEG 1910 or GEL 1010

**Description:** This course investigates the fundamentals of ecological restoration. Students learn the process of developing restoration plans for degraded sites, including conducting a site analysis, building a master plan for restoration, implementing the plan, and monitoring the site after restoration.

## ENV 3340 - Climate Change Science

**Credits:** 3

**Prerequisite(s):** MTR 1600 or GEG 1100 or ENV 1200 or GEL 1010 or GEL 1150 or MTR 1400

**Description:** This course examines the physical mechanisms of climate change through an integrative earth systems science lens. These processes explain many of the observed changes within the atmosphere, hydrosphere, cryosphere, biosphere, and lithosphere of the planet. Aspects of dynamic climate change include movement of energy through the Earth system, atmospheric and oceanic circulation, and hydrologic and carbon cycles. This understanding is applied to interpreting climate model projections, with keen attention to climate sensitivity, time scales of changes, and sources of uncertainty in climate prediction. An understanding of the physical processes driving climate models facilitates an examination of climate change impacts on natural and societal systems.

**Cross Listed Course(s):** MTR 3340

## ENV 3350 - Climate Change Solutions

**Credits:** 3

**Prerequisite(s):** ENV 3340 or MTR 1600 or MTR 3340

**Description:** This course builds on student's prior knowledge of the science of climate change and focuses on ways that scientists, policy makers, and the general public can work to solve climate change. Students learn about current technologies that can reduce our carbon emissions including renewable energy and electric vehicles. In addition, students evaluate strategies for cooling our planet including geoengineering and carbon sequestration. Finally, students consider policy, social, and economic strategies for reducing carbon emissions.

## ENV 3400 - Water Resources

**Credits:** 3

**Prerequisite(s):** MTH 1108 or MTH 1110 or MTH 1112; ENV 1200 or GEG 1100; Completion of General Studies

**Description:** This course presents an analysis of water as a major resource. It includes the study of the hydrologic cycle, competing water uses, current water problems, and approaches to water management. The relationship of water to land use is examined in terms of dams, watersheds, water laws, pollution, and flood control. Topics introduced in this class include hydrology, hydrogeology, water quality analysis, water treatment, wastewater treatment, and both U.S. and international water resource management.

## ENV 3420 - Soil Resources

**Credits:** 3

**Prerequisite(s):** ENV 1200 or GEL 1010 or GEG 1100

**Corequisite(s):** ENV 3422 or GEL 3422 or GEG 3422

**Description:** This course analyzes the materials and processes that combine to produce various soil types. Soil types are examined in relationship to climate, landforms, vegetation, and geology, as well as in relation to land-use patterns.

*Note:* This course is cross-listed as GEG 3420, ENV 3420, and GEL 3420. Students can only take one of the courses for credit.

**Cross Listed Course(s):** GEG 3420, GEL 3420

## ENV 3422 - Methods of Soil Analysis and Sampling

**Credits:** 1

**Prerequisite(s):** ENV 1200 or GEG 1100 or GEL 1010

**Corequisite(s):** GEL 3420 or GEG 3420 or ENV 3420

**Description:** This course surveys measurement techniques and principles used in characterizing the physical and chemical properties of soils. It includes soil sampling techniques, analysis of experimental design, sources of experimental error, and standard and instrumental methods of chemical analysis.

*Note:* Credit will be granted for only one prefix, ENV, GEL, or GEG

**Lab Fees:** \$25

**Cross Listed Course(s):** GEG 3422, GEL 3422

## ENV 3440 - Energy and Mineral Resources

**Credits:** 4

**Prerequisite(s):** GEL 1010 or GEG 1100 or ENV 1200 or permission of instructor

**Description:** This course provides an overview of the Earth's energy and mineral systems with an emphasis on origin, characteristics, distribution, and the interaction of people and geologic resources.

*Note:* Credit will be granted for only one prefix.

**Field Trips:** Field trips are required

**Cross Listed Course(s):** GEG 3440, GEL 3440

## ENV 3620 - Resource Use and the Environment

**Credits:** 3

**Prerequisite(s):** ENV 1200 or GEG 1000 or GEG 1100 or GEG 1300 or GEG 1910 or GEL 1010 or MTR 1600

**Description:** In this course, students examine the roles culture, economics, and politics play in the management of critical global resources. Students analyze case studies and empirical data to critically evaluate the drivers of resource use and environmental impacts around the world.

**General Studies:** Natural and Physical Sciences, Global Diversity

## ENV 3700 - Mountain Environments

**Credits:** 3

**Prerequisite(s):** ENV 1200 or GEG 1100 or MTR 1600 or GEG 1910 or GEL 1010

**Description:** The course examines integrated mountain ecosystems, particularly in the Front Range of Colorado. Topics examined include vegetation distribution, climates, landforms and processes, wildlife, and human impacts.

## ENV 3710 - Environmental Remediation

**Credits:** 3

**Prerequisite(s):** ENV 1200, BIO 1091, CHE 1800, and junior standing; or permission of instructor

**Description:** This course presents technologies available for reclaiming contaminated sites and reducing health risks. Physical, chemical, and biological technologies will be examined for the

cleanup of hazardous wastes. Students will integrate the nature of hazardous wastes, the behavior of chemicals at the surface and subsurface, and technological applications. Students will design a monitoring program for assessing the applicability of site cleanup and analyze the data from a site monitoring program.

## ENV 3720 - Waste Management

**Credits:** 3

**Prerequisite(s):** ENV 1200, BIO 1091, CHE 1800, and junior standing; or permission of instructor

**Description:** Waste generation, human health, waste treatment, disposal methods, recycling as well as environmental hazards will be examined in this course. Students will research the policies that govern transportation and disposal of waste. Laws and agency regulations will be examined to determine their effectiveness in reducing, remediating, and containing waste.

## ENV 3730 - Environmental Risk Assessment

**Credits:** 3

**Prerequisite(s):** ENV 1200, 9 hours coursework in any of the following Environmental Science, Geology, Physical Geography, Biology, Chemistry, and Meteorology courses, junior standing; or permission of instructor

**Description:** Risk is an important component of regulatory decision making. Since risk assessment has no "correct" answers, this course explores what risk perception, risk management, and risk communication mean. Students will learn how to weigh the costs and benefits of risk reduction and how to evaluate the uncertainties in risk estimates. Case studies will be used to help explain the principles.

## ENV 3740 - Environmental Health

**Credits:** 3

**Prerequisite(s):** ENV 1200, BIO 1091, CHE 1800, and junior standing; or permission of instructor

**Description:** This course addresses local, regional and global environmental issues affecting human health and policies. Environmental toxins and carcinogens, impacts on human health, dose response, occupational health, risk assessment strategies are discussed. A field trip to an environmental health agency is required.

## ENV 3920 - Directed Study in Environmental Science

**Credits:** 2-6

**Description:** This course provides an opportunity for upper-division students with a strong background in environmental science to pursue a specific research topic of interest with a faculty member. The course requires permission of the instructor and chair of the Department of Earth and Atmospheric Sciences.

## ENV 3980 - Internship in Environmental Science



**Credits:** 1-15

**Prerequisite(s):** Major in Environmental Science; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at c2hub@msudenver.edu.*

*Note:* Variable Credit

## ENV 4000 - Geologic Hazards

**Credits:** 3

**Prerequisite(s):** ENV 1200 or GEG 1100 or GEL 1010 or permission of instructor

**Description:** This course investigates natural hazards that affect solid Earth. Case studies of exceptional and recent events link natural hazards to Earth's geologic processes and structures. The distribution, frequency, impact, and predictability of natural disasters, as well as strategies for reducing human injury and loss, are also considered.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** GEL 4000

## ENV 4010 - Environmental Hazards and GIS

**Credits:** 3

**Prerequisite(s):** ENV 4000; GEG 3610 recommended

**Description:** This course evaluates environmental hazards relative to various land-use patterns. It utilizes case studies and Geographical Information Systems (GIS) to examine hazards and prepare models.

## ENV 4150 - Hydrology (Surface Water)

**Credits:** 4

**Prerequisite(s):** GEG 1100 or GEG 1910 or ENV 1200 or GEL 1010, and General Studies Quantitative Literacy complete

**Prerequisite(s) or Corequisite(s):** MTH 1210

**Description:** In this course, students examine surface waters with respect to water flow, drainage systems, storage, pollution and environmental relationships. The hydrologic cycle is studied with respect to the amount and distribution of water, the movement and fluxes of water and current water-related issues. Topics addressed include hydrologic data sources, statistical analysis in hydrologic problem-solving, snow and snowmelt, hydrograph analysis, hydrographic routing, hydrologic modeling and current challenges of urban hydrology, hydrologic models and hydrologic design. Use of spreadsheet software is required.

*Note:* Credit will be granted for only one prefix: ENV, GEL, or GEG

**Cross Listed Course(s):** GEG 4150, GEL 4150

## ENV 4200 - Environmental Policy and Planning

**Credits:** 3

**Prerequisite(s):** ENV 1200 and completion of General Studies

**Description:** This course provides an overview of environmental policy and major environmental laws in the U.S. The major statutes are analyzed in terms of purpose, scope, implementation, compliance requirements, and impact on land use. Case studies are examined in a planning context.

## ENV 4250 - Hydrogeology (Groundwater)

**Credits:** 4

**Prerequisite(s):** GEL 1010, CHE 1800, MTH 1110

**Prerequisite(s) or Corequisite(s):** GEL 3420

**Description:** This course is a practical approach to the study of groundwater with emphasis on water quality, underground flow, pumping, and infiltration/recharge principles in relationship to the geologic environment. The course includes practical methods of laboratory water quality testing, groundwater flow analysis and experimentation, as well as septic system design and evaluation. Since mathematical models are involved, familiarity with graphing and algebraic operations is of essence. A foundational knowledge in geology is prerequisite.

*Note:* Credit will be granted for only one prefix

**Field Trips:** Self-guided group fieldtrips are required for this course

**Cross Listed Course(s):** GEG 4250, GEL 4250

## ENV 4400 - Landscape Ecology

**Credits:** 3

**Prerequisite(s):** ENV 1200, GIS 2250; or permission of instructor

**Description:** Students will examine the effects of spatial pattern and scale on ecological processes. Concepts, tools, and techniques that enhance the effectiveness of watershed and ecosystem management, design of green infrastructure, and smart growth are explored. Students will learn how the concepts of landscape ecology apply to environmental policy, management, regulation, and assessment.

## ENV 4410 - Water Law

**Credits:** 3

**Prerequisite(s):** ENV 1200 or ENV 1400 or ENV 3400 or Permission of instructor

**Description:** This course surveys U.S. water law and administration. Topics include (1) why we need laws regulating water use, (2) how ancient water laws influenced U.S. water law, (3) variations of surface and groundwater law, including prior appropriation, riparian, and hybrid, (4) international and interstate agreements, and (5) a special focus on water administration in the West.

## ENV 4420 - Wetlands

**Credits:** 3

**Prerequisite(s):** ENV 1200 or GEG 1100 or MTR 1600 or GEG 1910 or GEL 1010 and College Algebra or Calculus

**Description:** In this course, students learn about a broad overview of

wetland landscapes. Topics include spatial distribution of wetlands (local and national), variations in wetlands topology (salt-water versus fresh-water and warmer versus colder climates), relationships between wetlands (migratory flight paths), wetlands ecosystems, human impacts on wetlands, federal, state, and local wetlands regulations, and international wetlands problems.

### **ENV 4430 - Habitat Planning**

**Credits:** 3

**Prerequisite(s):** ENV 1200 or GEG 1100

**Description:** This is an interdisciplinary course designed to examine the forces and impacts of urban expansion and other human activities (e.g., recreation, transportation, energy development) on ecological processes and wildlife habitats. Topics include conservation biology principles, problems with wildlife habitat conservation, and planning solutions to preserve wildlife habitat. Multiple spatial and political scales provide the context for analysis.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** GEG 4430

### **ENV 4440 - Limnology**

**Credits:** 3

**Prerequisite(s):** ENV 1200, BIO 1081, and BIO 1091; or permission of the instructor

**Description:** This course examines the study of lakes, reservoirs, and ponds as inland water ecosystems. The physical, chemical, and biological components of inland waters are examined. The course investigates how lakes are formed and how they evolve over time. The shape of the lake basin, its water balance, and the catchment area are studied with respect to their influence on the ecology within the lake. Students learn how to assess the health of a lake, how to examine water quality, how to handle aquatic weed problems, and how to manage a lake fishery.

**Field Trips:** A one-day field trip to a lake, pond, or reservoir is required.

### **ENV 4450 - Stream Ecology**

**Credits:** 3

**Prerequisite(s):** ENV 1200, BIO 1081, and BIO 1091; or permission of the instructor

**Description:** This course explores the diversity of running water ecosystems throughout the world by examining the chemistry, physical features, and biology of stream ecosystems. Principles of stream ecology will be used to examine local stream ecosystems ranging from those found in the mountains to the prairies. The relationship among a stream, its watershed, floodplain, and riparian zone will be studied. Human activities that alter water quality, chemistry, and the ecology of a stream will be investigated, as well as methods to mitigate and protect lotic (flowing water) ecosystems.

**Field Trips:** Students will have an opportunity to apply what they have learned in the classroom during a mandatory, one-day field trip.

### **ENV 4460 - Advanced Water Quality Analysis**

**Credits:** 3

**Prerequisite(s):** CHE 1800, CHE 1801, CHE 1810, CHE 1811, and ENV 2100

**Description:** This course examines the interplay between humans, our activities, and water quality. Topics include nutrient cycling, water and wastewater treatment, chemical and biological contamination, and hydraulics. This course uses problem based learning through modeling to examine water quality using real world examples and mass balance evaluations. Field trips to water and wastewater treatment plants are required.

### **ENV 4470 - Snow Hydrology**

**Credits:** 3

**Prerequisite(s):** ENV 3400

**Prerequisite(s) or Corequisite(s):** ENV 4150

**Description:** In this course, students focus on snow processes and their function as part of the hydrologic cycle. Topics include snow formation in the atmosphere, snow accumulation and measurement, snow distribution, snowpack metamorphism and basic energy exchange principles, snow chemistry, snow ablation and runoff, watershed processes, and snow management issues. Course content is amplified through case studies and/or field trip(s).

### **ENV 4500 - Environmental Biogeochemistry**

**Credits:** 3

**Prerequisite(s):** ENV 1200, BIO 1091, CHE 1801 and CHE 1811, junior standing; or permission of instructor

**Description:** This course examines the chemical processes and pathways by which inorganic and organic chemical species interact within aquatic and terrestrial ecosystems. Environmental factors that control the chemical composition and bioavailability will be emphasized for both natural and human-impacted (polluted) systems.

### **ENV 4910 - Global Environmental Field Problems: Variable Topics**

**Credits:** 3

**Prerequisite(s):** ENV 1200, 9 credit hours in any of the following Environmental Science, Geology, Physical Geography, Biology, Chemistry, Meteorology, junior standing; or permission of instructor

**Description:** Students will use field techniques to research and analyze global environmental problems. Possible field experiences will examine environmental or ecological change by traveling to the Sangre de Cristo Mountains of Colorado, the Sonoran desert in Arizona, or alpine and periglacial regions of Alaska. This course may be repeated three times for credit under different topics for a maximum of nine hours.

### **ENV 4920 - Topics in Environmental Science: Variable Topics**

**Credits:** 3

**Prerequisite(s):** ENV 1200, 9 credit hours in the following Environmental Science, Geology, Physical Geography, Biology,

Chemistry, and Meteorology, and junior standing; or permission of instructor

**Description:** Content of this course will vary according to contemporary environmental issues. This course may be repeated twice under different topics for a maximum of 6 hours.

## ENV 4950 - Internship in Environmental Science

**Credits:** 2-15

**Prerequisite(s):** Environmental Science or Land Use major with concentration in environment and resources, junior standing, 12 credit hours in environmental science, permission of EAS department chair.

**Description:** This course provides an on-the-job internship experience with an environmental science-related company or agency. The experience must be done under qualified supervision and the auspices of an Earth and Atmospheric Sciences faculty member.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

## ENV 4960 - Global Environmental Challenges

**Credits:** 3

**Prerequisite(s):** ENV 1200 and ENV 2100; Senior standing

**Prerequisite(s) or Corequisite(s):** ENV 4200

**Description:** In this course, students identify major global environmental problems, including causes and impacts and the interplay of economic, cultural, and political forces. The approach uses geographic analysis including location, spatial distribution, density, boundaries, and physical factors such as landforms, soils, and climate to fully understand and predict current environmental challenges and future effects. Student-generated content such as presentations and discussions catalyze in-class discussions throughout the semester.

**University Requirement(s):** Senior Experience

## ENV 4970 - Environmental Field Studies

**Credits:** 3

**Prerequisite(s):** ENV 2100 and 9 hours of upper-division courses in environmental science and senior standing.

**Description:** This course is a senior-level capstone course for environmental science majors and minors in which students collect and analyze environmental samples and data from the local area.

**University Requirement(s):** Senior Experience

## Event Management

### EVT 1051 - Wedding Planning

**Credits:** 3

**Description:** This course introduces students to the basic concepts

involved in becoming a professional wedding planner. It covers the various details of planning the wedding and the basics of managing an independent wedding planning business.

### EVT 2010 - Introduction to The Event Industry

**Credits:** 3

**Description:** This course presents an overview of the major segments of events industry: meetings, expositions, events, and conventions. The roles and responsibilities of destination marketing organizations and destination management companies will be reviewed. The relationship between general and service contractors and professional events will be examined and their specific functions will be discussed and evaluated. This course highlights the role of the event planner, whose responsibilities include planning, organizing, directing, and controlling various types of events.

### EVT 2020 - Event Project Planning

**Credits:** 3

**Description:** This course provides an overview of project management as an identification and explanation for the building blocks of an event from start to finish. The project triangle is introduced and demonstrates the construction of an event. Students will define the scope, create well-defined requirements, and develop work breakdown structures for an event. Task and precedence diagramming will be taught to develop the event schedule and master task list. Students will also learn to construct an event project communications plan for the purpose of communicating with internal and external stakeholders. The final portion of the course is designed to teach students to close out the function and visualize the lessons learned from the production of the event.

### EVT 3000 - Event Catering Strategies

**Credits:** 3

**Prerequisite(s):** EVT 2010 or HLDR 2100 and RST 1200

**Description:** In this course, students examine the strategies required of meeting and event planners tasked with the development and coordination of food and beverage functions within a variety of meetings and events. Students interpret food and beverage consumption patterns of meeting attendees, identify various service requirements, meal styles and functions, distinguish between on and off-site catering requirements, examine the relationship between the catering department and other departments within a hotel, plan and design sample group menus, and determine appropriate pricing strategies and contractual requirements for meeting and event group functions.

### EVT 3010 - Event Support Systems

**Credits:** 3

**Prerequisite(s):** HLDR 2100

**Description:** In this course, students will examine event objectives and potential sponsorship opportunities for nonprofit events as they

relate to the event budget. The course will provide students with an opportunity to apply current industry software to manage attendee registration, volunteer management, audiovisual requirements, and event space management. In addition, students will produce reports of the key service providers related to attendee accommodations, transportation, ancillary activities, and post-event evaluations.

## **EVT 3100 - Corporate Meetings**

**Credits:** 3

**Prerequisite(s):** HLDR 2100

**Description:** This course focuses on how to coordinate and manage corporate meetings. Students organize a hypothetical corporate meeting from beginning to end. Hospitality industry standard forms and meeting management software are introduced and utilized. Students also develop goals and objectives, organize logistical components, and evaluate the return on investment of the meeting. Students also analyze contractual needs based on goals and objectives of the meeting. Potential risks to the meeting are assessed and considerations for a corresponding contingency plan are outlined.

## **EVT 3200 - Conventions and Trade Shows**

**Credits:** 3

**Prerequisite(s):** EVT 2010

**Description:** Students in this course focus upon program planning and logistics management for citywide conventions with corresponding trade shows, as well as freestanding tradeshow and exhibition management. Student outcomes include a project presentation demonstrating the student's ability to schedule, promote, budget, and execute a large-scale, multi-day and/or multi-venue meeting with an exhibition.

## **EVT 4020 - Event and Meeting Contracting**

**Credits:** 3

**Prerequisite(s):** HLDR 2100

**Description:** In this course, students explore a variety of event and meeting industry negotiations and contracts. Students develop the necessary skills to recognize business situations requiring bargaining and/or negotiation to achieve acceptable outcomes for both parties. The course emphasizes the importance of being able to identify and analyze the numerous and varied letters of agreement and contracts prevalent in the meeting and event industry, including but not limited to hotel, convention center, restaurant, special event center, country club and both indoor and outdoor festival space. Students create and appraise banquet and event orders (BEOs), entertainment riders, and agreements between clients facilities and third-party, independent planning companies or consultants.

## **EVT 4030 - Advanced Planning and Risk Management**

**Credits:** 3

**Prerequisite(s):** EVT 2010 AND HLDR 2100

**Description:** Drawing upon knowledge and skills acquired in pre-

requisite events courses, this course will allow students to gain relevant leadership skills in areas of crisis planning and management. This course will provide students from across the Auraria Campus as well as industry leaders the skills and tools to lead efforts to prepare for crises within their organizations as well as implement preventions that will reduce the likelihood and impact of 5 different kinds of crisis (i.e., public health emergencies, natural disasters, infrastructure failures, major technology breaches, and terrorist attacks) while enabling disaster recovery when necessary.

## **EVT 4100 - Special Event Production**

**Credits:** 3

**Prerequisite(s):** HLDR 2100 and EVT 2020

**Prerequisite(s) or Corequisite(s):** EVT 3000 and EVT 3010

**Description:** In this course, students examine the required equipment, professional personnel and licensing required to construct a special event, with specific emphasis placed on outdoor festivals, social galas, and fundraisers. Students appraise the appropriate vendors and expert support staff required to resolve specific logistical and/or technical production challenges. Students further examine the needs of event stakeholders and propose communication techniques appropriate for working with each group effectively.

## **EVT 4200 - Global Meetings and Events**

**Credits:** 3

**Prerequisite(s):** EVT 2010 or HLDR 2100

**Description:** Students in this course compare and contrast domestic and global meeting and event planning theories and practice. The analysis includes the differences between the United States and international destinations with regard to venues, business practices, budgeting and currency issues, program planning, and risk management. Students examine potential areas of cross-cultural miscommunication and logistics management during the planning process and propose appropriate international etiquette and protocols.

## **EVT 4300 - Event Design Experience and Strategy**

**Credits:** 3

**Prerequisite(s):** EVT 2010, EVT 4200, EVT 3000

**Description:** Students in this course use Event Design Methodology to create both physical and visual mapping. Course activities focus upon analyzing the critical conditions and situations necessary to plan and build engaging event experiences. Students use design technology to visualize spaces, traffic flow, and meeting attendee interactions. By employing a visual representation prior to a meeting, the student event planners can create events that assure attendees have transformative experiences during their event or meeting where stakeholder the viewpoint is visualized so planners may better understand attendee needs. The design methodology utilizes tools such as, stakeholder alignment, pre, and post-event empathy mapping, event canvas, event delta, and the event prototype.

## **Exercise and Sport Sciences**

## **ESS 1010 - CPR/AED Recertification for the Professional Rescuer**

**Credits:** 1

**Prerequisite(s):** To participate in a review course, a student must be currently certified in CPR/AED for the Professional Rescuer or the equivalent. Certification will be verified at the first class meeting.

**Description:** This course is designed for students who have the interest or need to maintain CPR/AED for the Professional Rescuer level certification but do not require a full course. The review format is organized as an abbreviated course that briefly reviews course information and offers students the opportunity for skill practice prior to testing. Certification requirements are 80% on all written tests and demonstrated skill proficiency. Successful completion of this course will renew CPR/AED for the Professional Rescuer certification for two (2) years. To participate in a review course a student must be currently certified in CPR/AED for the Professional Rescuer or the equivalent. Certification will be verified at the first class meeting. This is a Red Cross Certification.

## **ESS 1030 - Physical Well-being**

**Credits:** 1-2

**Description:** In this course, students learn practical information about physical well-being. Students focus on improving all aspects of physical wellness and mental health to include adaptability, resilience, sleep, nutrition, exercise, and stress management. This course is designed to interest the general student body, which wants to learn more about the correlation between well-being and overall health.

*Note:* This 8-week online course pairs well with an activity focused course (ESSA prefix) for the greatest practical impact.

## **ESS 1440 - Stress Management Techniques**

**Credits:** 3

**Description:** This course is designed to provide the student with an understanding of the elements of stress-induced conditions. The course provides strategies by which the student can learn to effectively manage stressful conditions.

## **ESS 1623 - Introductory Sports Medicine Concepts**

**Credits:** 3

**Description:** This course is designed to introduce students to etiologies, pathologies, and basic care of musculoskeletal injuries (e.g.; fractures, sprains, strains, contusions). Other topics covered in this course include the injury assessment process, environmental illnesses/injuries, emergency planning, risk reduction strategies and proper documentation.

## **ESS 2021 - Physical Literacy and Society**

**Credits:** 3

**Description:** This course allows the student to understand physical literacy and the impact of physical literacy on all populations and society across the world. Content covered includes the important correlation between physical literacy and overall wellness. A personalized approach is taken to assure students can gain the skills necessary to become physically literate and apply these skills throughout the semester and into the future. This course is part lecture and part activity as each student will develop and participate in their personal wellness and physical activity plan.

*Note:* this course does involve low intensity activity for all ability levels

**General Studies:** Social and Behavioral Sciences

## **ESS 2060 - Emergency Rescue/First Responder & CPR**

**Credits:** 3

**Description:** This course is designed for the professional and layperson to prepare them in emergency pulmonary resuscitation for infants, children and adults. This course will offer students the opportunity to develop skills and earn certifications in the following: American Red Cross Medical Responder, CPR/AED for the Professional Rescuer, Blood Borne Pathogens and Oxygen Administration.

## **ESS 2160 - Water Safety Instructor Certification**

**Credits:** 3

**Prerequisite(s):** American Red Cross Advanced Lifesaving Certification or Lifeguard Training Certification

**Description:** This course studies the methods of teaching water safety, skill analysis, and correction. Course leads to Red Cross Water Safety Instructor Certification. Field experience assignments will be a required part of the class.

## **ESS 2700 - Wellness Coaching I**

**Credits:** 3

**Description:** Students are introduced to the principles and tools of wellness coaching practice. Topics include scope of practice, ethics and values, effective communication, relationship building, and facilitating results to illuminate the discipline of wellness coaching. Research based techniques and best practices for facilitating behavior change are included.

*Note:* Credit will be granted for only one prefix: ESS or ITP.

**Cross Listed Course(s):** ITP 2950

## **ESS 2720 - Fundamentals of Coaching**

**Credits:** 2

**Prerequisite(s):** Completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This entry-level class is designed to meet requirements for a three year Letter of Authorization for coaching in the State of

Colorado from the Colorado High School Activities Association. This course provides an overview of knowledge and skills in principles of coaching. Students will learn to create a healthy and age appropriate athletic experience along with meeting the national standards for sport coaches based on the most recent National Association of Sport and Physical Education guidelines.

### **ESS 3110 - Medical Topics and Injury/Illness Pathophysiology for Exercise Science**

**Credits:** 3

**Prerequisite(s):** BIO 2310

**Description:** Students are introduced to etiologies, risk factors, physiology and pathophysiology of various health conditions. Students learn to use and apply the World Health Organization's International Classification of Functioning, Disability and Health (ICF) model and, are introduced to selected medical tests, diagnostic procedures. Students also learn how to determine the need for more advanced medical care for individuals with selected health conditions.

### **ESS 3220 - Behavioral Aspects of Physical Activity, Exercise, and Sport**

**Credits:** 3

**Prerequisite(s):** junior or senior standing

**Description:** This course is designed for students interested in the sport, fitness, exercise or physical rehabilitation disciplines. In this course, students learn the behavioral aspects of exercise, physical activity, and sport to be more effective in improving fitness, wellness, and recovery outcomes of clients. Students examine behaviors and behavioral theories regarding adherence to exercise, overcoming barriers, and maintaining motivation.

### **ESS 3250 - Fitness and Exercise Coaching**

**Credits:** 3

**Prerequisite(s):** junior or senior standing

**Description:** In this course, students apply health coaching concepts for practitioners specifically working in the fitness, exercise, and physical rehabilitation related fields. Students survey nutritional and physiological sciences, behavioral and physical screenings, client communication, motivation, planning and adherence strategies, which provides them with a background in fitness and exercise coaching.

### **ESS 3300 - Anatomical Kinesiology**

**Credits:** 3

**Prerequisite(s):** BIO 2310 with a grade of "C" or better

**Description:** This course examines the components of the human musculoskeletal system and the basic (qualitative) mechanics of human motion. Analysis of joint motion and the associated muscular involvement in various physical activities will be emphasized. Application of basic, qualitative principles of physics to the analysis of human motion will be examined. Additional emphasis is placed on

the relevance of this analysis to teaching effectiveness in the professional fields of physical education, athletic training, and exercise science.

### **ESS 3340 - Physiology of Exercise**

**Credits:** 4

**Prerequisite(s):** BIO 2320 and EXS 1640

**Description:** Students in this course are introduced to the physiological response and adaptations of individuals to exercise as well as to the application of these responses to sports medicine, rehabilitation, and general fitness. Students participate in laboratory experiences that demonstrate the underlying theoretical constructs that govern physiological responses to exercise.

### **ESS 3700 - Psychology of Coaching**

**Credits:** 2

**Prerequisite(s):** Completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy

**Description:** This course is designed for Human Performance and Sport majors and coaching minors. The purpose of the course is to orient prospective clinicians and coaches in the many aspects of sport and exercise psychology in order to be more effective when working in athletics. It offers the prospective coach, athletic trainer and exercise clinician the opportunity to train the client's mind to enhance sport development.

### **ESS 3720 - Science and Art of Coaching and Athletic Administration**

**Credits:** 3

**Prerequisite(s):** ESS 2720

**Description:** Topics covered in this course include principal aspects of coaching pedagogy and the organizational planning techniques necessary for successful coaching. The student will apply coaching philosophy and sport administration principles as they apply to sport at various age levels.

### **ESS 3750 - Study Abroad: Human Performance and Sport**

**Credits:** 3

**Prerequisite(s):** Sophomore standing, 2.5 GPA

**Description:** This is a variable topics course and involves study and visitation to historical and culturally rich selected international human performance and sport programs and locations. Students will compare international approaches to human performance and sport through a combination of the following: travel, site visits, tours, interactive educational activities, research in libraries of local institutions and lectures. Lectures may highlight current scientific and cultural themes, governance, management, marketing, sport operations & development, health & fitness initiatives, protocols, and collective sport activities.

**Cross Listed Course(s):** DANC 3750

## ESS 3835 - African Drum and Dance Ensemble

**Credits:** 1

**Description:** This ensemble introduces the varied and rich musical traditions of Africa and the African diasporas through participation and performance. The course focuses on the development of a variety of drumming and dance techniques, while cultivating a program of pieces for performance at the end of the semester. No previous musical experience is required, and it is a non-auditioned ensemble and open to all students regardless of their major.

*Note:* This course may be repeated for credit.

**Cross Listed Course(s):** DANC 3835, MUS 3835

## ESS 3980 - Internship in Human Performance and Sport

**Credits:** 1-15

**Prerequisite(s):** Major in Human Performance and Sport; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at c2hub@msudenver.edu.*

*Note:* Variable Credit

## ESS 3990 - Field Experience

**Credits:** 1-3

**Prerequisite(s):** Approval of instructor

**Description:** This course provides students with the opportunity to apply theoretical concepts of human performance and sport to a practical, on-site learning experience. This course includes 1 to 3 credit hours of field experience in a community agency, school, or professional organization.

## ESS 4500 - Motor Learning and Development

**Credits:** 3

**Description:** Students in this course will examine theories of human motor development and motor learning and apply them to practical situations in the fields of physical education, exercise science, dance, and various other health and wellness professions. Perceptual motor control and environmental factors affecting skill acquisition are emphasized in the course content.

**Cross Listed Course(s):** DANC 4500

## ESS 4660 - Legal Liability for Physical Educators, Coaches and Administrators

**Credits:** 3

**Prerequisite(s):** Junior standing

**Description:** This course is designed to provide an overview of the legal issues most often encountered in sport and physical activity. Topics include contract, labor, constitutional, and intellectual property law, with an emphasis on tort law. Content is tailored specifically toward the sport and exercise professions. The law is applied to amateur, recreational, and professional sport environments as well as physical education and leisure activities

## ESS 4700 - Wellness Coaching II

**Credits:** 3

**Prerequisite(s):** ITP 2950 or ESS 2700

**Description:** This advanced course in wellness coaching allows students to better understand ethics, professionalism, communication, behavior change, and coaching sessions. Students create coaching agreements, behavior change plans, and document interactions to support the eventual creation of a coaching business.

*Note:* Credit will be granted for only one prefix: ESS or ITP.

**Cross Listed Course(s):** ITP 4400

## ESS 4950 - Community Coaching for Health

**Credits:** 3

**Prerequisite(s):** ESS 4700 or ITP 4400 and Senior Standing

**Description:** Lifestyle medicine knowledge is meant to be applied in the community setting, in order to truly impact the health of others. This course will allow senior students to utilize their competencies in lifestyle medicine, wellness coaching, and patient navigation in the community. Through community and campus partnerships, students will have the opportunity to apply their skills in real-world situations to impact the health and wellbeing of clients. Students will complete a coaching log that may be utilized when applying for the National Board Certification for Health and Wellness Coaching. Professionalism, documentation skills, and refinement of their coaching skills will be emphasized.

**University Requirement(s):** Senior Experience

**Cross Listed Course(s):** ITP 4950

## Exercise and Sport Sciences Activity

### ESSA 1000 - Human Performance and Leisure

#### Activities: Variable Topics

**Credits:** 2

**Description:** A wide variety of two-credit activity courses designed for the interests of the general student body. These courses do not serve the needs of Human Performance and Sport majors.

*Note:* This course may be repeated under different titles for a maximum of 16 credits.

### ESSA 1020 - Ballet Folklórico

**Credits:** 2

**Description:** This course will serve as an introduction to Ballet Folklórico through an exploration of the technique, music, culture, and philosophy associated with this dance tradition.

**Cross Listed Course(s):** DANC 1020

## ESSA 1101 - Hip Hop I

**Credits:** 2

**Description:** This course will incorporate hip hop dance techniques, popular hip hop moves, terminology, history and various styles of hip hop will be learned. The class will consist of warm up, center floor work, across the floor, and dance combinations.

*Note:* This course may be taken twice for a total of 4 credits.

**Cross Listed Course(s):** DANC 1101

## ESSA 1110 - Belly Dance I

**Credits:** 2

**Description:** Belly dancing, an ancient cultural dance, is a creative and joyous art of self-expression and a way to fitness and wellbeing.

*Note:* This course may be taken twice for a total of 4 credits.

**Cross Listed Course(s):** DANC 1110

## ESSA 1130 - Ballet Level I

**Credits:** 2

**Description:** Intended for adults with minimal or no experience, this course presents basic steps, positions, and movements of classical ballet, stressing correct body placement.

**Cross Listed Course(s):** DANC 1130

## ESSA 1150 - Ballroom Dance

**Credits:** 2

**Description:** This course provides instruction and practice in ballroom dance with a focus on traditional dances. Dance mixers and ice breakers will also be included in this class.

**Cross Listed Course(s):** DANC 1150

## ESSA 1160 - Jazz Level I

**Credits:** 2

**Description:** This course is designed to teach fundamental techniques of jazz dance for fitness, endurance, strength, alignment and to help the student discover different movement patterns.

**Cross Listed Course(s):** DANC 1160

## ESSA 1180 - Modern Dance I

**Credits:** 2

**Description:** This course is designed for students with minimal or no dance experience. A basic modern dance foundation stressing alignment, strength and coordination will be covered.

**Cross Listed Course(s):** DANC 1180

## ESSA 1210 - Improvisation and Choreography

**Credits:** 3

**Description:** This course explores introductory dance improvisation and composition through creative problem solving and choreographic exercises. It is organized into sequences, expressing a variety of themes.

**Cross Listed Course(s):** DANC 1210

## ESSA 1240 - Tap Dance I

**Credits:** 2

**Description:** This course is designed to provide an introduction to tap dance, as well as the physical, social and emotional benefits derived from regular participation in this activity.

**Cross Listed Course(s):** DANC 1240

## ESSA 1330 - Golf I

**Credits:** 2

**Description:** This course is designed for the beginning golfer. The course covers individual skills, rules, etiquette, etc. The course meets off-campus at a golf practice facility.

## ESSA 1340 - Golf II

**Credits:** 2

**Prerequisite(s):** ESSA 1330 Golf I or adequate playing ability or instructor approval

**Description:** This course is designed for the student with prior experience in golf. The course will include a review of fundamentals and advanced skills. The course meets off-campus at a golf practice facility.

## ESSA 1350 - Tennis Level I

**Credits:** 2

**Description:** This course is designed for beginning players who are below 2.5 USTA rating. Skills, strategy and rules at the introductory level are presented.

## ESSA 1400 - Fencing

**Credits:** 2

**Description:** This course is designed to teach the basic fundamentals of beginning fencing.

## ESSA 1410 - Ski, Cross-Country, or Snowboard

**Credits:** 2

**Description:** This course is taught at a nearby ski area. Lessons are presented by the area's instructional staff in alpine skiing, cross-country skiing, or snowboarding. Instruction for beginners to advanced students is given.



## ESSA 1450 - Backpacking and Camping

**Credits:** 2

**Description:** This is a course that combines lectures and a weekend backpacking trip where the student will learn where to go, how to dress, the type of equipment needed, how to feed him/herself and others, as well as learning wilderness ethics.

## ESSA 1500 - Total Fitness

**Credits:** 2

**Description:** Total Fitness takes a comprehensive approach to fitness, which includes proper stretching, strength training and aerobic exercise. The topics of nutrition, stress management, criteria for selecting a fitness club and personal trainer are also discussed. Students will learn proper technique for and participate in a variety of cardiovascular, resistance training and flexibility activities.

*Note:* Class includes activity and lecture

## ESSA 1660 - Tae Kwon Do Level I

**Credits:** 2

**Description:** This course is designed to introduce the beginning student to the Korean martial art of tae kwon do and how it may relate to personal health, physical conditioning, and self-defense.

## ESSA 1670 - Tae Kwon Do Level II

**Credits:** 2

**Description:** This course will give the intermediate and advanced martial arts student the opportunity to develop and perform their art for their own enjoyment and for the public.

## ESSA 1750 - Weight Training Level I

**Credits:** 2

**Description:** This is a course designed to introduce the student, both male and female, to the proper conditioning programs for personal physical development.

## ESSA 1760 - Weight Training II

**Credits:** 2

**Description:** This course is designed for the moderately experienced weight lifter. Instruction and practice in the necessary skills of strength and conditioning will be performed to make sure the student will be safe and to work toward the individual's set goals. Advanced lifting techniques, including power lifting, will be performed.

## ESSA 1820 - Stretch and Strength

**Credits:** 2

**Description:** This course includes instruction on proper stretching techniques, along with methods of developing strength. Exercise injury prevention is stressed.

## ESSA 1830 - Walking for Fitness

**Credits:** 1

**Description:** This course is designed to introduce the student to the benefits of walking as a method of aerobic conditioning and how walking helps promote cardiovascular health and muscular fitness. Goal setting and developing a fitness plan will be an integral part of the course.

*Note:* this course may be repeated 2 times

**Lab Fees:** \$5.00

## ESSA 1840 - Hatha Yoga I

**Credits:** 2

**Description:** This course offers students an introduction to the basic methodologies of asana (posture), pranayama (breathing practices) and meditation. The foundation of yoga, as outlined in the Hatha and Raja yoga philosophies, will build the context for the class work.

## ESSA 1850 - Yoga Life Skills

**Credits:** 1

**Description:** Students in this course will learn specific postures, breathing methods and meditation techniques to manage their energy and their mind. Students will become more masterful at preventing and managing stress, anxiety and melancholy while simultaneously increasing their body strength and flexibility.

**Lab Fees:** \$5.00

## ESSA 1860 - Yoga for Anxiety Management

**Credits:** 2

**Description:** This course offers students of all levels of fitness a comprehensive yoga program designed for anxiety management, improving wellness, fitness, vitality, sleep and stress reduction. It combines specific practices for anxiety management: postures (asanas), breathing practices (pranayama), relaxation (yoga nidra), and meditation. Students will gain knowledge of practical aspects of yoga psychology and yoga philosophies (Hatha, Raja, and Karma Yoga paths), recommended for anxiety management and their application to contemporary lifestyle. The students will acquire yoga tools and knowledge to find a healthy outlet for anxiety and to ability manage reactions to emotional triggers.

*Note:* no previous yoga experience necessary

## ESSA 1870 - Stress Management

**Credits:** 2

**Description:** This course is designed to provide the student with an understanding of the elements of stress-induced conditions, as well as provide a means by which students will become capable of effectively relieving stressful conditions.

## ESSA 1880 - Tai Chi Level I

**Credits:** 2

**Description:** This course is designed to introduce the beginning student to the 25 basic movement forms and concepts of Tai Chi, an ancient form of Chinese physical exercise and mental concentration. Tai Chi is a gentle form of exercise that provides practical application to movements in daily life with an emphasis on meditation, strength, flexibility and aerobic training.

## ESSA 1890 - Tai Chi Level II

**Credits:** 2

**Description:** This course is designed for students already familiar with the content of Tai Chi Level I. Tai Chi Level II completes the 108 movement forms and concepts begun in Tai Chi Level I and covers advanced movements through expanded amplitude, direction, and complexity.

## ESSA 1960 - Yoga for Weight Management

**Credits:** 2

**Description:** This course offers students of all levels of fitness a comprehensive yoga program designed for weight management, improving wellness, fitness, and vitality. It combines specific practices for weight management: postures (asanas), breathing practices (pranayama), relaxation (yoga nidra), and meditation. Students will gain knowledge of practical aspects of yoga psychology and yoga philosophies (Hatha, Raja, and Karma Yoga paths), recommended for weight management and their application to contemporary lifestyle.

## ESSA 2000 - Weight Training for Women

**Credits:** 2

**Description:** This course emphasizes appropriate and safe resistance training techniques for the beginning or intermediate female lifter. The learner will understand and practice proper technique in a variety of resistance exercises. Students will be exposed to discussions regarding body composition, weight loss, nutritional considerations while exercising, and the positive psychological impact of exercise. The course environment is non-intimidating, supportive, and designed to motivate the learner. Program designed for increased muscular endurance, muscular strength and cardiovascular endurance will be covered.

*Note:* no experience necessary

## ESSA 2025 - iFitness

**Credits:** 1

**Description:** Looking for a fitter, healthier you? Not sure how to get started or just need a little guidance? This course will help inform, guide and motivate students toward a fit and healthy life. Using on-line resources and a fitness app, all aspects of physical wellness will be covered. Tracking personal physical activity with a smart phone app will be required.

*Note:* If students own a personal fitness tracking device (smart watch, smart phone, etc) they are encouraged to use it in this class. If

students do not have a fitness tracking device, course instructors will ensure students are provided additional different methods to track their progress in this class.

## ESSA 2201 - Hip Hop II

**Credits:** 2

**Prerequisite(s):** DANC 1101 or ESSA 1101 or Instructor Approval

**Description:** Students will gain a physical and intellectual understanding of intermediate hip-hop as they are exposed to hip-hop terminology, history, and a variety of hip-hop styles.

**Cross Listed Course(s):** DANC 2201

## ESSA 2210 - Belly Dance II

**Credits:** 2

**Prerequisite(s):** DANC 1110 or ESSA 1110 or permission of instructor

**Description:** Belly dancing, an ancient cultural dance, is a creative and joyous art of self-expression and a way to fitness and wellbeing. Belly Dancing Level II will delve deeper into the emotional, physical and spiritual components of Belly Dancing. Students will learn to dance with increased fluidity and depth, explore floor work and create an original dance.

*Note:* This course may be taken twice for a total of 4 credits.

**Cross Listed Course(s):** DANC 2210

## ESSA 2230 - Ballet II

**Credits:** 2

**Prerequisite(s):** DANC 1130 or ESSA 1130 or Instructor Approval

**Description:** This course is designed for students with beginning ballet skills. It will cover low intermediate level classical ballet exercises, stressing performance quality and proper alignment.

**Cross Listed Course(s):** DANC 2230

## ESSA 2240 - Tap Dance II

**Credits:** 2

**Prerequisite(s):** DANC 1240 or ESSA 1240

**Description:** This course is designed for low-intermediate level tap dance students. It introduces intermediate techniques of tap for fitness, health, rhythmic and performance skills.

**Cross Listed Course(s):** DANC 2240

## ESSA 2260 - Jazz II

**Credits:** 2

**Prerequisite(s):** DANC 1160 or ESSA 1160

**Description:** This course is for students with beginning level jazz dance experience. This course covers low intermediate Jazz Dance techniques focusing on alignment and performance presence.

**Cross Listed Course(s):** DANC 2260

## ESSA 2280 - Modern Dance II

**Credits:** 2

**Prerequisite(s):** DANC 1180 or ESSA 1180

**Description:** This course is designed for students with beginning modern dance experience. A low intermediate movement foundation stressing alignment, syncopation and performance presence will be covered.

**Cross Listed Course(s):** DANC 2280

### **ESSA 3320 - Women's Self-Defense**

**Credits:** 1

**Description:** This course will begin by examining the psychological tools needed to defend oneself and will gradually move into the actual, physical skills necessary to survive, escape, avoid and/or resist violence. The Women's Empowerment Model will be presented. This model emphasizes self-respect, an understanding of one's inalienable human rights, and the determination and ability to protect those rights. Students will learn self-defense against verbal and physical assaults by becoming more aware, assertive and skilled in physical resistance techniques. Using interactive exercises, students will practice both verbal and physical self-defense skills. All ability levels are welcome, but the class is extremely physical; thus, students should come prepared to move.

*Note:* Credit will be granted under one prefix only: CPD or ESSA.

**Cross Listed Course(s):** CPD 3320

### **ESSA 3330 - Ballet III**

**Credits:** 2

**Prerequisite(s):** DANC 2230 or ESSA 2230 and Instructor Approval

**Description:** This course is designed for students with low intermediate ballet skills. Intermediate level ballet exercises, stressing quality, artistry, alignment and efficiency of movement are covered.

**Cross Listed Course(s):** DANC 3330

### **ESSA 3360 - Jazz III**

**Credits:** 2

**Prerequisite(s):** DANC 2260 or ESSA 2260 and Department Approval

**Description:** This class is for students with low intermediate level jazz dance experience. This course covers intermediate Jazz Dance focusing on, alignment, and performance presence.

**Cross Listed Course(s):** DANC 3360

### **ESSA 3380 - Modern Dance III**

**Credits:** 2

**Prerequisite(s):** DANC 2280 or ESSA 2280 and Department Approval

**Description:** This course is for students with low intermediate modern dance experience. Students will build an intermediate movement foundation stressing alignment, syncopation, weight and performance presence.

**Cross Listed Course(s):** DANC 3380

### **ESSA 4430 - Ballet IV**

**Credits:** 2

**Prerequisite(s):** ESSA 3330 and Department Approval

**Description:** This course is designed for students with intermediate ballet skills. This course will cover advanced intermediate level ballet, stressing quality, artistry, efficiency and alignment.

**Cross Listed Course(s):** DANC 4430

### **ESSA 4460 - Jazz IV**

**Credits:** 2

**Prerequisite(s):** ESSA 3360 and Department Approval

**Description:** This class is for students with intermediate level jazz dance experience. This course covers advanced intermediate Jazz Dance, focusing on alignment and performance presence.

**Cross Listed Course(s):** DANC 4460

### **ESSA 4480 - Modern Dance IV**

**Credits:** 2

**Prerequisite(s):** ESSA 3380 and Department Approval

**Description:** This course is for students with intermediate modern dance experience. An advanced intermediate movement foundation stressing alignment, strength, weight and performance presence will be covered.

**Cross Listed Course(s):** DANC 4480

### **HSL 1030 - Skills and Methods of Teaching Physical Activities for Special Populations**

**Credits:** 2

**Description:** This course is intended for HPS majors and minors.

The emphasis of this course is on sport and motor programs for special populations and programs related to those individuals with physical, mental, or multiple disabilities as well as the aging population. This course will include opportunities for experience in designing, implementing, and evaluating existing sports and physical activity programs for the disabled.

### **HSL 1250 - Adaptive Aquatic Programs**

**Credits:** 2

**Prerequisite(s):** Current ARC WSI certification

**Description:** This course acquaints the student with various adapted aquatic programs and methods of teaching the mentally and/or physically disabled. The course leads to Red Cross Adaptive Aquatic certification.

### **HSL 1340 - Skills and Methods of Teaching Rhythms for Special Populations**

**Credits:** 2

**Description:** This course emphasizes skills for the development, implementation, and evaluation of rhythmic activities for the

handicapped in recreation and rehabilitation programs. The course will also cover a variety of adapted dance, and movement techniques for the auditorially and visually impaired, emotionally disturbed, physically handicapped, mentally handicapped, and the aged.

## **HSL 1420 - Activity and Fitness Programs for the Elderly**

**Credits:** 2

**Description:** This course emphasizes skills for the development, implementation and evaluation of activities and fitness programs for older persons in various settings. This course will include opportunities for observation and involvement with various recreation agencies or health care facilities in the Denver area.

## **HSL 1430 - Camping for Special Populations**

**Credits:** 2

**Description:** This class will provide information concerning methods and techniques applicable to camps for special populations and to outdoor recreational outings.

## **HSL 1500 - Human Performance, Sport and Leisure Studies: Variable Topics**

**Credits:** 2

**Description:** These courses are required for human performance and sports and recreation professions majors and minors to meet departmental skill requirements in various physical behaviors. They also cover methods of teaching and field experience assignments. All HSL 1500 courses include a cognitive component with written and reading assignments, testing, and assigned laboratory activities.

## **Exercise Science**

### **EXS 1020 - Resistance Training Techniques**

**Credits:** 3

**Description:** This is an introductory course that will allow students to enhance their knowledge and experience regarding resistance training. Regardless of experience, all students will learn proper exercise technique and terminology (through skill analysis and muscle anatomy) and basic resistance training programming methods. This course is not designed to help the student design resistance training programs for other individuals.

### **EXS 1640 - Physical Fitness Techniques and Programs**

**Credits:** 3

**Description:** Students in this course will be introduced to basic skills, practice, and theory in physical fitness. Major components of muscular strength, muscular endurance, cardiovascular endurance, flexibility, and body composition are discussed. Exercise

prescription, administration and leadership skills are enhanced through active participation.

### **EXS 2680 - Group Exercise Leadership**

**Credits:** 3

**Prerequisite(s):** EXS 1640 AND EXS 1020

**Description:** Students in this course will expand their knowledge and skills in performance techniques, program design, and leadership needed to teach small group exercise programs or group-led exercise classes for healthy adults. Students will become familiar with coaching a variety of group fitness formats intended to enhance cardiorespiratory fitness, muscle strength and endurance, and musculoskeletal flexibility. Students will develop the ability to select appropriate exercises, identify improper form/technique, recommend/demonstrate appropriate exercise progression, and modify exercises based on skill and/or to minimize injury.

### **EXS 2890 - Personal Training Concepts and Application**

**Credits:** 3

**Prerequisite(s):** EXS 1020

**Description:** This class is designed to introduce students to the personal training profession from a variety of perspectives. While program design and training techniques will be presented, these concepts are not the focus of the course. Emphasis will be placed on an exploration of the various settings where personal training services are offered and the business elements that all professional personal trainers should comprehend. Class discussions, lectures, hands-on exercise lessons and demonstrations will help students gain a greater awareness of what it takes to be a competent, professional personal trainer.

### **EXS 3780 - Fitness Programs for Special Populations**

**Credits:** 2

**Prerequisite(s):** EXS 1020, EXS 1640 with a "C" or better in both

**Description:** This course is designed to help fitness professionals adapt exercise prescription to meet the needs of people with special exercise requirements. Special populations may include people with diabetes, asthma, metabolic disorder, anxiety, multiple sclerosis and arthritis, as examples.

### **EXS 3790 - Fitness Programming for Children, Adolescents, and Older Adults**

**Credits:** 3

**Prerequisite(s):** EXS 1640

**Description:** The course is designed to introduce students to physiological, cognitive and psychological changes that occur from birth through adolescence and in the later stages of life. The role of physical activity and exercise will be explored in each of these life stages. Considerations for exercise assessment and prescriptions will be addressed for a number of chronic conditions, such as but not

limited to: metabolic syndrome, diabetes, cardiovascular, osteoporosis, and neurological conditions.

### **EXS 3841 - Comparative Fitness Programs**

**Credits:** 3

**Prerequisite(s):** EXS 1640 AND BIO 2320

**Description:** In this course students will explore: 1) current trends, issues, and environments in fitness management, 2) comparison of selected popular fitness and evaluation programs, 3) certification programs and employment available for fitness personnel. Students will be provided opportunity for on-site visitations of selected exercise science work places as well as future employment preparation (e.g. resume writing and interviewing skills).

### **EXS 4650 - Exercise Electrocardiography**

**Credits:** 3

**Prerequisite(s):** HPS 3340

**Description:** This course is designed to provide students with an overview of the basic interpretation of an electrocardiogram (ECG). Emphasis will be placed on identification of atrial and ventricular arrhythmias, myocardial ischemia and infarction. Students will become versed in components of cardiovascular physical exam as well as different cardiovascular exercise assessments.

### **EXS 4680 - Advanced Fitness Assessment and Exercise Prescription**

**Credits:** 4

**Prerequisite(s):** EXS 1640, ESS 3340

**Description:** Students in this course will be acquainted with the art and science of exercise fitness assessment and exercise prescription. Students will evaluate the physiological responses to different physical fitness assessments using contemporary techniques and equipment. After completing the class, students will be expected to be competent to conduct fitness assessments and to prepare exercise prescriptions for a variety of populations. Practical skills tests to demonstrate each student's competence in these areas will be required.

### **EXS 4772 - Advanced Strength and Conditioning**

**Credits:** 3

**Prerequisite(s):** EXS 1020 AND EXS 1640 AND ESS 3300 AND ESS 3340

**Description:** Students in this course will identify and elaborate upon important concepts from basic resistance training technique to biomechanics and exercise physiology. Students will design appropriate goal-oriented strength and power training programs for specific athletic populations. Students will also learn about the technique and mechanical characteristics of several advanced weight training exercises commonly used in athletic populations and other fitness programs.

### **EXS 4780 - Community Fitness Testing and Program Planning**

**Credits:** 3

**Prerequisite(s):** EXS 4680

**Description:** This course is designed to provide the student with the opportunity to conduct laboratory fitness assessments, evaluate test results and develop exercise prescriptions. In addition, the student will become knowledgeable with regard to the promotion and marketing of fitness programs.

### **EXS 4790 - Special Considerations for Exercise Assessment and Prescription**

**Credits:** 3

**Prerequisite(s):** EXS 4680 AND ESS 3110

**Description:** Students in this course will be introduced to the unique exercise requirements for individuals with chronic health conditions as well as those with special considerations. The importance of physical activity and fitness will be explored in common disease states and conditions. Emphasis will be placed on special considerations for exercise assessment and prescription in common conditions and diseases, such as but not limited to cardiovascular, metabolic, neurological, aging, and pregnancy.

### **EXS 4800 - Biomechanics of Human Movement**

**Credits:** 3

**Prerequisite(s):** HPS 3300 or ESS 3300

**Description:** Students in this course will study the effects of internal and external forces on human movement. Course content encompasses the study of stability, motion, force and leverage principles as they apply to basic patterns of human movement. Emphasis is placed on optimization of motor performance using mechanical analysis.

### **EXS 4880 - Internship in Exercise Science**

**Credits:** 10

**Prerequisite(s):** EXS 4780 and Senior Standing; completion of all major courses; 2.75 GPA

**Description:** This course is designed for the exercise science major to acquire practical experience in the fitness field. It is a senior experience.

**University Requirement(s):** Senior Experience

## **Finance**

### **FIN 1985 - Introduction to Business Careers Internship**

**Credits:** 3

**Description:** Approved internships introduce the specific field of business as well as provide an opportunity to gain practical, hands-on

professional work experience. Students will learn about the profession, explore related career paths, and increase professionalism. *Note:* Internship must be approved by the department using the C2 Hub process.

**Cross Listed Course(s):** ACC 1985, CIS 1985, ECO 1985, MGT 1985, and MKT 1985

## **FIN 2220 - Small Business Financing**

**Credits:** 3

**Prerequisite(s):** Satisfaction of General Studies Quantitative Literacy requirements and at least Sophomore Standing

**Description:** This course is an entry-level finance course recommended for students intending to start their own business. Students will learn basic financial and economic concepts important in the operation of a small and entrepreneurial business, time value of money techniques, and working capital management. Students will then learn how to apply these concepts to create value in the business. Sources of financing for the small business are also extensively presented and discussed.

## **FIN 2250 - Personal Money Management**

**Credits:** 3

**Prerequisite(s):** Sophomore standing and non-business majors

**Description:** This survey course is oriented to the identification and solution of personal financial problems. The subject matter ranges from the determination of one's financial condition to estate planning, including controlling credit usage, making major purchase decisions, buying insurance, making investments, and planning retirement.

*Note:* Credit will be granted for either FIN 2250 or FIN 3150, not both. Business majors cannot take FIN 2250.

## **FIN 2370 - Money Issues for Women**

**Credits:** 1

**Description:** The economic and social circumstances of women's lives in the United States often place them in a different material and psychological relationship to money and issues surrounding money than men. This course will review a variety of issues women face when planning for the future, as well as some of the tools used to build a secure future.

*Note:* Credit will be granted under one prefix only: CPD or FIN.

**Cross Listed Course(s):** CPD 2370

## **FIN 2700 - Introduction to Banking**

**Credits:** 3

**Description:** Students discover and explore the banking industry, different services in the banking industry, and the role of banks in the economy in preparation for a career in the banking industry during this course. Students explore topics including, but not limited to, banking functions (such as deposits, loans, and investments), the management of risk in the banking industry, the responsibilities of banks towards customers and other stakeholders, and the government regulation of banks.

## **FIN 3010 - Financial Markets and Institutions**

**Credits:** 3

**Prerequisite(s):** ACC 2010 with a grade of "C-" or better, ECO 2010, ECO 2020 and At least junior standing

**Description:** This course provides a framework for understanding our financial environment, including markets, institutions, and securities. Each type of market and how financial institutions use it, its internationalization, and recent events that have affected it, are studied.

## **FIN 3100 - International Money and Finance**

**Credits:** 3

**Prerequisite(s):** ECO 2010 and Junior or Senior standing

**Description:** This course covers the basics of the foreign exchange market, the balance of payments, parity conditions in international finance, foreign exchange risk and forecasting, the financing of international activities, and international capital flows. The course will focus on the financial management of the multinational firm.

## **FIN 3150 - Personal Financial Planning**

**Credits:** 3

**Prerequisite(s):** Business major or minor with at least junior standing

**Description:** This course is an introduction to the field of personal financial planning for business students. The student will study money management, investments, insurance, employee benefits, retirement planning, and estate planning, as they relate to individual and family financial planning.

## **FIN 3300 - Managerial Finance**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021; Completion of General Studies Oral Communication Requirement; ECO 2010; ECO 2020; ACC 2010; MTH 1310 or MTH 1110 with C- or better; at least junior standing.

**Description:** This is a study of the dynamic environment of financial management, exposing students to various finance topics such as financial analysis and forecasting, time value money, security valuation, capital budgeting, risk and return, cost of capital, working capital management and international finance.

## **FIN 3320 - Entrepreneurial Finance**

**Credits:** 3

**Prerequisite(s):** At least junior standing

**Description:** The course is designed to acquaint students with the basic concepts of obtaining funds for the start-up and financing the continued growth of the firm. The course covers start-up financing, growth capital, daily financial management, valuation, and strategic financial planning.

## **FIN 3420 - Principles of Insurance**

**Credits:** 3

**Prerequisite(s):** At least junior standing

**Description:** This course explores the underlying principles of insurance, and the need for insurance in a progressive, dynamic society. It includes an introductory examination of insurable risks, uses of insurance, as well as a study of the important coverages that are currently available.

## **FIN 3450 - Retirement Planning and Employee Benefits**

**Credits:** 3

**Prerequisite(s):** At least junior standing

**Description:** A course designed for the typical employee, describing common retirement plans in the workplace as well as personal savings plans used to provide retirement income. The course discusses such common employer-sponsored retirement plans as a Section 401(k) plan for employees of a for-profit business, a Section 403(b) plan for educators, and a Section 457(b) plan for State and local government employees. Such plans are considered in both the accumulation and distribution stages of retirement. Also included in the course is retirement funding strategies and personal saving strategies, such as the uses of Individual Retirement Accounts (IRAs) and annuities to plan for retirement. Government retirement plans, such as Social Security, are also considered.

## **FIN 3500 - Management of Banking Operations**

**Credits:** 3

**Prerequisite(s):** FIN 2700

**Description:** In this course, students will develop a broad understanding of how decisions are made in banks with a focus on banks' retail operations. Students will closely examine bank consumer services such as savings and checking accounts, mortgages, personal loans, credit cards, and certificates of deposit. Students will also examine the roles of bank leadership, different roles of bank employees, study different measures of bank performance, and discuss how loans are evaluated. Students will be introduced to the composition and characteristics of bank assets and liabilities, to interest rate risk, and to regulatory capital requirements.

## **FIN 3550 - Culture and Practice of Compliance**

**Credits:** 3

**Prerequisite(s):** FIN 3500

**Description:** Compliance is increasingly important in American corporations as firms develop programs and offices whose role is to ensure that they comply with all relevant laws and regulations. These offices also train workers on these regulations and encourage them to behave legally and ethically. First, students cover the practical issues involved in the development of a compliance office and in the implementation of a corporate compliance program during this course. Second, students examine the three lines of defense in compliance, as well as the roles of tone, training, and monitoring.

Third, students discuss examples of cases where corporations have deviated from legal or ethical standards, the role of a compliance office, and the legal and ethical responsibilities of a chief compliance officer. Finally, students develop the skills necessary to maintain a strong compliance program, such as auditing strategies, interviewing and document review, and drafting documents for an intended audience of executives or regulatory agencies.

## **FIN 3600 - Investments**

**Credits:** 3

**Prerequisite(s):** FIN 3300 with a grade of "C-" or better and junior or senior standing

**Description:** This course is a survey of the organization and regulation of security markets; security analysis and valuation; and principles of portfolio management from the viewpoint of the individual investor.

## **FIN 3800 - Real Estate Practice and Law**

**Credits:** 3

**Prerequisite(s):** At least junior standing

**Description:** This course surveys the principles and practices of real estate. Subject areas treated include the nature and description of real estate, real property interests and ownership, finance, appraisal, contract and agency law, and real estate investment.

## **FIN 3810 - Advanced Real Estate Practice and Law**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** FIN 3800 and junior or senior standing

**Description:** This course builds upon the material covered in FIN 3800 by providing expanded, in-depth coverage of the topics as well as introducing some new topics to provide a broad coverage of the field of Real Estate and to prepare the student for licensing examinations.

## **FIN 3850 - Intermediate Finance**

**Credits:** 3

**Prerequisite(s):** FIN 3300 with a grade of "C-" or better and junior or senior standing

**Description:** This is an advanced, integrated study of investment risks and returns, the development of modern portfolio theory, financial statements, capital budgeting, and working capital issues. Use of financial calculators and Excel spreadsheets is required to analyze financial problems.

## **FIN 3910 - Regulatory Environment of Banking**

**Credits:** 3

**Prerequisite(s):** FIN 3500

**Description:** There is a long list of regulations that apply specifically to the banking industry: the Bank Secrecy Act, multiple consumer protection acts, lending requirements, credit reporting, fair debt

collection, and many others. Students explore the historical evolution of bank regulation, give an overview of UDAAP, the existing 'alphabet soup' of regulations, and reporting requirements in this course. In addition, students discuss how regulations affect profits, explore the size of the regulatory burden of banks, estimate the costs and benefits of regulation, and establish an informed opinion on an optimal level of regulation. Finally, students review the history financial crises and the impact of legislative and regulatory changes on the activities by U.S. banks.

### **FIN 3980 - Internship in Finance**

**Credits:** 1-15

**Prerequisite(s):** Major in Finance; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

### **FIN 4200 - Financial Modeling with Spreadsheets**

**Credits:** 3

**Prerequisite(s):** FIN 3300, FIN 3600, FIN 3850, CIS 2010, with a grade of "C-" or better in all except CIS 2010 and senior standing

**Description:** This course provides the student with a strong set of financial analysis skills to use in building complex financial models utilizing electronic spreadsheets. The topics covered include building financial statements, analysis of financial statements, modern portfolio theory, capital budgeting, regression analysis, and both linear and nonlinear programming for financial applications.

### **FIN 4400 - Estate Planning**

**Credits:** 3

**Prerequisite(s):** Business major or minor with At least junior standing

**Description:** The course provides the student with the basic concepts of estate planning and importance in overall financial planning. The course covers the tools and techniques of estate planning so as to arrange the efficient future wealth transfers to maximize the financial well being of both the individual and recipients of the wealth transfer.

### **FIN 4450 - Nonprofit Financial Management and Financing**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** HSP 2010

**Description:** This course prepares potential nonprofit leaders and

program managers to understand, plan and manage the money side of their organizations and programs, including how to raise money and how to manage it. Students review strategies for grants, donations, impact investment and earned income, as well as the principles of budgeting and accounting for nonprofits.

### **FIN 4500 - Analysis of Financial Statements**

**Credits:** 3

**Prerequisite(s):** FIN 3850 with a grade of "C-" or better and Senior standing

**Description:** An in-depth study of current financial reporting practices, analysis and interpretation of corporate financial statements, utilizing text and selected cases.

### **FIN 4600 - Security Analysis and Portfolio Management**

**Credits:** 3

**Prerequisite(s):** FIN 3600, FIN 3850 with a grade of "C-" or better in both and Senior standing

**Description:** This course is designed to provide students with a comprehensive understanding of security analysis and portfolio management. The focus of the course is on selecting the appropriate securities and managing the portfolio to meet the investor objectives. This is the capstone and assessment course for finance majors with a concentration in financial services.

### **FIN 4620 - Risk Analysis for Financial Services Organizations**

**Credits:** 3

**Prerequisite(s):** FIN 3500

**Description:** This course examines firms' operational and financial risks and the methods available to handle that risk, with a particular focus on finance and banking. Students will explore strategic, financial, legal, and regulatory risks. Particular attention will be paid to loan and credit management, forms of measuring the risk of credit, and banking and insurance capital requirements. Students will learn to assess the level of risk and to make recommendations on how to reduce that risk.

### **FIN 4660 - Advanced Investment Management**

**Credits:** 3

**Prerequisite(s):** FIN 3600

**Description:** AIM will be an advanced class that builds on the foundations of lower level courses in investments, corporate finance and security analysis, among others. It offers students valuable exposure to investment practices, including security analysis, portfolio construction, risk analysis and return attribution. AIM requires students to manage a live equity portfolio with actual cash value. In addition to a deeper academic knowledge of important concepts in the world of finance, students gain practical experience and demonstrable skills to make them attractive to potential employers in a range of financial service firms.



## FIN 4700 - Special Topics in Finance

**Credits:** 3

**Prerequisite(s):** Senior standing and approval of the Finance Department chair

**Description:** This is an in-depth study of selected topics in finance not available otherwise in the curriculum. Typically, this course will focus on current issues or developments in finance, and the content will vary.

*Note:* This course may be repeated for credit under different topics.

## FIN 4720 - Case Studies in Compliance

**Credits:** 3

**Prerequisite(s):** FIN 3550

**Description:** Students receive hands-on training in compliance through an analysis and evaluation of real world situations. Students work on cases to spot the regulatory or compliance concerns, develop an audit plan, draft an investigatory report, and propose a remediation plan. Students work as a compliance team to resolve issues in a way that protects the rights of customers and the profits of the firm.

## FIN 4750 - Seminar in Personal Financial Planning

**Credits:** 3

**Prerequisite(s):** FIN 3420, FIN 3450, FIN 3600, FIN 4400 and ACC 3090

**Description:** This is a senior-level integrative course for finance majors concentrating in personal financial planning. It brings together the various aspects of financial planning with heavy emphasis on case studies.

## FIN 4810 - Affordable Housing Finance and Development

**Credits:** 3

**Prerequisite(s):** REL 2400

**Description:** In this course, students will explore the intricacies of financing affordable housing properties. Students will examine public sector funding sources, providers of private-sector debt, as well as equity in the form of Low Income Housing Tax Credits. They will also gain practical insights into the elements of a multifamily affordable housing development *pro forma*, as well as developing a *pro forma* using information provided.

## FIN 4950 - Financial Strategies and Policies

**Credits:** 3

**Prerequisite(s):** FIN 3600, FIN 3850 with a grade of "C-" or better in both, senior standing, and completion of all business core courses except MGT 4950

**Description:** This course takes an integrated case study approach to financial management. Emphasis is on presentation of analyses and recommendations for strategies and policies. This is the capstone and assessment course for finance majors with a concentration in general

finance. Proficiency in personal computer and word processing and spreadsheet applications is necessary.

## Fire and Emergency Services

### FER 1020 - Introduction to Trauma Informed Care for First Responders

**Credits:** 3

**Description:** Students will be introduced to the concept of Trauma-Informed Care (TIC) and how agencies, Human Services professionals, and first responders can utilize this model to benefit clients. Students will describe and define what TIC is and ways in which traditional interventions can be modified to increase the sense of safety experienced by clients and those who work with them. Students will learn how to incorporate trauma-informed practices into interventions with diverse populations, especially those with Post-Traumatic Injury and/or Post-Traumatic Stress Disorder (PTSD). Students will also examine strategies for identifying and managing vicarious trauma and compassion fatigue.

### FER 3000 - Applications of Fire Research

**Credits:** 3

**Prerequisite(s):** General Studies English; General Studies Math

**Description:** The students will examine the basic principles of research and methodology for analyzing current fire-related research. The course also provides a framework for conducting and evaluating independent research in the following areas: fire dynamics, fire test standards and codes, fire safety, fire modeling, structural fire safety, life safety, firefighter health and safety, automatic detection and suppression, transportation fire hazards, risk analysis and loss control, fire service applied research, and new trends in fire-related research. Successful completion of the course will require participation in a service learning project.

*Note:* Some sections of this course may be taught as Service Learning.

### FER 3110 - Community Risk Reduction for Fire and Emergency Services

**Credits:** 3

**Prerequisite(s):** General Studies English; General Studies Math

**Description:** Students will be introduced to a theoretical framework for understanding the ethical, sociological, organizational, political, and legal components of community risk reduction and a methodology for the development of a comprehensive community risk reduction plan.

*Note:* Some sections of this course may be taught as Service Learning.

### FER 3140 - Fire and Emergency Services Administration

**Credits:** 3

**Prerequisite(s):** General Studies English; General Studies Math

**Description:** This course is designed to be a progressive primer for students who want more knowledge about fire and emergency services administration. Students will examine the following skills necessary to manage and lead a fire and emergency services department through the challenges and changes of the 21st century: Persuasion and influence, accountable budgeting, anticipation of challenges and the need for change, and using specific management tools for analyzing and solving problems. A central part of the course focuses on how the leadership of a fire and emergency services department develops internal and external cooperation to create a coordinated approach to achieving the department's mission.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 3200 - Fire Prevention, Organization, and Management**

**Credits:** 3

**Prerequisite(s):** General Studies English; General Studies Math

**Description:** In this course, students will examine the factors that shape fire risk and the tools for fire prevention, including risk reduction education, codes and standards, inspection and plans review, fire investigation, research, master planning, various types of influences, and strategies. Also, students will examine the changing roles and responsibilities of fire prevention professionals in managing fire prevention programs and risk reduction activities to ensure public safety.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 3300 - Understanding International Terrorism**

**Credits:** 3

**Description:** This course will enable students to understand the evolution and current state of international terrorism by examining its history on a global scale. This global perspective will provide students with the ability to think sensibly about international terrorism and critically evaluate which counterterrorism methods have proven to be effective. Additionally, this course will investigate the theory behind the international terrorist's motivations and actions.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 3330 - Introduction to Homeland Security**

**Credits:** 3

**Description:** This course will enable the student to identify the important components of homeland security. The student will recognize the agencies associated with homeland security and their inter-related duties and relationships. The student will explore the historical events that have impacted homeland security, the state, national, and international laws affecting homeland security, and the most critical threats, especially terrorism, confronting homeland security.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 3430 - Personnel Development for Fire and Emergency Services**

**Credits:** 3

**Prerequisite(s):** General Studies English; General Studies Math

**Description:** In this course, students will examine relationships and issues in personnel administration and human resource management within the context of fire and emergency service organizations, including personnel management, organizational development, productivity, recruitment and selection, performance management systems, discipline, and collective bargaining.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 3460 - Political and Legal Foundations for Fire Protection**

**Credits:** 3

**Prerequisite(s):** General Studies English; General Studies Math

**Description:** In this course, students will examine the legal aspects of the fire service and the political and social impacts of legal issues. The course includes a review of the American legal system and in-depth coverage of legal and political issues involving employment and personnel matters, administrative and operational matters, planning and code enforcement, and legislative and political processes with regard to the fire service. At the end of the course students will be able to understand how fire and emergency services administrators perform as effective risk managers by recognizing legal and political issues affecting public safety, and finding and applying appropriate legal rules and/or political constructs as indicated.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 3800 - Fire Service Ethics**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, Oral Communication

**Description:** This course examines the basic principles of ethics as related to fire service operations and management with special attention given to current issues in the fire service.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 3911 - Cultural Competence for First Responders**

**Credits:** 3

**Prerequisite(s):** Completion of General Studies Written Communication and Quantitative Literacy Requirements

**Description:** Students in this course examine first responder roles in

society in relation to social power, class structure, ecological patterns, subcultural developments, and processes of change in the community and in the larger culture. Culture is examined in order to comprehend the interaction between subcultures in the larger society, as well as develop an understanding of cultural competence applications for first responders. Students in this course evaluate the ambivalence in the social processes of first responders, and the challenges inherent in the profession.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 3980 - Internship: Fire and Emergency Response**

**Credits:** 1-6

**Description:** Students in this course gain an internship experience in a fire and/or emergency services management setting where students are able to use the skills learned in the classroom in a supervised, professional realm. Students work as fire and emergency management practitioners in a variety of public and private outlets.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* This course is repeatable up to 6 semester hours.

## **FER 4100 - Analytical Approaches to Public Fire Protection**

**Credits:** 3

**Prerequisite(s):** Meets General Studies requirement for written communication

**Prerequisite(s) or Corequisite(s):** FER 3140

**Description:** In this course, students apply the tools and techniques of rational decision making in Fire and Emergency Services agencies. Students learn and apply data collection, statistics, probability, decision analysis, utility modeling, resource allocation, and cost-benefit analysis for fire and emergency services.

## **FER 4160 - EMI National Response and Recovery Frameworks**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, Oral Communication

**Description:** In this class, students will be introduced to the strategies and tactics behind a functioning Emergency Operations Center (EOC). Students will learn about the concept of a unified command, deployment and responses to disasters affecting communities. In addition, they will learn important decision making strategies and skills for proficiency in management of a center and the role of an Emergency Manager.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 4220 - Fire Dynamics**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** In this course, students examine the principles of fire and combustion, including the chemistry and physics of fire, ignition, flame spread and smoke movement related to fire compartments. Students apply instruction to fire service, other fire safety practitioners, which includes special hazards, mathematical fire modeling and explosions.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 4260 - Fire Investigation and Analysis**

**Credits:** 3

**Prerequisite(s):** General Studies English; General Studies Math

**Description:** In this course, students will analyze the technical, investigative, legal, and social aspects of arson, including principles of incendiary fire analysis and detection, environmental and psychological factors of arson, legal considerations, intervention, and mitigation strategies.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 4310 - Fire Protection Structures and Systems**

**Credits:** 3

**Prerequisite(s):** Meets General Studies requirement for written communication

**Description:** Students examine the underlying principles involved in structural fire protections systems, building furnishings, and fire protection systems, including water-based fire suppression systems, fire alarm and detection systems, special hazard suppression systems, and smoke management systems.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 4420 - Fire-Related Human Behavior**

**Credits:** 3

**Prerequisite(s):** General Studies English; General Studies Math

**Description:** This course provides students with a fundamental understanding of how humans respond to fire and how this understanding has been integrated into life safety systems design and development. Students will examine current and past research on human behavior, systems models, life safety education, and building design to determine interactions of these areas in emergency situations. Students will develop an understanding of a best practice building life safety system as one that combines knowledge in the areas of psychology and sociology joined with engineering and education to produce the best possible outcomes in terms of human survivability in an emergency. Successful completion of the course will require participation in a service learning project.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 4510 - Managerial Issues in Hazardous Materials**

**Credits:** 3

**Prerequisite(s):** Meets General Studies requirements for Written Communication and Quantitative Literacy

**Description:** In this course, students analyze current issues in management of a department-wide hazardous materials program and explain issues that are pertinent to officers and managers in public safety departments, including regulations and requirements for hazardous materials preparedness, response, storage, transportation, handling and use, and the emergency response to terrorism threat/incident. Other class topics include state, local, and federal emergency response planning, personnel and training, and operational considerations, such as determining strategic goals and tactical objectives.

*Note:* Some sections of this course may be taught as Service Learning.

## **FER 4610 - Disaster Planning and Control**

**Credits:** 3

**Prerequisite(s):** Meets General Studies requirement for written communication and quantitative literacy.

**Description:** Students examine concepts and principles of community risk assessment, planning, and response to fires, natural and man-made disasters, including National Institute Management System (NIMS) and Incident Command System (ICS), mutual aid and automatic response, training and preparedness, communications, civil disturbances, terrorist threats/incidents, hazardous materials planning, mass casualty incidents, earthquake preparedness, and disaster mitigation and recovery.

*Note:* Credit will be granted for only one prefix: FER or HCM. Some sections of this course may be taught as Service Learning.

**University Requirement(s):** Senior Experience

**Cross Listed Course(s):** HCM 4161

## **French**

### **FRE 1001 - Bon Voyage - A Cross-Cultural Journey Through France and the French-Speaking World**

**Credits:** 3

**Description:** In this course taught in English, students explore the vibrant cultures of France and of the French-speaking world. In the first part of the course, students examine France as a nation defined by elements of geographical boundaries, history, and language. The second part explores the French-speaking cultures around the world. Built as a cross-cultural journey, the course presents contemporary issues via culturally responsive materials and engaging activities. While broadening their knowledge, students familiarize themselves with a variety of cultural values and ways of living. Students should

consider taking FRE 1010 for an even richer experience.

**General Studies:** Arts and Humanities, Global Diversity

## **FRE 1010 - Elementary French I**

**Credits:** 5

**Description:** This course focuses on skills development in listening, speaking, reading, and writing with emphasis on the use of functional, communicative language for oral and written proficiency and cultural competency.

**General Studies:** Oral Communication

## **FRE 1020 - Elementary French II**

**Credits:** 5

**Prerequisite(s):** FRE 1010 or its equivalent

**Description:** This course is a continuation of FRE 1010 and focuses on skills development in listening, speaking, reading, and writing with emphasis on the use of functional, communicative language for oral and written proficiency and cultural competency.

**General Studies:** Arts and Humanities, Global Diversity

## **FRE 1021 - Bridging Cultures on the Job**

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** FRE1020, or permission of the instructor

**Description:** This one-credit course complements the existing FRE 1020 - Elementary French II or its equivalent. It adds a professional dimension to the study of French, with two main objectives: enhancing students' ability to communicate in specific, career-relevant situations in the target language, and developing intercultural expertise for effective communication with individuals from diverse cultural backgrounds.

**General Studies:** Arts and Humanities

## **FRE 1800 - International French Year I**

**Credits:** 1-15

**Description:** This is a variable-credit course, designed for first-year students learning French in a study abroad setting. Recognizes approved study-abroad educational experience in French speaking, comprehension, reading, and writing.

## **FRE 2010 - Intermediate French I**

**Credits:** 3

**Prerequisite(s):** FRE 1020 or equivalent

**Description:** This course is the first of a two-semester, integrated, second-year sequence. The course focuses on further skills development in listening, speaking, reading, and writing, with emphasis on the use of functional, communicative language for oral and written proficiency and on cultural competency. Class is conducted mostly in French and will include a variety of interactive activities designed to help students develop their knowledge of

French and their ability to use it productively in situations of communication.

## **FRE 2020 - Intermediate French II**

**Credits:** 3

**Prerequisite(s):** FRE 2010 or equivalent

**Description:** This course is a continuation of FRE 2010 and is the second of a two-semester, integrated, second-year sequence. The course focuses on further skills development in listening, speaking, reading, and writing, with emphasis on the use of functional, communicative language for oral and written proficiency and on cultural competency. Class is conducted mostly in French and will include a variety of interactive activities designed to help students develop their knowledge of French and their ability to use it productively in situations of communication.

## **FRE 2110 - French Reading and Conversation**

**Credits:** 3

**Prerequisite(s):** One year of college French or equivalent, or Permission of instructor

**Description:** This course helps to build oral proficiency at intermediate and advanced levels through a variety of personalized interactional activities that are based on readings appropriate to each stage of linguistic development.

## **FRE 2800 - International French Year II**

**Credits:** 1-15

**Prerequisite(s):** One year of college French or equivalent

**Description:** This is a variable-credit course that recognizes second-year study of French language and culture in an approved study-abroad setting.

## **FRE 3010 - French as a Global Language**

**Credits:** 3

**Prerequisite(s):** FRE 2010, FRE 2020, or departmental permission

**Description:** This transitional course is designed to develop those critical, linguistic, and analytical skills required to pursue French studies at the advanced level. The cultural sources studied-literary texts, films, news articles, videos, audio programs, etc.- are chosen to acquaint students with Francophone socio-cultural and literary issues.

## **FRE 3050 - Cultural Crossroads: Heritage Languages and Cultures**

**Credits:** 3

**Prerequisite(s):** ENG 1020

**Description:** Cultural Crossroads focuses on heritage languages and cultures in the USA. Students gain the cultural background necessary for insightful interaction with the rich diversity of heritage languages and cultures present in the United States. Main topics include the variety of language families, the historical and geo-political reasons

for emigration, the establishment and treatment of immigrant diasporas, the role of differing social etiquette in cultural exchanges, the contributions of immigrants to their new country, and the importance of heritage languages in shaping identities, communities, and society.

*Note:* Not repeatable for credit under a different prefix. The course is taught in English.

**Cross Listed Course(s):** GER 3050, LANG 3050, SPA 3050

## **FRE 3110 - Survey of French Literature I**

**Credits:** 3

**Prerequisite(s):** FRE 3010 or permission of instructor; and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This introduction to French literature from the Middle Ages to the Enlightenment gives an insight into French literary, historical, and cultural development through selected reading and discussion.

## **FRE 3120 - Survey of French Literature II**

**Credits:** 3

**Prerequisite(s):** FRE 3010 or permission of instructor; completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This introduction to 19th- and 20th-century French literature emphasizes the evolution of literary style and content from Romanticism to contemporary literary schools. Readings and discussion are in French.

## **FRE 3150 - French Phonetics: Theory and Practice**

**Credits:** 3

**Prerequisite(s):** Two years of college French or equivalent, or Permission of instructor

**Description:** This course covers the essential facts of French phonology. It is aimed at improving students' pronunciation and articulation and introducing them to the field of linguistics.

## **FRE 3310 - Advanced French Composition and Grammar**

**Credits:** 3

**Prerequisite(s):** FRE 2010, FRE 2020 or equivalent, or Permission of instructor

**Description:** This course is designed to reinforce and further develop writing skills, thus enabling the student to combine accuracy with imagination and inventiveness in writing French.

## **FRE 3320 - Cinema in French for Advanced Conversation**

**Credits:** 3

**Prerequisite(s):** FRE 3010 or Senior Standing or Instructor's

Permission

**Description:** This course explores French-language films and provides a vehicle for advanced-level French language comprehension and expression. While students receive an enriched understanding of contemporary French culture, they are encouraged to use advanced structures of the language, as well as other aspects of grammar and idiomatic expressions.

### **FRE 3550 - French Historical Perspectives**

**Credits:** 3

**Prerequisite(s):** FRE 3010 or permission of instructor; completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This survey chronologically presents major political, societal, and cultural movements that have molded France and the French throughout history.

### **FRE 3560 - Contemporary Socio-Cultural Issues**

**Credits:** 3

**Prerequisite(s):** FRE 3010 or permission of instructor; completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This course provides in-depth presentations and analysis of recent social, cultural, political, and economic issues important to an understanding of contemporary France.

### **FRE 3600 - Special Topics in French Cultures**

**Credits:** 3

**Prerequisite(s):** FRE 2020 or permission of the instructor

**Description:** Students discover and engage critically with a broad sampling of French and Francophone cultural production. Students read, watch, write about, and discuss a variety of works that may include graphic novels, detective fiction, music, and other forms of popular culture, as well as new historical perspectives. The topics vary from semester to semester. The course is conducted entirely in French.

*Note:* This course may be repeated under different topics twice for a total of 6 credits.

### **FRE 3650 - Introduction to French Translation**

**Credits:** 3

**Prerequisite(s):** FRE 2020 or permission of the instructor

**Description:** This course is an introduction to the principal topics in the discipline of translation. The student translates a variety of texts from French to English and from English to French, discusses and critiques translations in class, examines various theoretical concepts of translation, and analyzes grammatical, lexical and cultural issues faced by translators. The student also identifies fundamental issues specific to various translation domains, develops essential skills for researching terminology, and translates texts from those areas. The student is familiarized with the technical, business and ethical sides of freelance translation.

### **FRE 3800 - International Advanced French**

**Credits:** 1-15

**Prerequisite(s):** At least junior standing in French or equivalent

**Description:** This course recognizes upper-division study in language, culture, and literature in a study abroad setting. It uses a variety of methods and includes reading, writing, and discussion seminars in French.

### **FRE 4520 - Modern French Theater**

**Credits:** 3

**Prerequisite(s):** Three years of college French or equivalent, or Permission of instructor; completion of General Studies requirements; and senior standing.

**Description:** This is a sampling of the French dramatists who have not only contributed to literary development, but who also have had an impact on society and culture. Theater analysis techniques will also be stressed.

**University Requirement(s):** Senior Experience

### **FRE 4530 - The French Novel**

**Credits:** 3

**Prerequisite(s):** Three years of college French or equivalent, or permission of instructor; completion of General Studies requirements; and senior standing.

**Description:** This is a sampling of 19th- and 20th-century French novels that will be studied in depth using several literary analysis techniques.

**University Requirement(s):** Senior Experience

### **FRE 4540 - Literature, Culture, and Translation**

**Credits:** 3

**Prerequisite(s):** FRE 3310 and/or Senior standing or permission of instructor

**Description:** This course is designed to allow students to use the various skills that they have developed during their studies of French language, culture and literature at an advanced level. Students analyze and apply translation techniques (from both French to English and English to French) and demonstrate an ability to analyze cultural differences that affect translation, both of text and image. The course provides a practical application of skills toward a service-learning translation project and includes reflection on the service learning process. Enrollment is limited to 15 students.

*Note:* Some sections of this course may be taught as Service Learning.

### **FRE 4750 - Senior Seminar in French Studies**

**Credits:** 3

**Prerequisite(s):** Senior standing, at least two courses at the FRE 3000-level

**Description:** This is an intense thematic seminar on either a literary

or cultural topic emphasizing a comparative study in the former and a multidisciplinary approach to the latter.

## Gender, Women and Sexualities

### GWS 1001 - Introduction to Gender, Women, and Sexualities Studies

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading, writing and mathematics.

**Description:** In this course students learn the foundational concepts and theories underlying the interdisciplinary field of Gender, Women, and Sexualities Studies. Students approach issues regarding gender, sexualities and social structures of power from an interdisciplinary perspective to analyze and influence behaviors and actions across social, economic, political, and geographic contexts.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

### GWS 1030 - Introduction to Social Justice and Decoloniality

**Credits:** 3

**Description:** This course introduces students to the interdisciplinary fields of Social Justice and Decolonial Studies through interdisciplinary perspectives, methods, and approaches. Students learn about privilege, power, and oppression and their relationships to race, class, gender, sexuality, and other identities. This course asks complex and difficult questions regarding colonialism, decoloniality, sovereignty, and agency. It offers students opportunities to study social movements, and engage in social justice and decolonial praxis.

*Note:* Credit will be granted for only one prefix.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Cross Listed Course(s):** AAS 1030, CHS 1030, NAS 1030

### GWS 1090 - Social Justice and Advocacy

**Credits:** 3

**Description:** Students in this course survey theories and methods of social justice work. Students examine intersecting methods of oppression, modes of resistance, and strategies towards social transformation. Students also develop the analytical and practical skills necessary to address multiple and intersecting forms of oppressions and injustice.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** AAS 1090, CHS 1090

### GWS 1200 - Sexuality, Race, and Power

**Credits:** 3

**Description:** In this course, students explore studies at the junction of race and sexualities including the histories, major theories and issues through an intersectional lens. Students learn foundational concepts and ideas that equip them with social and behavioral

sciences fundamentals. Students apply intersectional analyses to the experiences of sexual and gender minorities within communities of color; (e.g., Native American, Black, Chicana/o/e, Asian American and Southwest Asian and North African).

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

**University Requirement(s):** Ethnic Studies & Social Justice

### GWS 1300 - Asia in Global Perspective

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** This course is an overview of Asia's diverse geographies, peoples, histories, and contemporary developments from an interdisciplinary perspective. Throughout the course, students investigate the intersection between domestic and global factors in shaping contemporary Asian experiences. Topics include Asia's dynamic cultures, rich philosophical, religious, and linguistic traditions, vibrant economies, and various types of political systems. Students also reflect on how issues such as colonization, nation-building, gender, and migration shape contemporary Asia and its many representations.

*Note:* Credit will be granted for only one prefix (SOC, ANT, GWS, HIS, LANG, or PSC).

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Guaranteed Transfer:** GT-SS3

**Cross Listed Course(s):** ANT 1300, HIS 1260, LANG 1260, PSC 1300, SOC 1300

### GWS 1550 - Introduction to Transgender Studies

**Credits:** 3

**Description:** This course explores the transgender experience, focusing on Western cultural definitions and concepts. The course covers transgender basics, including definitions and language; the history of the transgender movement; the legal, social, and medical aspects of transition; current political issues within and for the movement; cultural aspects of gender diversity; well-known trans people in Western culture; working with transgender populations; and being a good ally and advocate. By the end of the course, students possess the language, knowledge, and skills to work with transgender populations in a variety of settings and understand the diversity of the transgender experience.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

### GWS 1600 - Women in World History

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading and writing pre-assessment placement tests

**Description:** This course will explore the role, experiences, and contributions of women in the family, the economy, the culture, the religions and the political structure from a broad, comparative framework. Students will become familiar with how women's history modifies the traditional interpretations of historical events.

*Note:* Credit will be granted for only one prefix: HIS or GWS.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

**Cross Listed Course(s):** HIS 1600

## **GWS 2010 - Interdisciplinary Research Methods in Social Issues**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or AAS 1010 or CHS 1000 or

Permission of instructor

**Description:** This course focuses on the interdisciplinary study of methods, analyses and critiques used by scholars to study social issues within and across a range of disciplines (e.g., history, arts, humanities, sciences, education, health, economics, law and social/behavioral sciences). Research designs and general statistical interpretation will be reviewed for each methodology. Techniques for laboratory and field research, conducting qualitative and quantitative studies, and writing research reports will also be included.

*Note:* Credit will be granted for only one prefix: GWS or AAS or CHS.

**Cross Listed Course(s):** AAS 2010, CHS 2030

## **GWS 2100 - Women of Color**

**Credits:** 3

**Description:** In this course students focus on the narratives, practices and everyday life experiences of women of color in the U.S. The similarities and differences among diverse groups of women, and other gender expansive minorities of color, are also examined to better understand the complexity of our gendered and racialized lives. Through an intersectional perspective, students address issues of work, health, interpersonal violence, media representations, globalization, as well as activism, social change and theoretical innovation. Students complete the course with a better understanding of the systems of privilege and oppression that have historically shaped the experiences of women of color and will acquire new tools to analyze social and cultural experiences.

*Note:* Credit will be granted for only one prefix: AAS, CHS, or GWS.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** AAS 2100, CHS 2100

## **GWS 2200 - Feminist and Queer Research Methods**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** GWS 1001 or GWS 1200

**Description:** This course focuses on feminist and queer research methods and methodologies specific to interdisciplinary research. It includes an overview of basic quantitative methods and analyses, along with an in-depth exploration of qualitative and mixed-methods research design. The course also covers topics such as: standpoint and critical theories, research ethics, feminist ethnography, and community research. The course provides a queer framework for

critiquing power, authority, and knowledge, all of which are essential concepts in feminist and queer research design and analyses.

## **GWS 2400 - Women's Folklore and Folklife**

**Credits:** 3

**Prerequisite(s):** ENG 1020

**Description:** This course provides an exploration of folklore in everyday life, folk narrative, and other verbal genres, cultural forms, and manifestations of traditional expressive behaviors as they pertain to reinforcing and resisting gender norms and practices within diverse cultures. It offers a critical examination of how women creatively use folklore to affirm and subvert their roles within sexist, racist, classist, and heterosexist cultural systems.

*Note:* Credit will be granted for one prefix only: ANT or GWS.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH1

**Cross Listed Course(s):** ANT 2400

## **GWS 2450 - Contemporary Women's Literature**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** In this course, students study various texts by women writers with an emphasis on contemporary writing, or writing from the 20th Century to the present. Students read, analyze, discuss, and write about women's texts through gender studies and feminist studies theoretical lenses. Students focus on different sociocultural and sociopolitical issues that exist and surface in women's writing. Course content is themed around issues that are most relevant and prevalent to women and their stories.

*Note:* Credit granted for only one prefix: ENG or GWS.

**Cross Listed Course(s):** ENG 2450

## **GWS 2600 - Meditation and Activism**

**Credits:** 2

**Description:** Students in this course explore basic lay meditation techniques and how they can support various forms of social justice activism. It explores the centrality of the body in the workings of oppression and privilege and organized social change through readings and mindfulness exercises. Through this focus, we familiarize ourselves with the texts of environmental and racial justice activists, and feminists, queer, and other gender justice advocates who have integrated meditation and mindfulness in their academic and activist work. This course provides students an introduction to the literature on mindful anti-oppression work and basic self-care through simple meditation practices.

*Note:* Credit granted for only one prefix.

**Cross Listed Course(s):** CPD 2600

## **GWS 2770 - Gender and Communication**

**Credits:** 3

**Description:** This course explores the relationship of gender to the communication process examining issues of power, conflict, sex role



stereotypes, and cultural patterns of interaction on relationships and identity. Students explore the multiple ways that masculinity and femininity are created and sustained through communication in such contexts as families, schools, the workplace, and the media. Students use feminist theoretical perspectives and interpretive approaches from communication studies to analyze cultural assumptions and the relationships of notions of gender to class, sexuality and race.

*Note:* Credit will be granted for only one prefix: COMM or GWS.

**General Studies:** Arts and Humanities

**Cross Listed Course(s):** COMM 2010

## **GWS 3050 - Psychology of Gender**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course presents a survey of major contemporary approaches to gender, including a range of scientific and theoretical work. A constructionist approach is utilized to synthesize the views. The course then reviews several major areas of application, including relationships, health, violence, workplace, and achievements.

*Note:* Credit will be granted for only one prefix: PSY or GWS.

**Cross Listed Course(s):** PSY 3050

## **GWS 3070 - Psychology of Sexual Orientation**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course explores psychological theory and research dealing with sexual orientation, with an emphasis on lesbian, gay and bisexual (LGB) identity. Topics include historical and theoretical frameworks, homophobia and heterosexism, origins of sexual orientation, LGB identity development and coming out, diversity, relationships and parenting, the role of community, and others.

*Note:* Credit will be granted for only one prefix: GWS or PSY.

**Cross Listed Course(s):** PSY 3070

## **GWS 3130 - Independent Study in Gender, Women, and Sexualities Studies**

**Credits:** 1-6

**Prerequisite(s):** GWS 1001 or permission of instructor

**Description:** This course engages students in an in-depth, faculty-guided conversation on Gender, Women, and Sexualities Studies theories and practices. In collaboration with their GWS faculty mentor, students will develop a comprehensive course proposal, with student learning objectives and detailed course schedule specific to their area of interest. Through the selections read, students will learn the theory, history, and scope of the literature in the field and will develop an extensive research project about their specific topic. This course offers individualized instruction and personal consultation with faculty.

*Note:* This course may be repeated for a total of 6 credits.

## **GWS 3170 - Social Justice, Self, and Citizenship: A Service Learning Course**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or PSY 1001 and six additional semester hours in Women's Studies or six additional semester hours in Psychology

**Description:** Social justice encompasses research, activism and current events about manifestations of social oppression and social change. This course focuses upon psychological theory and self-identity in the context of multicultural and social justice issues (e.g., classism, racism, sexism, heterosexism, and ableism). Lectures, readings, and discussions are integrated with a required service learning placement involving 30 hours of volunteer work in a setting for the underserved. Students have the opportunity to a) reflect on their values, assumptions, place within, and emotional reactions to social oppressions; b) analyze the political systems that surround their communities and institutions; and c) apply their reflections to their career goals and personal development.

*Note:* Credit will be granted for only one prefix: PSY or GWS. Some sections of this course may be taught as Service Learning.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** PSY 3170

## **GWS 3180 - Feminist Philosophy**

**Credits:** 3

**Prerequisite(s):** PHI 1010 or 1030 and junior standing are recommended

**Description:** This course involves an examination of traditional philosophical topics and questions from the perspective of contemporary feminist theory. Special consideration is given to feminist critiques of logic, rationality and scientific objectivity and to feminist approaches to ethical, social and political thought.

*Note:* Credit will be granted for only one prefix: PHI or GWS.

**Cross Listed Course(s):** PHI 3180

## **GWS 3230 - Bodies and Embodiment**

**Credits:** 3

**Description:** Students in this course examine multiple interdisciplinary discourses about gendered, sexed, raced, classed, and able bodies, beginning with Simone de Beauvoir's *The Second Sex*. Through discussion, lecture and critical evaluation of key theories in Body and Embodiment Studies (by Michel Foucault, Judith Butler, Susan Bordo, bell hooks, and Iris M. Young) students in this course explore the inscribed, as well as the lived, body--bodies that are gazed at, desired, fashioned, heard, and eroticized. In order to historically situate these discourses, the body is presented as a social construct that is controlled and manipulated but that also has unique experiences which cannot be verbalized and/or managed.

*Note:* Credit will be granted for only one prefix: ITP, SOC, or GWS.

**Cross Listed Course(s):** ITP 3230, SOC 3230

## **GWS 3240 - American Indian Women**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or NAS 1000 Recommended

**Description:** This course is designed to expose the student to the diverse and varied works of American Indian women. By studying

the literature, music, and dance of the American Indian woman, students explore the historical factors that have impacted the lives of both American Indians and non-native people. This course also examines the transition that American Indian women have made in order to survive and attempt to understand their struggles for freedom.

*Note:* Credit will be granted for only one prefix: NAS or GWS.

**Cross Listed Course(s):** NAS 3240

### **GWS 3250 - Black Women Writers**

**Credits:** 3

**Prerequisite(s):** AAS 1010 or ENG 1020

**Description:** The course studies selected works chosen as representative of the issues and concerns of Black women worldwide as voiced by Black women writers from Africa and the Diaspora.

*Note:* Credit will be granted for only one prefix: AAS, ENG, GWS

**Cross Listed Course(s):** AAS 3250, ENG 3250

### **GWS 3260 - Gender, Social Justice and the Personal Narrative**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** This course explores personal narrative as a vehicle for discovery and dissemination of social justice themes as they connect to the lived experiences of the authors. Students take part both as readers and authors, narrating excerpts from their own lives as they relate to social justice themes.

### **GWS 3270 - Beauty Cultures**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course, students explore contemporary and historical beauty cultures (both in the U.S. and in a global context), their critiques, and their impact on the lived experience of individuals, including themselves. We attempt to discern and untangle the interplay between individual aesthetic impulses, informal transmission between folk groups, and larger cultural and structural forces as they pertain to the beautification of the human face and body.

**University Requirement(s):** Arts and Humanities, Global Diversity

### **GWS 3280 - Queer Theory**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or GWS 1200 or GWS 1550

**Description:** In this course, students survey a broad array of scholarship in queer theory, as well as applications of queer theory to explore the ways individuals, groups and communities form and resist norms. Ultimately, students analyze a variety of issues such as sexuality and gender, race and nation, medical and carceral practices, trans studies, disability studies, and decolonial practices, using queer theories.

*Note:* Credit will be granted for only one prefix: SOC or GWS.

**Cross Listed Course(s):** SOC 3280

### **GWS 3300 - Women's Leadership**

**Credits:** 2

**Description:** This course will examine the various roles, models, and guiding principles of women in leadership. The discussions will be intentionally interactive as students share their own experience of women's leadership ranging from traditional to unconventional. Students will identify the values most clearly associated with women's leadership crossculturally and read diverse women's experiences in their communities. Each student will interview a woman whom they deem to be in a leadership role, though not necessarily a formal position, and will present his or her findings to the class. All class members will reflect on their own leadership values in relation to the course material.

*Note:* Credit will be granted under one prefix only: CPD or GWS.

**Cross Listed Course(s):** CPD 3300

### **GWS 3310 - Women and the Law**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or CJC 1010 or Permission of instructor

**Description:** This course introduces students to basic concepts that define the relationship of women to the law. Students will learn about the historical conditions and legal perspectives that affect women's rights in the U.S. This course deals specifically with women's equal participation in citizenship, work, education, reproductive rights, and protection from violence.

*Note:* Credit will be granted for only one prefix: CJC, PSC, SOC, and GWS.

**Cross Listed Course(s):** CJC 3710, PSC 309J, SOC 365B

### **GWS 3350 - Gender and Society**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or GWS 1001; or Permission of instructor

**Description:** Explore what it means to live gendered lives in a gender-conscious society in which cultural, political and economic forces intersect with race, ethnicity, class, age, sexuality and other social positions to affect the self, our opportunities and our life chances.

*Note:* Credit will be granted for only one prefix: SOC or GWS.

**Cross Listed Course(s):** SOC 3430

### **GWS 3360 - Women in European History**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course provides an historical analysis of the role and contribution made by women in the development of Western civilization from Neolithic times to the present.

*Note:* Credit will be granted for only one prefix: GWS or HIS.

**Cross Listed Course(s):** HIS 3360

## **GWS 3365 - Structural Violence, Poverty and Human Rights**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** In this course, students apply a structural violence framework to make visible the power inequalities that result in producing and reproducing injustices and violations of socioeconomic rights. The use of ethnographic case studies allows students to explore a human rights-based approach to collective actions for justice. Through group discussion, analysis, and workshops, student learn to take political responsibility for injustices beyond those we individually witness or experience.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** ANT 3365, PSC 3365

## **GWS 3395 - Transnational Genders and Sexualities**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or GWS 1200 or ANT 1310 or ANT 2500 or ENG 1020 or ENG 1021

**Description:** This course explores the transnational production of gender and sexualities. It examines how people, ideas and capital moving across borders play a role in the development of gender and sexual identities, practices, and communities. Through this focus, the course engages transnational phenomena such as tourism, migration, global LGBT communities, colonization and human rights.

*Note:* Credit will be granted for only one prefix: ANT or GWS

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Cross Listed Course(s):** ANT 3395

## **GWS 3400 - Human Trafficking: Public Health Response**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** Students explore human trafficking utilizing global public health frameworks to examine the interprofessional nature of community response in Colorado. A review of multidisciplinary perspectives on labor and sex trafficking provides a comprehensive understanding of this human rights issue. Further, students examine the tactics used by traffickers to recruit and control victims and the effects of abuse on survivors. Students will be presented with an overview of the United Nations, U.S. federal and Colorado state laws to curb trafficking. Finally, students evaluate global and local efforts of the current anti-trafficking movement, including ways to be involved.

*Note:* Credit may be granted for only one prefix.

**Cross Listed Course(s):** AAS 3405, CJC 3650, HSP 3405, PUB 3400, SWK 3405

## **GWS 3430 - LGBTQ+ Literature**

**Credits:** 4

**Prerequisite(s):** ENG 2000 or ENG 2100 or GWS 1200

**Description:** Students read, analyze, and write about various forms of literature produced by and about the LGBTQ+ experience with consideration of historical and social contexts. Students read the work of important LGBTQ+ writers in a variety of literary periods and cultures and critical readings on LGBTQ+ history and pertinent theory, and students explore how historical contingencies and political debates inform literature, as well as how literature and culture inform and challenge public and political opinion.

*Note:* Credit will be granted for only one prefix: ENG or GWS.

**Cross Listed Course(s):** ENG 3360

## **GWS 3460 - Women and the Social Sciences: Variable Topics**

**Credits:** 3

**Prerequisite(s):** GWS 1001, SOC 1010, or permission of instructor; completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** These courses focus on women in relation to the social sciences under such titles as: Women and the Family; Women and Addictions; Women in the Criminal Justice System; Domestic Violence; Cross-Cultural Roles of Women; Women and Politics. Check Class Schedule for each semester's offerings.

*Note:* This course may be repeated once for credit under different topics.

## **GWS 3470 - Biology of Women**

**Credits:** 3

**Prerequisite(s):** BIO 1000 or GWS 1001 or Permission of instructor

**Description:** An examination of the anatomy and physiology of sex in humans, the mechanisms involved in formation of sex and gender, and the interactions between science, society, and medical practice with regard to issues of sex and gender.

*Note:* Credit will be granted for only one prefix: BIO or GWS.

**Cross Listed Course(s):** BIO 3471

## **GWS 3490 - Queer Identities**

**Credits:** 3

**Prerequisite(s):** GWS 1200, GWS 1550, or SOC 1010; or permission of instructor

**Description:** Students explore the various ways queer, trans and other sexual and gender minoritarian subjects construct, embody and express identity. Students analyze the behaviors, strategies and practices queer and trans, individuals (and their communities) utilize to self-identify. This course covers queer self-presentation and embodiment in relation to the intersections with capital, nation and race.

*Note:* Credit will be granted under one prefix only: GWS or SOC.

**Cross Listed Course(s):** SOC 3490

## **GWS 3500 - Social Work Practice with LGBTQ People**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course explores concepts and methods useful in assessing and addressing the strengths, developmental needs, and social issues pertinent to lesbian, gay, bisexual, transgender, queer (LGBTQ) as well as other sexual minority identities. Multiple levels of practice issues are explored, including individual, group, family, policy, and community. Concepts of oppression and privilege are explored as they relate to LGBTQ people's experiences as well as experiences within LGBTQ communities.

*Note:* Credit will be granted for only one prefix: GWS or SWK.

**Cross Listed Course(s):** SWK 3500

## GWS 3510 - Feminist Theories and Practices

**Credits:** 3

**Prerequisite(s):** GWS 1001, GWS 2100, and 6 additional hours of upper-division, GWS coursework; or permission of instructor

**Description:** This course examines some of the key areas of inquiry in contemporary feminist theories and practices. Specifically, we reflect on feminist histories and question the notions of being, knowing, desiring and moving as sexed, gendered, raced, and classed beings. The course investigates the transformative contributions of liberal feminism, radical feminism, postcolonial and decolonial feminisms, queer theory and transnational feminisms to all academic disciplines. We identify how feminist theories and practices illuminate some of the pressing issues of our time, such as neocolonialism, environmental degradation, war, poverty and violence.

## GWS 3530 - Gender and Global Politics

**Credits:** 3

**Prerequisite(s):** GWS 1001 or PSC 1020

**Description:** This course introduces students to the application of feminist theorizing of international relations to critical global issues. The first part of the course examines feminist international relations theory to ascertain how gender informs global politics. The second part of the course examines a variety of global issues, such as war, global economic relations, human trafficking, and the environment, to see how the ways we understand, and therefore construct policies to deal with these issues, are gendered.

*Note:* Credit will be granted for only one prefix: GWS or PSC.

**Cross Listed Course(s):** PSC 3530

## GWS 3540 - Women in the Developing World

**Credits:** 3

**Prerequisite(s):** GWS 1001 or PSC 1020 or ANT 1310

**Description:** This course presents a cross-cultural study of women's lives in the developing world by examining two main issues: the influence of culture on women's issues and politics' impact on women. By the end of this course students will not only learn about the lives of women in the developing world but also become familiar with how women across the globe articulate the desire for equality.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** ANT 3540, PSC 3540

## GWS 3550 - Chicana Feminisms

**Credits:** 3

**Prerequisite(s):** CHS 1000 or GWS 1001; or permission of instructor

**Description:** This course will provide students with a general background on Chicana feminist thought. Chicana feminism has carved out a discursive space for Chicanas and other women of color, a space where they can articulate their experiences at the intersection of race, class, gender, and sexuality, among other considerations. In the process, Chicana feminists have critically challenged Chicano nationalist discourse as well as European and North American feminism. The course will address the diversity in thinking and methodology that defines these discourses thus acknowledging the existence of a variety of feminisms that occur within Chicana intellectual thought. The course will also explore the diversity of realms in which this feminist thinking is applied: labor, education, cultural production (literature, art, performance, etc.), sexuality, and spirituality, among others.

*Note:* Credit will be granted for only one prefix: CHS, GWS, or HON.

**Cross Listed Course(s):** CHS 3460, HON 3460

## GWS 3560 - Sociology of Sexuality

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** This course is a survey of historical, cultural, and social aspects of human sexuality. The interplay between sex and society will be the major focus. Cross-cultural and historical analysis of sexual values and behavior will be examined. Competing and conflicting sexual value systems in contemporary societies will be analyzed. Other topics include: sexual scripts, sexual deviance and social control, sexual socialization processes, and the social bases of sexual dysfunction.

*Note:* Credit will be granted for only one prefix: GWS or SOC.

**Cross Listed Course(s):** SOC 3460

## GWS 3600 - Gender in Social Work Practice

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course examines social work practice from a feminist theoretical perspective. It examines issues of equality, social justice, policy and practice within a patriarchal society. This course examines how gender is produced and reproduced in contemporary society, and how gender matters for social work practice. Multiple levels of practice issues are explored, including individual, group, family, policy, and community. Concepts of oppression and privilege are explored as they relate to people's gendered experiences.

*Note:* Credit will be granted for only one prefix: GWS or SWK.

**Cross Listed Course(s):** SWK 3600

## GWS 3650 - Economics of Social Justice

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course, students apply the tools of economic analysis to issues affecting marginalized groups (as determined by, for example, race, ethnicity, socioeconomic status, age, and ability) in the United States. Students examine labor market disparities and how factors such as racism and sexism affect outcomes in these markets. Students also explore the role of institutions and social and cultural norms in creating and maintaining disparities in economic outcomes. In particular, students analyze disparities in education, the criminal justice system, and housing and wealth from the economic perspective. Across all topics, students learn how power and privilege intersect across different racial, ethnic, sexual, and class identities. Finally, students use economic tools to evaluate policies and strategies that promote social justice.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** ECO 3600

## GWS 3651 - U.S. Women's History

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course emphasizes women's changing roles in American history. Students examine women's status, image and legal rights and how they evolved due to social and economic changes and as a result of activism of reformers and writers. Students study the nuances and differences between and among American women, assessing the intersectional relationship between gender, race, class, and sexuality. The course stresses both the changes and the continuities over the last 300 years.

*Note:* Credit will be granted for only one prefix: GWS or HIS.

**Cross Listed Course(s):** HIS 3650

## GWS 3655 - Women of the American West

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course will provide students with an overview of the ways in which women of many cultures shaped the North American West. Women developed the West as a home place, borderland, and frontier. Course themes that will be explored in lectures, discussion, and assignments include gender, masculinity, class, race, ethnicity, sexuality, labor, and environment.

*Note:* Credit will be granted for only one prefix: GWS or HIS.

**Cross Listed Course(s):** HIS 3655

## GWS 3660 - Poverty, Race and Gender

**Credits:** 3

**Prerequisite(s):** SWK 1010 or permission of instructor

**Description:** This course introduces the student to the relationship between race, gender and poverty and examines the underlying causes of the "feminization of poverty" in the United States. Social, economic, age-based and ethnic factors are explored in detail. The differences between prevailing stereotypes and current realities are highlighted.

*Note:* Credit will be granted for only one prefix: CHS, GWS, SOC, or SWK.

**Cross Listed Course(s):** CHS 3660, SOC 3660, SWK 3660

## GWS 3670 - Contemporary Issues in Women's Studies: Variable Topics

**Credits:** 1-3

**Prerequisite(s):** GWS 1001 or Permission of instructor

**Description:** Objectives vary with course title, but generally focus on current issues that are constantly changing and developing in this area. Check Class Schedule for each semester's offerings.

*Note:* This course may be repeated once for credit under different topics.

## GWS 3700 - Psychology of Group Prejudice

**Credits:** 3

**Prerequisite(s):** PSY 1001 or AAS 1010 or GWS 1001

**Description:** This course covers psychological theory and research that examines causes, effects, expressions, and reduction of group prejudice. Various types of group prejudice are addressed, most notably prejudice against cultural and ethnic minorities in the United States (i.e., Native Americans, African Americans, Hispanic Americans, and Asian Americans). Sexism and heterosexism also are discussed.

*Note:* Credit will be granted for only one prefix: AAS, GWS, or PSY.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** AAS 3700, PSY 3700

## GWS 3780 - Gender and Disaster

**Credits:** 3

**Description:** This course analyzes gender's shaping global development and disaster vulnerability by focusing on the experiences of girls and women before, during, and after disastrous events. It examines intersecting patterns of vulnerability and response based on gender, class, race/ethnicity, age, nationality and other factors. Students examine gender-focused case studies from developed and developing societies and investigate the practical implications of gender-sensitive sociology of disaster.

*Note:* Credit will be granted for only one prefix: ANT, GWS, or SOC

**Cross Listed Course(s):** ANT 3361, SOC 3780

## GWS 3855 - History of Sexuality

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor.

**Description:** How can we understand history better if we consider it through the lenses of gender and sexuality? In this course, we examine these concepts as they changed over time. We consider how different societies have defined and understood gender and sexuality, and how people who have claimed different gender identities experienced and expressed themselves in medicine, the law, labor, politics, religion, nationality, family life, and popular culture. How does sex intersect with race and class? How have ideals of the body and gender expression shifted? Specific cultures, eras, and themes covered vary, depending on the instructor's specialization.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** HIS 3855

## GWS 3910 - Women's Spirituality

**Credits:** 3

**Prerequisite(s):** GWS 1001 Recommended

**Description:** This course explores the spiritual, psychological, social, political, and cultural aspects of the women's spirituality movement through reading, research, critical reflection, writing, and optional creative /experiential projects. Students engage these concepts and theories in relation to women's experiences within diverse religious traditions, as well as personal spiritual understanding and practices. In addition, students apply a spiritual feminist critique to gender socialization, body image, cultural constructions of power and subordination, social activism, and personal agency.

## GWS 3920 - Gender Politics of Health

**Credits:** 3

**Prerequisite(s):** GWS 1001 or SOC 1010 or PSY 1001

**Description:** This course focuses on health issues specific to women and the challenges historically faced by women in the health care arena. Students will learn about the role of patriarchal medical mythologies that exist throughout various cultures in the oppression of women, especially minority women, and how women have reclaimed healing, health, and communities of medical knowledge production. This course specifically explores feminist, physiological, psychological, and sociological factors in women's health within a global context.

*Note:* Credit will be granted for only one prefix: PSY, SOC, GWS, or ITP

**Cross Listed Course(s):** PSY 3920, SOC 3920, ITP 3920

## GWS 3930 - Theories of Love and Sex

**Credits:** 3

**Prerequisite(s):** ENG 1020 or permission of instructor

**Description:** This course synthesizes interdisciplinary theories about love and sex. It explores the complexities of love and sex, including their fundamental meanings, contemporary understandings, identity implications as well as their historical constructions. An important dimension of this exploration is the source and meaning of the moral valuation assigned various forms of sexual activity.

**General Studies:** Social and Behavioral Sciences, Global Diversity

## GWS 3940 - Victim Advocacy for Survivors of Interpersonal Violence

**Credits:** 3

**Prerequisite(s):** GWS 1001 and six additional hours in Gender, Women, and Sexualities Studies or HSP 1010 and six additional hours in Human Services

**Description:** This course provides a foundation to the field of interpersonal violence victim advocacy to complement trainings provided by local victim advocacy agencies and police departments. The primary focus is victim advocacy as it relates to interpersonal violence (i.e., relationship violence, sexual violence, and stalking). This course helps prepare students to engage in advocacy by providing a broad understanding of the role of power and control in violence and its root causes, the historical perspective on anti-violence movements, the impact of trauma and biopsychosocial considerations, intersectional identities and vulnerability, laws and policies surrounding interpersonal violence, methods of justice and healing, community activism, and resources available to survivors.

*Note:* Credit will be granted for only one prefix: GWS or HSP.

**Cross Listed Course(s):** HSP 3940

## GWS 3960 - Feminist Art Since 1960

**Credits:** 3

**Prerequisite(s):** ARTH 1800 or GWS 1001 with "C-" or better or permission of department

**Description:** Students in this course examine the various intersections between art and feminism beginning with the rise of second-wave feminist politics and continuing to the present. Work by artists who self-consciously identified as feminist or work that has been meaningfully read through feminist theories, including queer and trans theories, is the focus. Students learn competing and diverse definitions of feminism and analyze the ways race, class and gender are intertwined and represented by artists globally. Through their assignments and discussions, students evaluate art's relationship to changing social, political, and philosophical conditions throughout the period.

*Note:* Credit will only be granted for one prefix: ARTH or GWS.

**Cross Listed Course(s):** ARTH 3385

## GWS 4100 - Women's Holistic Health

**Credits:** 3

**Description:** This course takes an in-depth, holistic approach to women's health. While highlighting new research findings, the class will explore the optimal integration of conventional medicine and complementary modalities for common women's health concerns. Students will deepen their awareness of tools women can utilize to maintain health and prevent illness.

*Note:* Credit will be granted for only one prefix: GWS or ITP.

**Cross Listed Course(s):** ITP 4100

## GWS 4160 - Human Trafficking

**Credits:** 3

**Prerequisite(s):** GWS 1001, or AAS 1010, or CJC 1010, or HSP 1010, or SWK 1010; upper-division standing; or permission of instructor

**Description:** This course explores human trafficking on international and local levels. A review of multidisciplinary perspectives on labor and sex trafficking provides comprehensive understanding of this human rights issue. Students examine the tactics used by traffickers to recruit and control victims and the effects of abuse on victims. This course provides an overview of U.S. federal and local laws to curb trafficking, including federal Trafficking Victims Protection Act. Finally, students evaluate global and local efforts of the current anti-trafficking movement, including ways to be involved.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** AAS 4160, CJC 4160, HSP 4160, SWK 4160

## GWS 4210 - Chicanas and the Politics of Gender

**Credits:** 3

**Prerequisite(s):** CHS 1000 or GWS 1001, CHS 3460

**Description:** This course is designed to further the theoretical understandings of Chicana Feminisms. The course spends a considerable amount of time dealing with the construction of gender in Chicana/o and Latina/o communities, and how the construction of gender has impacted the daily, lived experiences of not only Chicanas and Latinas, but also of gay, lesbian, transgendered, and queer identified Chicanas/os and Latinas/os. The course examines the social construction of gender within Chicana/o and Latina/o communities through cultural texts such as academic production, art, film, popular culture, and spirituality.

*Note:* Credit will be granted for only one prefix: CHS or GWS.

**Cross Listed Course(s):** CHS 4210

## GWS 4230 - The Female Offender

**Credits:** 3

**Description:** This course examines the nature and causes of female criminality and the responses to female offending by all areas of the criminal justice system e.g. policing, courts and prisons. It blends an in-depth analysis of historical methods of addressing female criminality with an intersectional approach to finding solutions to modern-day problems that can influence criminality among girls and women such as intimate partner violence, poverty, mental illness, and the feminization of work. Topics will include gender norms, girl fights, women who kill, prostitution, human trafficking, women's prisons and women on death row. The course will also address methods for correcting and preventing female criminality from an intersectional approach.

*Note:* Credit will be granted for only one prefix: CJC or GWS.

**Cross Listed Course(s):** CJC 4230

## GWS 4240 - Gender and Violence

**Credits:** 3

**Prerequisite(s):** GWS 1001 or GWS1200 or GWS 1550 or CJC 1010 or PSC 1020 or SOC 1010 or permission of instructor

**Description:** Students analyze key patterns and structures of gender and sexual violence, with a special focus on the diverse experiences of women, queers and gender-variant people. Students draw from disciplines such as queer/trans theory and transnational feminism to illuminate iterations of and resistance to gender-based violence, including how 'safety' and 'precarity' are distributed unevenly across groups due to various social formations. Topics in this course include sexual violence, interpersonal violence, family violence, trafficking, state violence (including carceral, medical and military violence), among others.

*Note:* Credit will be granted for only one prefix: CJC, GWS, PSC, or SOC.

**Cross Listed Course(s):** CJC 4240, PSC 4240, SOC 4240

## GWS 4750 - Feminist Research and Activism

**Credits:** 3

**Prerequisite(s):** GWS 2200, GWS 3510, completion of General Studies requirements, and senior standing; or permission of instructor.

**Description:** Designed primarily for Gender, Women, and Sexualities Studies majors and minors, this seminar serves as the program capstone. The seminar focuses on interdisciplinary research writing and activism that students apply to a senior thesis and presentation. Thesis papers should reflect each student's particular focus area within the program (e.g., Transnational and Cultural Diversity, Social Justice and Activism, Bodies and Sexualities, and Interdisciplinary) and represent the broader context of gender, women, and sexualities studies and feminist theory and praxis.

**University Requirement(s):** Senior Experience

## GWS 4920 - Gender, Women, and Sexualities Studies Internship

**Credits:** 1-12

**Prerequisite(s):** GWS 1001 and permission of instructor

**Description:** This course provides an internship experience in community-based, non-profit, government, or corporate agencies that serve gender and sexual minorities, and/or underserved populations. The internship allows the student to integrate and apply gender and social justice theories to their work with community organizations, under joint supervision of the placement supervisor and gender, women, and sexualities studies professor.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

## GWS 4970 - Undergraduate Teaching Assistant Training

**Credits:** 3

**Prerequisite(s):** GWS 1001, GWS 1200, or GWS 2100 and GWS course for which the student will serve as TA with a grade of B or better

**Description:** This course provides students with an intensive experience as an undergraduate teaching assistant in courses offered through Gender, Women, and Sexualities Studies (GWS) either on campus or online. Under close faculty supervision, this course provides training and support for students to learn about feminist pedagogy and processes involved in teaching gender, women, and sexualities studies courses. Students utilize what they have learned in previous GWS courses to assist other students enrolled in these classes. The experience includes workshop attendance with additional hours of application in the course. Students need to have already taken the course for which they will be serving as a Teacher Assistant.

*Note:* Students may take the course for a maximum of six credit hours

## Geographic Information Systems

### GIS 1220 - Digital Earth: Geospatial Technologies

**Credits:** 4

**Description:** This course serves as an introduction to technologies used for visualization, measurement, and analysis of geographical features that occur on earth. Students learn basic concepts needed to understand maps, global positioning system (GPS), geographic information science (GIS) and remote sensing of the environment. Topics include the nature and characteristics of geospatial technologies, concepts of spatial data, principles and methods of capturing and representing spatial data, and methods of analysis and interpretation of maps and visualizations. This course addresses basic analysis and spatial problem-solving skills. Intermediate spatial analysis skills are taken up in subsequent GIS courses.

*Note:* Students may not receive credit for GEG 1220 and GIS 1220.

**General Studies:** Natural and Physical Sciences

### GIS 2250 - Geographic Information Systems

**Credits:** 4

**Prerequisite(s):** Quantitative Literacy General Studies requirement should be completed before taking this class.

**Description:** This is a foundation course that provides students with the basic knowledge of Geographic Information Systems (GIS) with regard to theoretical, technical, and application issues. It introduces and provides direct experience with the techniques used to analyze and display spatial data using GIS. The skills and knowledge developed in this course will be used to support upper-division courses.

### GIS 2710 - Global Positioning Systems

**Credits:** 2

**Prerequisite(s):** GIS 1220 with a grade of "C-" or better

**Description:** This course is an introduction to the science of land navigation using maps and a Global Positioning System (GPS). Students navigate positions in the field and apply cartographic principles to GPS lab and field exercises. Emphasis is given to the integration of GPS data with Geographic Information Systems (GIS).

### GIS 3250 - Cartography

**Credits:** 3

**Prerequisite(s):** GIS 2250 and MTH 1210 with grades of "C-" or better; or permission of instructor

**Description:** This course focuses on basic cartographic and visualization concepts and techniques to convey spatial information. Students will critique and design basic cartographic products such as dot, choropleth, contour, and proportional symbol maps using Geographic Information Systems (GIS). They will explore advanced visualization techniques such as integrating data, text, and graphics, developing web maps, and animating maps to show temporal change. Cartographic applications for natural resource management and planning are stressed.

### GIS 3410 - Web Mapping

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** GIS 2250

**Description:** This course is an introduction to creating web mapping applications on the Internet and serves as an introduction to Spatial Data Infrastructures. Students design, develop, and implement web mapping applications using ESRI software and open source software. Students work with web authoring tools, learn basic javascript, and work with basic visualization tools. Lectures focus on the theories and principles behind web mapping, distributed and cloud computing, graphic design, and other principles of web-based cartography.

### GIS 3920 - Directed Study in Geospatial Sciences

**Credits:** 1-6

**Prerequisite(s):** GIS 3250 and Instructor Approval

**Description:** This course provides an opportunity for upper-division students to independently study a specific topic, initiate their own research or creative project, or assist with a research project initiated by a faculty member in the Geospatial Sciences. Proposals including expected milestones and deliverables will be developed in cooperation with a faculty advisor. The course requires permission of the instructor to enroll.

*Note:* This course may be repeated for up to 6 semester hours toward the degree.

### GIS 4810 - GIS Programming

**Credits:** 3

**Prerequisite(s):** GIS 2250 with a grade of "C-" or better

**Description:** This course is an introduction to programming and scripting for intermediate Geographic Information Systems (GIS) users. The fundamental concepts of scripting and object-oriented programming will be developed using the Python programming language. This course teaches students to design and write clearly structured programs in Python in the ArcGIS environment. Students will develop programs to manage geospatial data, perform geoprocessing analysis to solve spatial problems, and automate mapping and visualization tasks.



## GIS 4840 - Remote Sensing

**Credits:** 3

**Prerequisite(s):** GIS 2250 with a grade of "C-" or better and (MTH 1110 or MTH 1112 or MTH 1120 or MTH 1400 or MTH 1410) with a grade of "C-" or better

**Description:** This course provides an overview of photogrammetry and remote sensing principals as well as practical experience in the extraction of earth surface information from hardcopy and digital imagery. Topics include electromagnetic radiation principles, aerial cameras, photo interpretation and measurement, satellite collection systems, digital imagery characteristics, and image processing. The application of remote sensing technologies to land management fields and the integration of digital imagery within Geographic Information Systems (GIS) is emphasized.

## GIS 4850 - Spatial Modeling in Raster

**Credits:** 4

**Prerequisite(s):** GIS 2250 with grade of "C-" or better and (MTH 1110 or MTH 1112 or MTH 1120 or MTH 1210 or MTH 1400 or MTH 1410) with grade of "C-" or better or permission of instructor

**Description:** This is an upper-division course in Geographic Information Systems (GIS) with an emphasis on spatial analysis and modeling. The underlying foundations of map algebra are discussed along with practical exercises that allow the student to develop familiarity with those procedures. This course offers an opportunity for students with a solid background in the fundamentals of GIS to apply the analytical capabilities of this technology to model real-world situations in support of decision-making. Application of GIS to the fields of Land Use Planning and Natural Resource Management are emphasized.

## GIS 4860 - GIS Applications

**Credits:** 4

**Prerequisite(s):** GIS 2250 with a grade of "C-" or better, upper division standing; or permission of instructor

**Prerequisite(s) or Corequisite(s):** GIS 3250

**Description:** This course provides advanced theoretical and practical knowledge in Geographic Information Systems (GIS), with emphasis on vector data models. Students will gain conceptual knowledge about the advantages and limitations of various vector GIS data models (shapefiles, coverages, geodatabases) in support of land management and scientific applications, as well as practical exercises using Arc/Info and ArcGIS software. Students will gain advanced experience in spatial data management, spatial analysis, and project management. Students will be responsible for a GIS application project of their own creation.

## GIS 4870 - Spatial Databases

**Credits:** 3

**Prerequisite(s):** GIS 4860 with a grade of "C-" or better, and upper division standing; or permission of instructor

**Description:** This upper-division course emphasizes the challenges

and uniqueness of spatial data organization from specific database models to national spatial data infrastructures. Students will gain theoretical and practical experience designing, implementing, and managing georelational and object-relational databases for planning and natural resource applications. Practical experience in spatial database creation using Global Positioning Systems (GPS), Database Management Systems (DBMS) and Geographic Information Systems (GIS) will be stressed.

## GIS 4880 - Current Topics in GIS: Variable Topics

**Credits:** 1-3

**Prerequisite(s):** GIS 2250 with a grade of "C" or better

**Description:** This course covers important topics in GIS and remote sensing, emphasizing new concepts and technological developments. The course content will vary, and the course may be repeated for credit as the course topic changes with a maximum of six credits earned.

## GIS 4890 - Advanced GIS Project

**Credits:** 3

**Prerequisite(s):** GIS 4860 with a grade of "C" or better, or permission of instructor

**Description:** This is a senior-level capstone course for land use majors with a concentration in Geographic Information Systems (GIS). Students serve as GIS specialists working on individual or group projects with emphasis on land use applications. Students manage a project from inception to completion, including databases and maps, as well as a final report and presentation.

**University Requirement(s):** Senior Experience

## GIS 4910 - Satellite Image Processing and Analysis

**Credits:** 3

**Prerequisite(s):** GIS 4840 with grades of "C-" or better and senior standing, or permission of instructor; GIS 4860 or GIS 4850 with grade of "C-" or better.

**Description:** This course focuses on current techniques and concepts for processing and analysis of digital satellite remote sensing imagery. The class covers both theoretical and practical applications of image processing techniques for land cover classification and land condition analysis. Topics include image preprocessing, enhancements, indices, and classification. Students conduct an original research project in addition to reviews of current literature.

**University Requirement(s):** Senior Experience

## GIS 4920 - Advanced Directed Study in Geospatial Sciences

**Credits:** 3

**Prerequisite(s):** GIS 4860 with a grade of "C-" or better, senior standing, and permission of instructor

**Description:** This course provides an opportunity for students with senior standing to create, initiate, manage, and analyze data for a unique undergraduate research project in Geospatial Sciences, with

guidance from a faculty advisor. A review of scientific literature relevant to the research topic is required, along with a research proposal outlining objectives, methods, and deliverables. A written scientific report is also required at the conclusion of the project. Students must obtain permission from the instructor in order to enroll in this Senior Experience course.

**University Requirement(s):** Senior Experience

## GIS 4950 - Internship in GIS

**Credits:** 1-12

**Prerequisite(s):** Departmental or Instructor permission

**Description:** This course provides an on-the-job internship experience with a Geographic Information Science-related company or agency. The experience must be done under qualified supervision and under the direction of an Earth and Atmospheric Sciences faculty member.

*Note:* Students may not receive more than 12 hours of credit for this course.

## Geography

### GEG 1000 - World Regional Geography

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading, writing, and mathematics preassessment placement tests

**Description:** This course presents the study of the formation, behavior, and interaction of social, political, cultural, and economic regions throughout the world.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Guaranteed Transfer:** GT-SS2

### GEG 1100 - Introduction to Physical Geography

**Credits:** 3

**Description:** This course explores the various elements of the physical environment and interactions between the elements. The course emphasizes the atmosphere (weather and climate), the lithosphere (soils, geology, and landforms), and the hydrosphere (oceans, streams, and groundwater).

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC2

### GEG 1120 - Orienteering

**Credits:** 1

**Description:** This course familiarizes students with the reading and interpretation of topographic maps and the use of the compass. Orienteering exercises are conducted in the field.

### GEG 1300 - Introduction to Human Geography

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading,

writing, and mathematics preassessment placement tests

**Description:** This course provides an introduction to geographic perspectives, concepts, and methods as they apply to the study of human activities. Emphasis is placed on explaining human spatial patterns and their consequences. Topics covered include population, migration, language, religion, folk and economic development, political systems, and resources.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Guaranteed Transfer:** GT-SS2

### GEG 1610 - Introduction to Planning

**Credits:** 1

**Description:** This course provides an overview of the role of planning in land use, different types of planning processes, public and private sector actors, skills required of planners, and planning documents and maps.

### GEG 1700 - Global Sustainability

**Credits:** 3

**Description:** Students are introduced to the transdisciplinary field of sustainability, addressing critical debates on climate change, environmental degradation, and social inequalities at local and global scales. They begin by examining the historical forces shaping human impact on the global environment, then apply insights from natural and social sciences to understand the environmental consequences of human actions. Throughout the course, students engage with innovative sustainable practices, such as renewable energy, sustainable agriculture, food systems, and urban sustainability, uncovering how communities worldwide advance sustainable and equitable solutions.

**Guaranteed Transfer:** GT-SS2

**University Requirement(s):** Social and Behavioral Sciences, Global Diversity

### GEG 1910 - Global Water Concerns

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading and writing placement tests

**Description:** In this course, water is examined as a natural and societal resource using local, national, and international examples. Landforms and processes related to water such as the hydrologic cycle, watersheds, surface water, and groundwater are surveyed. Students learn about water use in early civilizations, water and culture, water quality and treatment, and water law. The critical issue of water conservation and scarcity is reviewed in the context of the social, legal, political, economic, and physical infrastructure that controls water around the world.

**General Studies:** Natural and Physical Sciences, Global Diversity

**Guaranteed Transfer:** GT-SC2

### GEG 2020 - Geography of Colorado

**Credits:** 3

**Description:** Geography of Colorado presents the study of the physical, economic, and cultural features of Colorado. These features include climate, landforms, history, water resources, energy and minerals, mining, soil, natural vegetation, agriculture, population characteristics, the economy, current issues, as well as their interactions, and the overall geographic setting.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS2

## GEG 2200 - Geography of the United States

**Credits:** 3

**Prerequisite(s):** Six hours of earth science courses

**Description:** This course is a survey of the geography of the U.S., including an overview of the physical characteristics, landforms, climate, soil, vegetation, and natural resources. Regions of the U.S. are studied, including the distribution of population, agriculture, industry, transportation, and culture. Geographic problems and issues are raised.

## GEG 2300 - Geographic Analysis of Social Issues

**Credits:** 3

**Prerequisite(s):** GEG 1300

**Description:** This course is a geographic analysis of current social issues. Topics include urban spatial problems such as crowding and crime, drugs and gangs, population growth, environmental perception, resource use, and culturally based land-use patterns. The administration of space, boundaries, territoriality, and spatial learning are discussed.

## GEG 2700 - Geographies of Environmental Justice

**Credits:** 3

**Description:** This class explores why people of color and lower income populations are subject to the disproportionate burden of pollution and contamination and analyzes collective struggles of affected people to democratize access to a clean environment. Environmental justice is at the intersection of social justice and environmentalism and helps us to better understand geographies of socio-environmental injustices and how people take actions to make the places where they live, work, and play safer. Students learn how issues such as air pollution, waste management, unsafe drinking water, working conditions on farms, food deserts, climate change, and other environmental hazards affect people living in low income communities across the United States.

*Note:* Credit will be granted for only one prefix, GEG or NAS.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS2

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** NAS 2700

## GEG 3000 - Historical Geography of the U.S.

**Credits:** 3

**Prerequisite(s):** Six hours of geography or permission of instructor; GEG 1300, GEG 2200, or HIS 1210 recommended

**Description:** This course examines the unique interrelationships between geography and history. Topics covered include frontiers and boundaries, settlement patterns, environmental perception, sequent occupancy, changing land-use practices, migration, and urban growth. Further, the course addresses the interrelationships between different physical environments and cultural landscapes.

## GEG 3100 - Geography Methods and Applications

**Credits:** 3

**Prerequisite(s):** GEG 1000 or GEG 1100 or GEG 1300 or GEG 1700 or GEG 1910 or GIS 2250, or permission of the instructor

**Description:** What does it mean to be a Geographer? Geography bridges the social and natural sciences. It focuses on spatial analysis, and on understanding and solving human-environmental problems. In this course, students are introduced to the theory, methods and applications of Geography. Students explore the common perspectives and themes that underlie this broad discipline, and examine how Geography is applied to improve conditions in the world today paying particular attention to contemporary topics and local applications.

## GEG 3120 - Geomorphology

**Credits:** 4

**Prerequisite(s):** GEL 1010 or GEG 1100 or permission of instructor

**Description:** This course explores Earth's landforms, including their origins and evolution over time. Maps and remote imagery are used in geomorphologic interpretations.

**Field Trips:** Field trips are required

**Cross Listed Course(s):** GEL 3120

## GEG 3230 - Latin American Geographies

**Credits:** 3

**Prerequisite(s):** Junior or higher standing

**Description:** Students in this course learn how nature, culture, and socio-political relations have shaped the landscapes of Middle and South America from a geographical perspective. The emphasis of the course is to examine the intersection of environment and society; that is, how power relations are imbricated with people's use of environments and access to resources. Specifically, the course focuses on how major regional patterns of political ecologies of development have shaped and continue to define Latin America's geography. Topics include development conditions, resource use and environmental politics, extractivism, deforestation and biodiversity conservation, agrarian and environmental struggles, indigeneity politics, and climate change-induced disruptions, and emigration and refugees. Within this perspective, the course provides an understanding of how sociopolitical and economic issues with environmental factors are part of the connections between the United States and Latin America.

**General Studies:** Social and Behavioral Sciences, Global Diversity

## **GEG 3300 - Indigenous Geographies of North America**

**Credits:** 3

**Prerequisite(s):** GEG 1300 or NAS 1000 or PSC 1010 or junior or higher standing

**Description:** In this course, we examine Indigenous Peoples' relationships to land and power in North America with a focus on the United States. Colonial legacies of dispossession, genocide, and the reservation system frame how we discuss and interpret physical and symbolic violence against Indigenous Peoples. We begin with a historical geographic exploration of Indigenous land use patterns and how European arrival and invasion radically destabilized Native cultures. U.S. government policies and actions including the establishment of reservations and Tribal governments illustrate how institutions shape contemporary political, economic, social, cultural, and environmental relationships. Contemporary issues such as natural resource extraction, economic development, intersectionality, and cultural resilience influence the experiences of Native Americans on and off reservations.

*Note:* Credit will be granted for only one prefix.

**General Studies:** Social and Behavioral Sciences

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** NAS 3300, PSC 3300

## **GEG 3330 - Climatology**

**Credits:** 3

**Prerequisite(s):** MTR 1400 or GEG 1100, and completion of quantitative literacy

**Description:** Climatology examines the characteristics, distribution, and causes of global and regional climate. Physical and dynamic mechanisms of climate are emphasized. The course also explores the spatial and temporal distributions of the main climate elements. Climate change topics include paleoclimatology, observed shifts in climate, climate model projections, and potential impacts of global warming.

*Note:* Credit will be granted for only one prefix

**Cross Listed Course(s):** MTR 3330

## **GEG 3360 - Economic Geography**

**Credits:** 3

**Prerequisite(s):** GEG 1300 or junior or higher standing

**Description:** This course investigates the economic landscape and global patterns of spatial interdependence and fragility from a political economic perspective. Major themes explored include uneven economic development, the role of state and non-state actors, how social identities influence economic geographies, the commodification of nature, and alternative and more sustainable development paths. Key ideas and case studies are used to analyze contemporary policies, patterns, and relationships seen in local, national, and global economies.

## **GEG 3410 - Biogeography**

**Credits:** 3

**Prerequisite(s):** GEG 1100 or GEL 1010 or MTR 1400 or ENV 1200

**Description:** This course examines past and present geographic patterns of biodiversity, emphasizing the physical and ecological conditions and processes that influence the distribution of organisms, communities, and ecosystems. Topics include past climates and continental configurations, dispersal and invasion, speciation and extinction, biogeographic responses to anthropogenic climate change, island biogeography, and application of biogeographic concepts to environmental conservation.

## **GEG 3420 - Soil Resources**

**Credits:** 3

**Prerequisite(s):** ENV 1200 or GEL 1010 or GEG 1100

**Corequisite(s):** ENV 3422 or GEL 3422 or GEG 3422

**Description:** This course analyzes the materials and processes that combine to produce various soil types. Soil types are examined in relationship to climate, landforms, vegetation, and geology, as well as in relation to land-use patterns.

*Note:* This course is cross-listed as GEG 3420, ENV 3420, and GEL 3420. Students can only take one of the courses for credit.

**Cross Listed Course(s):** ENV 3420, GEL 3420

## **GEG 3422 - Methods of Soil Analysis and Sampling**

**Credits:** 1

**Prerequisite(s):** ENV 1200 or GEG 1100 or GEL 1010

**Corequisite(s):** GEL 3420 or GEG 3420 or ENV 3420

**Description:** This course surveys measurement techniques and principles used in characterizing the physical and chemical properties of soils. It includes soil sampling techniques, analysis of experimental design, sources of experimental error, and standard and instrumental methods of chemical analysis.

*Note:* Credit will be granted for only one prefix, ENV, GEL, or GEG

**Lab Fees:** \$25

**Cross Listed Course(s):** ENV 3422 , GEL 3422

## **GEG 3440 - Energy and Mineral Resources**

**Credits:** 4

**Prerequisite(s):** GEL 1010 or GEG 1100 or ENV 1200 or permission of instructor

**Description:** This course provides an overview of the Earth's energy and mineral systems with an emphasis on origin, characteristics, distribution, and the interaction of people and geologic resources.

*Note:* Credit will be granted for only one prefix.

**Field Trips:** Field trips are required.

**Cross Listed Course(s):** ENV 3440, GEL 3440

## **GEG 3520 - Regional Geography: Variable Topics**

**Credits:** 2-3

**Prerequisite(s):** Six hours of earth science courses Specific regions of the world will be selected for in-depth study

**Description:** Topics will include physical and cultural geography, demographics, economic activity, urbanization, political geography, and environmental issues.

*Note:* The course may be repeated for credit as a different region is studied.

## **GEG 3600 - Urban Geography**

**Credits:** 3

**Prerequisite(s):** GEG 1300 or Junior or higher standing

**Description:** The course surveys the theories and debates in urban geography - an interdisciplinary and continually changing body of knowledge that aims to analyze and to interpret the form, function and structure of cities. The course covers a range of theoretical topics relevant to the study of cities, which include urban form and design, culture and society, urban space, and urban politics and economics. Besides this theoretical background, the course provides an empirical analysis of the main issues concerning the contemporary process of urbanization in developed and developing societies, with an emphasis on urban poverty, inequality and housing; and the role of urban social movements and activist urbanists in finding innovative solutions to persistent problems.

## **GEG 3610 - Principles of Urban and Regional Planning**

**Credits:** 3

**Prerequisite(s):** GEG 1000 or GEG 1300 or GEG 1700 or permission of instructor

**Description:** In this course students are introduced to the history and future of cities. They will learn basic land-use planning concepts and how to analyze land-use patterns, interpret land-use maps, and analyze existing land-use plans. Topics include urban and regional planning issues related to population growth and decline, urban design, economic development, community planning, transportation planning, sustainable development, and equity and accessibility. Further, students learn how to collect relevant data, analyze a comprehensive plan, and predict future planning issues. This course focuses on the paradigm of planning in North American cities.

## **GEG 3630 - Transportation Planning and Land Use**

**Credits:** 3

**Prerequisite(s):** GEG 3610, six additional hours of geography

**Description:** This course is an analysis of transportation systems as they relate to other types of land use. Transportation networks are examined in terms of types, patterns, and densities. Consideration is given to alternative transportation systems as they relate to energy savings, pollution prevention, and the reduction of congestion.

## **GEG 3700 - Urban Sustainability**

**Credits:** 3

**Prerequisite(s):** GEG 1700 or Junior or higher standing

**Description:** This course examines the relationship between urbanization and sustainability. It analyzes the opportunities and

challenges of cities to initiate, foster and manage the pace of change needed to transition to sustainability. It evaluates how cities throughout the world are planning for sustainability and reducing their carbon footprint and, in doing so, learning how to foster change in local contexts. The course also provides students with the professional tools to identify and learn how sustainable urban planning practices generated in dynamic U.S. and international contexts can be adapted to different urban local settings to find creative ways to transition to urban sustainability.

## **GEG 3720 - Global Sustainable Development**

**Credits:** 3

**Prerequisite(s):** GEG 1700 or Junior or higher standing

**Description:** This course surveys the sustainability concept and sustainable development practices focusing on: economic growth and environmental degradation, the overuse of resources and the generation of waste, and the effectiveness of environment protection and environmental justice. It examines the environmental implications of production systems, consumption patterns, and waste generation in the global north as well as poverty and exclusion in the global south. It reviews the evolution of sustainability and sustainable development as major policy-making paradigms for addressing the tension between economic development and environmental protection. The course also examines the technocentric approach to environmental degradation and other alternative approaches that emphasize justice, socio/economic equity and ecological responsibility.

## **GEG 3920 - Directed Study in Geography**

**Credits:** 2-6

**Prerequisite(s):** Departmental or instructor permission

**Description:** This course provides an opportunity for upper-division students to conduct a specific project in the field of Geography. Students may develop a unique undergraduate research project or assist with a research project initiated by a faculty member. The faculty advisor guides each. The course requires permission of the instructor to enroll. Students may not receive more than 9 hours of credit for this course and the previous courses titled "Directed Study in Land Use."

## **GEG 4020 - Field Experience in Teaching Social Studies in Secondary Schools**

**Credits:** 3

**Prerequisite(s):** EDS 3140

**Corequisite(s):** HIS 4010

**Description:** This field-based course provides opportunities to develop teacher candidates' professional and pedagogical skills in a Social Studies classroom. In coordination with the classroom teacher, teacher candidates will design and implement content lessons, use content strategies to improve both information acquisition and literacy skills, and adjust instruction for students with diverse needs, including Culturally and Linguistically Diverse

backgrounds. Course assignments and evaluations are designed to help teacher candidates become reflective practitioners. HIS 4010 Methods of Teaching Social Science is recommended as a co-requisite course.

*Note:* Credit will be granted for only one prefix: GEG or HIS.

**Cross Listed Course(s):** HIS 4020

## **GEG 4150 - Hydrology (Surface Water)**

**Credits:** 4

**Prerequisite(s):** GEG 1100 or GEG 1910 or ENV 1200 or GEL 1010, and General Studies Quantitative Literacy complete

**Prerequisite(s) or Corequisite(s):** MTH 1210

**Description:** In this course, students examine surface waters with respect to water flow, drainage systems, storage, pollution and environmental relationships. The hydrologic cycle is studied with respect to the amount and distribution of water, the movement and fluxes of water and current water-related issues. Topics addressed include hydrologic data sources, statistical analysis in hydrologic problem-solving, snow and snowmelt, hydrograph analysis, hydrographic routing, hydrologic modeling and current challenges of urban hydrology, hydrologic models and hydrologic design. Use of spreadsheet software is required.

*Note:* Credit will be granted for only one prefix: ENV, GEL, or GEG

**Cross Listed Course(s):** ENV 4150, GEL 4150

## **GEG 4250 - Hydrogeology (Groundwater)**

**Credits:** 4

**Prerequisite(s):** GEL 1010, CHE 1800, MTH 1110

**Prerequisite(s) or Corequisite(s):** GEL 3420

**Description:** This course is a practical approach to the study of groundwater with emphasis on water quality, underground flow, pumping, and infiltration/recharge principles in relationship to the geologic environment. The course includes practical methods of laboratory water quality testing, groundwater flow analysis and experimentation, as well as septic system design and evaluation. Since mathematical models are involved, familiarity with graphing and algebraic operations is of essence. A foundational knowledge in geology is prerequisite.

*Note:* Credit will be granted for only one prefix

**Field Trips:** Self-guided group fieldtrips are required for this course

**Cross Listed Course(s):** ENV 4250, GEL 4250

## **GEG 4430 - Habitat Planning**

**Credits:** 3

**Prerequisite(s):** ENV 1200 or GEG 1100

**Description:** This is an interdisciplinary course designed to examine the forces and impacts of urban expansion and other human activities (e.g., recreation, transportation, energy development) on ecological processes and wildlife habitats. Topics include conservation biology principles, problems with wildlife habitat conservation, and planning solutions to preserve wildlife habitat. Multiple spatial and political scales provide the context for analysis.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** ENV 4430

## **GEG 4470 - Snow Hydrology**

**Credits:** 3

**Prerequisite(s):** ENV 1200; GEG 1910 or ENV 3400

**Description:** This course focuses on snow processes and their function as part of the hydrologic cycle. The course covers snow formation in the atmosphere, snow accumulation and measurement, snow distribution, snowpack metamorphism and basic energy exchange principles, snow chemistry, snow ablation and runoff, watershed processes, and snow management issues. Course content is amplified through case studies and/or field trip(s).

*Note:* Credit will be granted for only one prefix: ENV or GEG

**Cross Listed Course(s):** ENV 4470

## **GEG 4610 - Advanced Urban and Regional Planning**

**Credits:** 3

**Prerequisite(s):** GEG 1000 or GEG 1300 or GEG 1700 or junior or higher standing

**Description:** This course is an examination of the philosophy and scope of urban and regional planning, and the principles and factors of planning and their interrelationships. Research methods in planning are emphasized. This course includes a global context of urban planning and 21<sup>st</sup> century developments and technologies.

## **GEG 4620 - Residential Land Use Patterns**

**Credits:** 3

**Prerequisite(s):** GEG 3600 or GEG 3610 or six hours of urban studies courses

**Description:** This course examines spatial patterns of urban growth, factors that affect housing, the role of nonprofit developers in the current housing market, as well as theories that explain the residential mosaic of North American cities. It includes an analysis of current housing trends as well as the housing types, densities, patterns and geographic distribution, as well as the interrelationships with other aspects of the urban environment, including infrastructure.

## **GEG 4640 - Recreational Land Use Patterns**

**Credits:** 3

**Prerequisite(s):** GEG 3610 or Permission of instructor

**Description:** This course considers various types of recreation space, including greenbelts; open space; wilderness areas; and national, state and local parks. It relates recreational land to the land-use planning process, as well as the environmental impacts of recreation.

## **GEG 4700 - Sustainability in Resource Management**

**Credits:** 3

**Prerequisite(s):** GEG 1700 or Junior or higher standing

**Description:** The course traces the evolution of current thought and practice in the environmental debate of resources. It reviews the politics of resource management as it relates to a broader set of issues about economic development, sustainability, and social equity. It examines the environmental and social effects associated with

development of specific land-based resources. Topics covered include consumerism, the growth economy, global climate change, hydropolitics, food systems and agriculture, deforestation, warfare, and ecological and human impacts of environmental degradation. The course provides a framework to examine the politics of resource management and environmental policy and how contending approaches and practices impact human development and environments.

## **GEG 4710 - Legal Aspects of Land Use**

**Credits:** 3

**Prerequisite(s):** ENV 4010 or GEG 3610 or Permission of instructor

**Description:** This course studies the laws, ordinances, and regulations related to land use, as well as the role of federal, state, and local government in regulating and controlling land use. The course makes use of case studies and local issues.

## **GEG 4720 - Planning for Climate Change**

**Credits:** 3

**Prerequisite(s):** Junior or higher standing

**Description:** Regions throughout the United States are experiencing profound impacts of climate change on local economies, communities, and environments. In this course, students study how hazard mitigation planning and community emergency planning can reduce the long-term risks and impacts of climate change in the United States. While hazards such as floods, hurricanes, and droughts cannot be prevented, risks to life and property can be greatly reduced through advanced planning. This course analyzes policies, practices and cases that illustrate how natural-environmental hazards are exacerbated by climate change and inextricably intertwined with sustainable development. Sustainable community development can improve social equity while minimizing environmental damage, reducing community vulnerability to natural disasters that are intensified by climate change.

*Note:* Some sections of this course may be taught as Service Learning.

## **GEG 4950 - Internship in Geography**

**Credits:** 2-15

**Prerequisite(s):** Departmental or instructor permission

**Description:** This course provides an on-the-job internship experience with a geography-related company or agency. The experience must be done under qualified supervision and under the direction of an Earth and Atmospheric Sciences faculty member. Students may not receive more than 15 hours of credit for this course and the previous course titled "Internship in Land Use."

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

## **GEG 4970 - Sustainability Practice Seminar**

**Credits:** 3

**Prerequisite(s):** 12 hours of upper-division courses in natural and/or social science or written permission of instructor; completion of all SBS I and II and Natural and Physical Sciences General Studies course requirements, senior standing.

**Description:** This course is a senior-level, capstone seminar for EAS students addressing the issue of how to integrate the environmental, social, and economic dimensions of sustainability into decision-making, project development, and assessment. The primary purpose of the course is to develop the knowledge and skills required to evaluate sustainable proposals and existing sustainable practices and to develop new alternatives for problem-solving. Topics covered include sustainable planning for climate change and adaptation to water scarcity. The pedagogic strategy of this course is to provide students with a grounded, hands-on experience in the practice of sustainability assessment.

**University Requirement(s):** Senior Experience

## **GEG 4975 - Geography Capstone**

**Credits:** 3

**Prerequisite(s):** GEG 3100 and Senior Standing

**Description:** A senior-level capstone course for geography and other majors addressing the issue of how to integrate research for decision-making to address broad geographical human-nature interactions. The primary purpose of the course is to develop the knowledge and skills required for complex problem-solving with the project development and planning approach. The pedagogic strategy of this course is to provide students with a grounded, hands-on experience for the professionalization of geographical skills and knowledge.

**University Requirement(s):** Senior Experience

## **Geology**

### **GEL 1010 - Physical Geology**

**Credits:** 4

**Description:** This course introduces the basic theories, concepts, and assumptions used in geology, utilizing both lecture and laboratory components. It includes earth's internal systems from core to crust, as well as the dynamics of the lithosphere with its processes, products, and effects on the environment. Students will learn to identify common rocks and minerals.

**Field Trips:** A field trip is required.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

### **GEL 1020 - Geology of Colorado**

**Credits:** 3

**Description:** This science course focuses on the State of Colorado to introduce basic concepts, principles, theories, and assumptions in geology. The course covers Colorado's major geological provinces and landforms; common minerals, rocks, and fossils; geologic processes; geologic resources and hazards; and important events in Colorado's geologic history.

**Field Trips:** One field trip is required.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC2

## **GEL 1030 - Historical Geology**

**Credits:** 4

**Prerequisite(s):** GEL 1010 or GEG 1100 or permission of instructor

**Description:** This course presents the origin and history of the Earth as well as the evolution of its life, based on the rock and fossil record. The course also reviews the changing geography of the Earth through geologic time, emphasizing the theory of plate tectonics.

**Field Trips:** A field trip is required.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## **GEL 1150 - Physical Oceanography**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading, writing, and mathematics pre-assessment placement tests

**Description:** This introductory course studies the world's oceans, including geographic, geologic and physical features of the ocean basins and the physical and chemical properties of ocean water. Other major topics include ocean exploration, ocean waves, currents and tides, air-sea interactions, marine ecology, and geologic history. The course emphasizes the use and control of ocean resources and the impact of ocean pollution.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC2

## **GEL 1510 - Geology of Red Rocks Park and Vicinity**

**Credits:** 1

**Prerequisite(s):** GEL 1010 recommended

**Description:** This course examines the geology of Red Rocks Park and vicinity, including rocks formed over a period of approximately 1.7 billion years. Along with basic concepts of geology, the formations exposed along the Front Range, including their ages, rock types, origins, and economic products, are examined within a concept of geologic history. The geologic history includes Colorado's famous "disappearing" mountain range (the Ancestral Rocky Mountains), evidence of ancient oceans and deserts, dinosaur bones and tracks and the uplift of the modern-day Rocky Mountains.

*Note:* Students may not receive credit for both GEL 1510 and GEL 1520. Students cannot enroll in both GEL 1510 and GEL 3510 for credit at the same time.

## **GEL 1520 - Garden of the Gods-Front Range Geology**

**Credits:** 2

**Prerequisite(s):** GEL 1010 recommended

**Description:** This course examines the geology along the Front Range from Boulder to Colorado Springs through rock exposures covering a span of approximately 1.7 billion years. Basic concepts of

geology are applied to the formations exposed along the Front Range. These formations are examined with respect to age, rock type, origin, and economic products. The geologic history includes Colorado's famous "disappearing" mountain range (the Ancestral Rocky Mountains), evidence of ancient oceans and deserts, dinosaur bones and tracks, and the uplift of the modern-day Rocky Mountains.

*Note:* Students may not receive credit for both GEL 1510 and GEL 1520. Students cannot enroll in both GEL 1520 and GEL 3520 for credit at the same time.

## **GEL 1530 - Geology of the Colorado Plateau**

**Credits:** 2

**Prerequisite(s):** None; GEL 1010, GEL 1510, GEL 1520 and/or GEL 1560 are recommended

**Description:** This course examines the geology of the eastern Colorado Plateau, including the geology of the Colorado National Monument, Arches National Park, and Southern Canyon lands National Parks. Along with basic concepts of geology, the formations exposed in the eastern Colorado Plateau, including their ages, rock types and origins, are examined. Historical geology and geomorphology come to life in this beautiful, desolate, arid country. Students must be in good physical condition because strenuous hiking is involved, and students must have prior camping experience. *Note:* Students cannot take both GEL 1530 and GEL 3530 for credit.

## **GEL 1550 - Geology of the Great Sand Dunes National Monument**

**Credits:** 2

**Prerequisite(s):** GEL 1010 recommended

**Description:** This course emphasizes the processes and landforms associated with the eolian (wind) and desert environments at the Great Sand Dunes National Monument, located in the San Luis Valley between the San Juan and Sangre de Cristo Mountains. Investigations of the dune fields allow students to identify various types of dunes, as well as damage related to desertification. The relationships of sand source areas, cross-bedding, and transport directions are investigated.

*Note:* Students cannot take both GEL 1550 and GEL 3550 for credit.

## **GEL 2530 - Introduction to Geologic Fieldwork**

**Credits:** 2

**Prerequisite(s):** GEL 1010, GIS 1220 or equivalent

**Description:** This course is an introduction to field measurements and data collection for earth scientists. It examines methods and procedures in sampling, measuring, describing, mapping, and ascertaining field data. The heart of the course is a week-long field experience studying a variety of geologic features where students are trained in hands-on practices pertinent to industry and academia, such as strike and dip measurements, triangulation procedures, field notebook entries, and orienteering. Students must be in good physical condition because strenuous hiking is involved. Additional field trip fees are required.



## **GEL 3050 - Introduction to Mineralogy and Optical Mineralogy**

**Credits:** 4

**Prerequisite(s):** GEL 1010, CHE 1800

**Description:** This course examines common minerals, their origin, associations within rocks, their basic geochemistry and identification. It includes a discourse in crystallography, as well as methodologies of identification utilizing practical laboratory and field techniques such as hand specimens analysis, chemical methods, X-ray crystallography, and the use of optical microscopy.

**Field Trips:** A field trip is required.

## **GEL 3120 - Geomorphology**

**Credits:** 4

**Prerequisite(s):** GEL 1010 or GEG 1100 or permission of instructor

**Description:** This course explores Earth's landforms, including their origins and evolution over time. Maps and remote imagery are used in geomorphologic interpretations.

*Note:* Credit will be granted for only one prefix.

**Field Trips:** Field trips are required

**Cross Listed Course(s):** GEG 3120

## **GEL 3420 - Soil Resources**

**Credits:** 3

**Prerequisite(s):** ENV 1200 or GEL 1010 or GEG 1100

**Corequisite(s):** ENV 3422 or GEL 3422 or GEG 3422

**Description:** This course analyzes the materials and processes that combine to produce various soil types. Soil types are examined in relationship to climate, landforms, vegetation, and geology, as well as in relation to land-use patterns.

*Note:* This course is cross-listed as GEG 3420, ENV 3420, and GEL 3420. Students can only take one of the courses for credit.

**Cross Listed Course(s):** ENV 3420, GEG 3420

## **GEL 3422 - Methods of Soil Analysis and Sampling**

**Credits:** 1

**Prerequisite(s):** ENV 1200 or GEG 1100 or GEL 1010

**Corequisite(s):** GEL 3420 or GEG 3420 or ENV 3420

**Description:** This course surveys measurement techniques and principles used in characterizing the physical and chemical properties of soils. It includes soil sampling techniques, analysis of experimental design, sources of experimental error, and standard and instrumental methods of chemical analysis.

*Note:* Credit will be granted for only one prefix, ENV, GEL, or GEG

**Lab Fees:** \$25

**Cross Listed Course(s):** ENV 3422 , GEG 3422

## **GEL 3440 - Energy and Mineral Resources**

**Credits:** 4

**Prerequisite(s):** GEL 1010 or GEG 1100 or ENV 1200 or

permission of instructor

**Description:** This course provides an overview of the Earth's energy and mineral systems with an emphasis on origin, characteristics, distribution, and the interaction of people and geologic resources.

*Note:* Credit will be granted for only one prefix.

**Field Trips:** Field trips are required

**Cross Listed Course(s):** ENV 3440, GEG 3440

## **GEL 3510 - Advanced Geology of Red Rocks Park and Vicinity**

**Credits:** 1

**Prerequisite(s):** Nine hours of geography or geology or permission of instructor

**Description:** This course requires an analytical approach to the geology of Red Rocks Park and vicinity, including rocks formed over a period of approximately two billion years. The geologic history includes Colorado's famous "disappearing" mountain range (the Ancestral Rocky Mountains), evidence of ancient oceans and deserts, dinosaur bones and tracks, and the uplift of the modern-day Rocky Mountains.

*Note:* Students cannot take both GEL 1510 and GEL 3510 for credit.

## **GEL 3520 - Advanced Garden of the Gods-Front Range Geology**

**Credits:** 2

**Prerequisite(s):** Nine hours of geography or geology or permission of instructor

**Description:** This course requires an analytical approach to the geology along the Front Range from Boulder to Colorado Springs through rock exposures covering a span of approximately two billion years. Along with basic concepts of geology, the formations exposed along the Front Range, including their age, rock types, origins and economic products, are analyzed within a context of geologic history.

*Note:* Students cannot take both GEL 1520 and GEL 3520 for credit.

## **GEL 3530 - Field Geology: Variable Topics**

**Credits:** 3

**Prerequisite(s):** GEL 1010 AND at least one additional GEL course or permission of instructor

**Description:** This advanced field course is an analytical, hands-on exploration of the geology of various regions. Through field trips, students investigate historical geology, stratigraphy, geomorphology, structural geology, and more, all amid beautiful vistas that stretch the imagination. Variable topics focus on geologic destinations near and far, such as national parks, classic outcrops, fossil sites, quarries, and mines. Students must be physically able to complete moderately strenuous hikes. Prior field and camping experience are recommended.

*Note:* Students cannot enroll concurrently in GEL 3530 and GEL 1530 during the same semester. This course may be repeated up to 3 times under different topics.

**Field Trips:** Additional field trip fees for transportation, food, lodging, etc. are required.

## **GEL 3540 - Geologic Hazards: Denver and Vicinity**

**Credits:** 2

**Prerequisite(s):** GEL 1010 or ENV 1200 or GEG 1100 or Permission of instructor.

**Description:** In this course, students investigate geologic hazards we live with in the Denver area, including risk of rockfalls, landslides, and slumps; subsidence over abandoned coal mines; soils that swell, collapse, or corrode steel and concrete; radon from bedrock and soil; potential earthquakes; and geologic factors that affect other natural hazards such as avalanches, floods, and wildfire.

*Note:* Credit will be granted for only one prefix.

**Field Trips:** This course includes required field trips.

**Cross Listed Course(s):** ENV 3540

## **GEL 3550 - Advanced Geology of the Great Sand Dunes National Monument**

**Credits:** 2

**Prerequisite(s):** Nine hours of geography or geology or Permission of instructor

**Description:** This course analyzes the processes and landforms associated with the eolian (wind) and desert environments at the Great Sand Dunes National Monument, located in the San Luis Valley between the San Juan and Sangre de Cristo Mountains. Analysis of the dune fields allows students to identify various type of dunes, as well as damage related to desertification. The relationships of sand source areas, cross-bedding and transport directions are analyzed.

*Note:* Students cannot take both GEL 1550 and GEL 3550 for credit.

## **GEL 3920 - Directed Study in Geology**

**Credits:** 2-6

**Prerequisite(s):** Fifteen hours in geology; Permission of instructor and department chair

**Description:** This course provides an opportunity for upper-division students with a strong background in geology to pursue study in a specific topic of interest and value. The course requires permission of the instructor and chair of the Earth and Atmospheric Sciences department and frequent meetings between student and instructor.

## **GEL 4000 - Geologic Hazards**

**Credits:** 3

**Prerequisite(s):** ENV 1200 or GEG 1100 or GEL 1010 or permission of instructor

**Description:** This course investigates natural hazards that affect solid Earth. Case studies of exceptional and recent events link natural hazards to Earth's geologic processes and structures. The distribution, frequency, impact, and predictability of natural disasters, as well as strategies for reducing human injury and loss, are also considered.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** ENV 4000

## **GEL 4050 - Igneous and Metamorphic Petrology**

**Credits:** 4

**Prerequisite(s):** GEL 3050

**Description:** This course involves the study of the nature, composition, origin, and history of igneous and metamorphic rocks. Students will be introduced to the principles that govern the mineralogical and textural diagenesis of these systems and their unique mineral assemblages. Lab exercises in optical microscopy, geochemical data interpretation, graphical analysis and classification modalities are essential components. Prior working knowledge of polarized optical microscopy, mineralogy, and chemistry is prerequisite. Familiarity with programming simple electronic spreadsheet algorithms is highly recommended. A fieldtrip is required.

## **GEL 4150 - Hydrology (Surface Water)**

**Credits:** 4

**Prerequisite(s):** GEG 1100 or GEG 1910 or ENV 1200 or GEL 1010, and General Studies Quantitative Literacy complete

**Prerequisite(s) or Corequisite(s):** MTH 1210

**Description:** In this course, students examine surface waters with respect to water flow, drainage systems, storage, pollution and environmental relationships. The hydrologic cycle is studied with respect to the amount and distribution of water, the movement and fluxes of water and current water-related issues. Topics addressed include hydrologic data sources, statistical analysis in hydrologic problem-solving, snow and snowmelt, hydrograph analysis, hydrographic routing, hydrologic modeling and current challenges of urban hydrology, hydrologic models and hydrologic design. Use of spreadsheet software is required.

*Note:* Credit will be granted for only one prefix: ENV, GEL, or GEG.

**Cross Listed Course(s):** ENV 4150, GEG 4150

## **GEL 4250 - Hydrogeology (Groundwater)**

**Credits:** 4

**Prerequisite(s):** GEL 1010, CHE 1800, MTH 1110

**Prerequisite(s) or Corequisite(s):** GEL 3420

**Description:** This course is a practical approach to the study of groundwater with emphasis on water quality, underground flow, pumping, and infiltration/recharge principles in relationship to the geologic environment. The course includes practical methods of laboratory water quality testing, groundwater flow analysis and experimentation, as well as septic system design and evaluation. Since mathematical models are involved, familiarity with graphing and algebraic operations is of essence. A foundational knowledge in geology is prerequisite.

*Note:* Credit will be granted for only one prefix

**Field Trips:** Self-guided group fieldtrips are required for this course

**Cross Listed Course(s):** ENV 4250, GEG 4250

## **GEL 4400 - Applied Field Volcanology**

**Credits:** 5

**Prerequisite(s):** GEL 3050

**Prerequisite(s) or Corequisite(s):** GEL 4050

**Description:** This hybrid field and lecture course explores volcanic

activity both past and present. Eruptive mechanisms, lithology, geomorphology, environmental and economic impacts as well as geologic hazards are discussed. Hands-on field work applying theoretical knowledge to the active study of volcanic geology, associated petrology, and eruptive geohazard assessment by visiting several active volcanoes is an integral part of the course. Additional trip fees apply.

## **GEL 4450 - Sedimentary Geology and Stratigraphy**

**Credits:** 4

**Prerequisite(s):** GEL 1030 or permission of instructor

**Description:** This course focuses on geologic concepts, principles, theories, and techniques for investigating how sedimentary rocks and strata develop and change through space and time. Within this framework, the course covers the origin and transport of sediment; physical properties and classification of sedimentary rocks; sedimentary diagenesis; depositional environments; depositional basins; stratigraphic classification systems; and field techniques for sedimentary geology and stratigraphy.

**Field Trips:** Field trips are required

## **GEL 4460 - Structural Geology and Mapping**

**Credits:** 4

**Prerequisite(s):** GEL 4450

**Description:** This course focuses on concepts, principles, theories, and techniques to investigate the development and spatial orientation of geologic structures such as folds and faults, as well as the mapping of geologic structures. Field trips are required.

## **GEL 4950 - Internship in Geology**

**Credits:** 2-15

**Prerequisite(s):** Land Use major with upper division standing plus 12 upper division hours of earth science courses and Permission of the chair of the earth and atmospheric sciences department

**Description:** This course provides an on-the-job internship experience with a land-use-related company or agency. The experience must be done under qualified supervision and under the direction of an Earth and Atmospheric Sciences faculty member.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

## **GEL 4970 - Undergraduate Research in Geology**

**Credits:** 3

**Prerequisite(s):** MTH 1210, GEL 3050, senior standing

**Description:** Students in this senior-level capstone course focus on independent research into a geological problem involving field and/or laboratory observations. Students prepare a paper or poster of their research suitable for professional presentation. Students demonstrate broad entry-level geoscientific proficiency through a modified

ASBOG (Association of State Boards of Geology) written exam.

**University Requirement(s):** Senior Experience

## **German**

### **GER 1010 - Elementary German I**

**Credits:** 5

**Description:** This course focuses on skills development in listening, speaking, reading, and writing with emphasis on the use of functional, communicative language for oral and written proficiency and cultural competency.

**General Studies:** Oral Communication

### **GER 1020 - Elementary German II**

**Credits:** 5

**Prerequisite(s):** GER 1010 or its equivalent

**Description:** This course is a continuation of GER 1010 and focuses on skills development in listening, speaking, reading, and writing with emphasis on the use of functional, communicative language for oral and written proficiency and cultural competency.

**General Studies:** Arts and Humanities, Global Diversity

### **GER 1021 - Bridging Cultures on the Job**

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** GER1020, or instructor's permission

**Description:** This one-credit course complements the existing GER 1020 - Elementary German II or its equivalent. It adds a professional dimension to the study of German, with two main objectives: enhancing students' ability to communicate in specific, career-relevant situations in the target language, and developing intercultural expertise for effective communication with individuals from diverse cultural backgrounds.

**General Studies:** Arts and Humanities

### **GER 1800 - International German Year I**

**Credits:** 1-15

**Description:** This is a variable-credit course for first-year students learning German in a study-abroad setting. It recognizes an approved study-abroad educational experience in German speaking, comprehension, reading, and writing.

### **GER 2010 - Intermediate German I**

**Credits:** 3

**Prerequisite(s):** GER 1020 or equivalent

**Description:** This course is the first of a two-semester, integrated, second-year sequence. The course focuses on further skills development in listening, speaking, reading, and writing, with emphasis on the use of functional, communicative language for oral and written proficiency and on cultural competency. Class is

conducted mostly in German and will include a variety of interactive activities designed to help students develop their knowledge of German and their ability to use it productively in situations of communication.

## **GER 2020 - Intermediate German II**

**Credits:** 3

**Prerequisite(s):** GER 2010 or equivalent

**Description:** This course is a continuation of GER 2010 and is the second of a two-semester, integrated, second-year sequence. The course focuses on further skills development in listening, speaking, reading, and writing, with emphasis on the use of functional, communicative language for oral and written proficiency and on cultural competency. Class is conducted mostly in German and will include a variety of interactive activities designed to help students develop their knowledge of German and their ability to use it productively in situations of communication.

## **GER 2110 - German Reading and Conversation**

**Credits:** 3

**Prerequisite(s):** One year of college German or equivalent or Permission of instructor

**Description:** This course prepares the student to read and to communicate with ease in German. It emphasizes vocabulary and idiomatic phrases used in everyday language.

## **GER 2120 - German Civilization**

**Credits:** 3

**Prerequisite(s):** One year of college German or equivalent or Permission of instructor

**Description:** This course emphasizes the broadening of reading and conversational skills. It introduces the student to various aspects of German civilization, from its geography and history to its philosophical and political thought, arts, music, and modern living.

## **GER 2800 - International German Year II**

**Credits:** 1-15

**Prerequisite(s):** One year of college German or equivalent

**Description:** This variable-credit course recognizes second-year study of German language and culture in an approved study-abroad setting.

## **GER 3010 - Third-Year German Conversation**

**Credits:** 3

**Prerequisite(s):** GER 2110 or 2120 or four years of high school German

**Description:** This course strengthens conversational ability with more complicated idiomatic and structural elements, using techniques such as skits, debates, and small-group discussions to improve fluency and broaden the scope of communication. Conducted in German.

## **GER 3050 - Cultural Crossroads: France, Germany, Spain**

**Credits:** 3

**Prerequisite(s):** ENG 1020

**Description:** This course gives students the cultural background necessary to understand and appreciate those spiritual and intellectual developments that have given today's three European nations (representing our language disciplines) their characteristics. Main topics include the Indo-European language family, the cultural and technological development of Germanic and Romance-speaking countries, the causes for the rise and fall of these countries throughout the 2000 years under consideration, the role of women in politics and the arts, the development of differing social etiquette, reasons for mass emigrations, and contributions of immigrants to their new countries, and the effect that the European Union has on the educational social welfare of its member nations.

*Note:* Students can get credit for only one prefix.

**Cross Listed Course(s):** FRE 3050, LANG 3050, SPA 3050

## **GER 3150 - German Phonetics: Theory and Practice**

**Credits:** 3

**Prerequisite(s):** Two years of college German or equivalent or Permission of instructor

**Description:** This course covers improvement of pronunciation and speech habits based on an understanding of the phonetics of German. After an introduction to the basic speech mechanism through principles of linguistics, the course offers practice in pronunciation through the declamation of selected texts.

## **GER 3200 - German Culture and Civilization**

**Credits:** 3

**Prerequisite(s):** Two years of college German or equivalent, or permission of instructor; completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This course is an advanced German conversational approach to the main cultural events that have shaped German lifestyles. Historical events, as well as modern German lifestyles of Germany, Austria, and Switzerland are discussed. The format is reading-discussion, conducted in German. Students are required to give oral presentations.

## **GER 3210 - Survey of German Literature I**

**Credits:** 3

**Prerequisite(s):** Two years of college German or equivalent or Permission of instructor

**Description:** This course provides an insight into German historical and cultural development through selected readings in German literature, from its beginning to the 18th century.

## **GER 3220 - Survey of German Literature II**

**Credits:** 3

**Prerequisite(s):** Two years of college German or equivalent or Permission of instructor

**Description:** This course covers the history of German literature of the 18th, 19th, and early 20th centuries, including selected readings of principle German authors, lectures on biography and criticism, and recitation. Conducted in German.

## GER 3300 - Advanced German Grammar

**Credits:** 3

**Prerequisite(s):** Two GER courses at the 2000 level

**Description:** This course is designed to prepare the student for the demands of the use of literary and scientific German at advanced levels. Students are led into an appreciation of the deeper structures of the language and the functional aspects of grammar in communication.

## GER 3800 - International Advanced German

**Credits:** 1-15

**Prerequisite(s):** Junior or Senior standing in German or equivalent

**Description:** This course recognizes upper-division study in language, culture, and literature in a study abroad setting. It uses a variety of methods and includes reading, writing, and discussion seminars in German.

## Health Care Management

### HCM 2010 - Global Health Systems

**Credits:** 3

**Prerequisite(s):** General Studies Written Communication Requirement

**Description:** In this course, students will analyze the structure of healthcare systems, whether self-pay, privately funded or government-subsidized in industrialized and developing nations. Emphasis is placed on the similarities and differences, as well as the context of economic, historical/political, social/cultural, and technological frameworks of healthcare systems. The global interdependence among nations and economies has an effect on the delivery and management of healthcare services around the world.

**General Studies:** Social and Behavioral Sciences, Global Diversity

### HCM 2500 - Health Care Foundations, Professionalism, and Applications

**Credits:** 3

**Prerequisite(s):** 20 credit hours and General Studies Written Communication Requirement

**Description:** In this course, students prepare for the healthcare field and their senior experience by developing essential skills in research, communication, and professional conduct. Students explore senior experience requirements, plan for academic and career goals, and investigate diverse healthcare careers. The course content emphasizes

ethical standards, effective teamwork, and proficient use of software applications important when working in the healthcare field. Students develop advanced writing skills using APA guidelines, conduct critical evaluations of scholarly sources, and apply project management and life skills to real-world challenges in health care.

## HCM 3030 - Health Care Jurisprudence

**Credits:** 3

**Corequisite(s):** HCM 3150

**Description:** This course examines the legal and ethical issues involved in the management and delivery of health care services. Emphasis is placed on law as it pertains to medical negligence, malpractice/ professional liability, medical records/information management, patient consent, confidentiality/privacy, patient rights/responsibilities, contracts, labor relations, and other current issues.

## HCM 3100 - Entrepreneurship in Health

**Credits:** 1

**Prerequisite(s):** General Studies Written Communication and Quantitative Literacy Requirements; or permission of instructor

**Description:** This course serves as an introduction to entrepreneurship in health and wellness. Topics addressed in the class include: becoming an entrepreneur and finding a worthwhile project, the models and tools that entrepreneurs use, leveraging available resources, unique challenges in health care, creating a business plan, and attracting funding. Best practices will be examined and techniques applied through the use of real world examples of innovation in health care.

### HCM 3150 - Health Care Organization and Management

**Credits:** 3

**Prerequisite(s):** Junior standing or higher

**Description:** Students in the course become familiar with the organizational structure of the health care field and are provided a general orientation to management practices within the industry. Emphasis is placed on the inter-relatedness of cultural, economic, political, technological and social aspects of health care delivery, along with its services and management. Further, the course content emphasizes the differences in management of health care from other professional areas and the importance of patient care and ethical issues for the manager to consider. Disease origins and epidemiology are explored as background for the aspiring management student.

## HCM 3200 - Managing Quality in Health Care

**Credits:** 2

**Prerequisite(s):** General Studies Written Communication and Quantitative Literacy Requirements; or permission of instructor

**Description:** This course is an introduction to the methods and tools for managing quality in health care, and developments in quality assurance, utilization review, continuous quality improvement, and

total quality management in health services, including hospitals, ambulatory care settings, managed care and public health.

## **HCM 3400 - Human Resources Management in Health Care**

**Credits:** 3

**Prerequisite(s):** HCM 3150; or permission of instructor

**Description:** This course is designed to analyze principles significant to human resource management in health care. Specific attention is placed on human resource functions, competencies, structures, quality, performance management, legal and labor issues, benefits, and recruitment and retention. Students explore the development of cover letters, resumes, and different interview techniques from both applicant and manager perspectives.

## **HCM 3500 - Health Care Research Methods**

**Credits:** 3

**Prerequisite(s):** HCM 3150 and statistics

**Description:** This course examines the research process, research terminology and the role of research as a tool for understanding and improving financing, delivery, and management in health care organizations. Students critique relevant research articles, explore sources of funding for research projects, and apply this knowledge to health care management projects.

## **HCM 3550 - Leadership in Health Care**

**Credits:** 1

**Prerequisite(s):** HCM 3150; or permission of instructor

**Description:** This course is an introduction to the concepts of leadership in health care. It presents the traits, styles and skills of effective leaders. It also addresses the tools and techniques used by leaders within health care organizations. Leadership during crises and of multicultural teams is analyzed. Students gain understanding of personal leadership traits and examine others' leadership styles.

## **HCM 3600 - Health Information Systems**

**Credits:** 3

**Prerequisite(s):** HCM 3150 or permission of instructor

**Description:** This course is a general introduction to health care management information system, focusing on the role and importance of electronic communication and data transmission. Planning and change management in health care information technology are emphasized. The materials cover patient-centered technologies found in the health enterprise today.

## **HCM 3700 - Health Disparities in the U.S.**

**Credits:** 3

**Description:** Students in this course engage in a comprehensive exploration and identification of key concepts related to diversity, inclusion, and health disparities. Students examine health data across

racial and ethnic groups and using grounded public health and healthcare management theories to analyze the impact of health disparities on individuals, communities, policies, and national systems. Through this course, students develop a nuanced understanding of how health disparities are influenced by various factors and gain practical skills to contribute to more equitable healthcare solutions.

## **HCM 3750 - Professional Practice Management**

**Credits:** 1

**Prerequisite(s):** HCM 3150; or permission of instructor

**Description:** This course is designed to provide a general orientation to practice management in the field of health care. The focus is on basic practice management concepts, skills, and functions considered necessary for effective and successful healthcare professional practice management.

## **HCM 3830 - Analytical Methods in Health Data**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** HCM 3150, HCM 3600

**Description:** This course allows the student to explore the role of analytics in supporting a complex, data-driven, healthcare industry. Key topics include analytic techniques and methods (spreadsheeting, formulating study questions, report writing, presentations) to examine issues such as measuring health system performance, comparing health care delivery, and assessing the health of populations.

## **HCM 3840 - Statistical Methods in Health Data**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** HCM 3150, HCM 3600

**Description:** This course will provide students with a general foundation of descriptive and inferential statistics of health care data using an analytical statistical software application, eg, SAS or similar application.

## **HCM 3850 - Database Systems in Health Care**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** HCM 3150, HCM 3600

**Description:** This course will provide students with the tools to understand the role of health data sets in defining and scoping business and clinical intelligence and apply the techniques of data science and statistical tools. This course provides an overview of data quality and governance, specific issues in various types of health care analyses, and emerging trends, and offers a final experience in the Health Data Science Certificate Program.

## **HCM 3860 - Health Care Business Intelligence**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** HCM 3150, HCM 3600

**Description:** This course will provide students with the tools to understand the role of health data sets in defining and scoping

business and clinical intelligence and apply the techniques of data science and statistical tools. This course provides an overview of data quality and governance, specific issues in various types of health care analyses, and emerging trends, and offers a final experience in the Health Data Science Certificate Program.

## **HCM 3980 - Internship in Health Care Management**

**Credits:** 1-15

**Prerequisite(s):** Major in Health Care Management; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at c2hub@msudenver.edu.*

*Note:* Variable Credit

## **HCM 4030 - Financial Management in Health Care**

**Credits:** 3

**Prerequisite(s):** ACC 2010 and HCM 3020 with a grade of C or better.

**Description:** This course surveys the organizational and operational aspects of fiscal analysis and control of health care institutions. Particular attention is given to the importance of third-party payer and reimbursement issues. Emphasis is placed on the practical processes involved in the determination and analysis of tax status, revenues, costs, charges, inventory/materials management, working capital levels, budgets, and financial reporting.

## **HCM 4040 - Health Care Economics**

**Credits:** 3

**Prerequisite(s):** ECO 2020 and HCM 3150 with a grade of C or better

**Description:** This course examines the major economic issues facing the health care industry with emphasis on microeconomic theory. The student assesses the relevance of economics to health and medical care and applies the principles to related health issues. The student will understand the mechanisms of the health care delivery system within the broad social, political, and economic contexts. The student will explore the ever changing nature of the health care industry and analyze related public policy from an economic perspective.

## **HCM 4150 - Electronic Medical Record Applications and Support**

**Credits:** 3

**Prerequisite(s):** HCM 3600 and CIS 3060, both with a grade of "C" or better, or permission of instructor

**Description:** Students in this course will be oriented to the detailed elements of an electronic medical record (EMR) and how it is used in the support of contemporary, patient-care services. The course will consist of several detailed experiential scenarios to familiarize the student with the use of the EMR in documenting patient-care services. The course will then lead the student through applying skills database administration and process analysis to maintain and support the EMR application in a health care organization.

## **HCM 4161 - Disaster Planning and Control**

**Credits:** 3

**Prerequisite(s):** Meets General Studies requirement for written communication and quantitative literacy.

**Prerequisite(s) or Corequisite(s):** FER 3140

**Description:** Students examine concepts and principles of community risk assessment, planning, and response to fires, natural and man-made disasters, including National Institute Management System (NIMS) and Incident Command System (ICS), mutual aid and automatic response, training and preparedness, communications, civil disturbances, terrorist threats/incidents, hazardous materials planning, mass casualty incidents, earthquake preparedness, and disaster mitigation and recovery.

*Note:* Credit will be granted for only one prefix: FER or HCM. Some sections of this course may be taught as Service Learning.

**University Requirement(s):** Senior Experience

**Cross Listed Course(s):** FER 4610

## **HCM 4300 - Strategic Management in Health Care**

**Credits:** 3

**Prerequisite(s):** HCM 3150

**Description:** This course is designed to discuss the role of the health care manager in health care planning and strategic management, as well as the concepts and methodology of strategic management as applied in health care. Emphasis is placed on how health care organizations adapt in a rapidly changing environment.

## **HCM 4350 - Health Care Information Systems Applications**

**Credits:** 3

**Prerequisite(s):** HCM 3600, CIS 3460, all with a grade of "C" or better, or permission of instructor

**Description:** This course presents a synthesis of health care management (HCM) and computer information systems (CIS) content to prepare the student for decision-making responsibilities as a practitioner in the field of health care information systems. A review of critical concepts from the HCM and CIS curriculum for the B.S. in Health Care Information Systems curriculum will be followed by an overview of applications used in the health care industry that interact with and support the electronic medical record (covered in HCM 4150), including administrative systems, clinical decision support, health information exchange, and digital clinical imaging applications. Discussion of these applications will include a review of data gathered by each, the interfaces sharing data with other

applications, the business and clinical processes supported by each, and a case study that synthesizes the relationships among health information applications.

## **HCM 4500 - Health Care Management Pre-Practicum**

**Credits:** 2

**Prerequisite(s):** All 3000-level HCM courses, HCM 4020, all required support courses (This course must be taken the semester prior to HCM 4510)

**Description:** This is a preparatory course required of HCM majors prior to taking HCM 4510, the Health Care Management Practicum. Students are required to prepare a résumé, develop information interviewing skills, determine a health care placement agency and preceptor, and develop a proposal for a practicum project under faculty guidance.

## **HCM 4510 - Health Care Management Practicum**

**Credits:** 6

**Prerequisite(s):** HCM 4500, plus either HCM 4030 or 4040

**Description:** A capstone course designed to provide the student with the opportunity to integrate and operationalize previously learned health care management knowledge and skills. The student completes a health management project. The management area of study and the practicum setting are mutually agreed upon by the student, the faculty member, and the health facility preceptor. Practical management topics are emphasized in seminar sessions.

**University Requirement(s):** Senior Experience

## **HCM 4600 - HCM Pre-Internship**

**Credits:** 1

**Prerequisite(s):** All required 3000-level HCM courses and required support courses with a grade of C or better

**Corequisite(s):** HCM 4605

**Description:** This course is the first step in preparing HCM majors for internship. Students are required to develop information interviewing skills, determine a health care placement agency and preceptor, develop a personal strategic plan, and prepare for the first phase of the internship.

## **HCM 4605 - HCM Internship I**

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** HCM 4600

**Description:** This is the first part of the HCM major's internship experience. It is intended to acquaint the student with the organization in which the internship is being conducted, to allow students to explore areas of interest within the organization, and to evaluate options relating to how the remainder of the internship will be carried out. This course must be taken the semester prior to taking HCM 4610, HCM Internship II. Students are required to prepare a proposal pertaining to the specific projects that will be performed.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

## **HCM 4610 - Health Professions Internship**

**Credits:** 3

**Prerequisite(s):** Senior standing, completion of 80% of HCM courses with C- or better; or permission of instructor.

**Description:** This capstone course provides students with the opportunity to integrate and operationalize previously learned health care management knowledge and skills. The internship provides an opportunity for students to learn first-hand about working with others in a professional setting. Students complete management projects in a health-related organization.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu) and/or Health Professions Department at 303-615-1200 or [Hep@msudenver.edu](mailto:Hep@msudenver.edu)*

**University Requirement(s):** Senior Experience

## **HCM 4920 - Health Care Information Systems Internship**

**Credits:** 3

**Prerequisite(s):** Minimum of twelve (12) semester hours of upper-division courses from CIS or HCM courses listed in the HCIS Major curriculum, all with a grade of "C" or better, or permission of instructor

**Description:** This capstone course provides students with the opportunity to integrate and operationalize previously learned health care management and computer information systems knowledge and skills in a field experience specific to the health care information systems discipline. The internship provides an opportunity for students to learn firsthand about working with others in a professional setting. Students complete projects using or working with health care information system applications in a health-related organization.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Credit will be granted for only one prefix: CIS or HCM.

**University Requirement(s):** Senior Experience

**Cross Listed Course(s):** CIS 4920

## **Health Care Professional Services**

### **HCPS 2700 - Medical Cannabis Law and Ethics**

**Credits:** 3

**Description:** Students in this course will survey the major legal and ethical issues of the health care cannabis systems in the United States.



The course covers the legal issues surrounding the relationships of patient, provider, and health care institution as well as historical considerations of cannabis. There will be specific inquiry into how organizations that work with cannabis manage from a legal standpoint. Further, the course will focus on shareholder responsibility, corporate compliance, key cases that control cannabis health care law, federal and state considerations as well as the ongoing changes that are taking place currently. Ethics from the standpoint of the grower, distributor and user will also be considered.

## HCPS 4000 - Health Care Operations

**Credits:** 3

**Prerequisite(s):** HCM 3150

**Description:** Students in this course will be introduced to the fundamental elements of operating a health care organization. Basic concepts of human resources management, finance and budgeting, billing and collection for patient care services, risk management, and monitoring of operational performance will be covered in the course.

## HCPS 4010 - Evidence Based Health Care Delivery

**Credits:** 3

**Prerequisite(s):** HCM 3150

**Description:** Students in this course will be introduced to evidence based health care delivery modalities. Students will learn about evolving models of care which incorporate current best practices supported by research and data. Understanding these evidence generating models is essential as the health care industry moves further into the free flow of information and shared knowledge. These health care delivery models are aimed at solving challenges related to coordination of patient care and reducing the time to integrate continuing analysis and synthesis of medical advancements.

## History

### HIS 1005 - Ancient Civilizations

**Credits:** 3

**Description:** This course introduces students to the development of ancient civilizations from a broad, comparative framework. These civilizations are studied from religious, economic, intellectual, political, cultural, and social perspectives.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

**Cross Listed Course(s):** ANT 1650

### HIS 1030 - World History to 1500

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading and writing pre-assessment placement tests

**Description:** This course introduces students to the world's civilizations and their development before 1500 from a broad, comparative framework. These civilizations are studied from

religious, economic, intellectual, political, cultural, and social perspectives.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

### HIS 1032 - Islam in History: From the Prophet to the Present

**Credits:** 3

**Description:** Students trace the origins, spread, and impact of Islam, from its founding to the present day. Students explore Islamic law, ethics, and history to learn how Islam has served as a guide to moral behavior; how and why ideas of justice have changed over time; and how contemporary Muslim scholars, activists, and feminists have re-interpreted the faith. To understand the power of misrepresentations of Islam, students explore how Muslims and non-Muslims coexisted across history, how European empires deployed anti-Muslim racism to justify their rule, and how Muslims fought back against both imperialism and Islamophobia. No previous knowledge is required.

**General Studies:** Global Diversity, Historical

**Guaranteed Transfer:** GT-HI1

### HIS 1035 - The Medieval World

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading and writing pre-assessment placement tests

**Description:** This course introduces students to the world's civilizations from the period of 400 to 1400. The course emphasizes the connections and continuities of the medieval period of world history from a broad comparative framework. Civilizations are studied from religious, economic, intellectual, political, cultural, and social perspectives.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

### HIS 1040 - World History since 1500

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading and writing pre-assessment placement tests

**Description:** This course provides an introduction to important theories, concepts, methods and content for understanding world history since 1500. Among others, it explores social, cultural, religious, economic, and political themes.

*Note:* Credit will be granted for only one prefix: HIS or HON.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

**Cross Listed Course(s):** HON 1040

### HIS 1045 - Europe, Renaissance to the Present

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading and writing pre-assessment placement tests

**Description:** This course examines the political, cultural, economic,

social, and intellectual history of Europe from the Renaissance to the Contemporary era. Students will investigate diverse topics such as the influence of politics and economics on Renaissance Art, the effect of religion on the nature of early modern warfare, how the Industrial Revolution altered every day life, and the impact of World War I on contemporary European politics.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

## **HIS 1150 - Race and Social Justice in U.S. History**

**Credits:** 3

**Description:** Students explore the broad history of the United States with a particular focus on race, inequality, and social justice. From Spanish and British settler colonialism through recent social movement protest, students examine how ideas about race and ethnicity were embedded in economic, legal, social, cultural, and political contexts. We compare the historically-rooted identities, agency, and resistance of marginalized groups. Students develop a foundational understanding of enduring inequalities and movement protests to realize democratic promises in America's past. We also ask how history can shape national identity.

**General Studies:** Historical

**Guaranteed Transfer:** GT-HI1

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** AAS 1150, CHS 1150

## **HIS 1210 - American History to 1865**

**Credits:** 3

**Description:** This is an introductory course in the history of the American peoples and the development of the United States through the Civil War. Students explore Native America, European colonizers, African slavery, and the Atlantic World of the 1600s and 1700s. The American Revolution, the creation of the U.S. Constitution, and the divisions and outcome of the Civil War feature prominently. Instructors organize the course with political, economic, social, and global perspectives to highlight the experiences of diverse peoples.

**General Studies:** Historical

**Guaranteed Transfer:** GT-HI1

## **HIS 1220 - American History since 1865**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading and writing pre-assessment placement tests

**Description:** This course covers the background to the present-day United States beginning with the Civil War and culminating with recent times. It analyzes cultural, social, economic and technological change. Topics addressed include immigration, industrialism, emergence of the U.S. as a world power, Progressivism, the First World War, the Great Depression, World War II, and the Cold War and its aftermath.

**General Studies:** Historical

**Guaranteed Transfer:** GT-HI1

## **HIS 1250 - China and East Asia**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading and writing pre-assessment placement tests

**Description:** This course covers the history of China and East Asia since the eighteenth century, emphasizing change and continuity in the region's politics, economies, and cultures. The course treats the traditional order in East Asia, its erosion by internal and external challenges, the struggle of East Asian people to adjust to a new world order, and their effort to rebuild after World War II. The contribution of East Asian immigrants to American civilization will also be considered.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

## **HIS 1260 - Asia in Global Perspective**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** This course is an overview of Asia's diverse geographies, peoples, histories, and contemporary developments from an interdisciplinary perspective. Throughout the course, students investigate the intersection between domestic and global factors in shaping contemporary Asian experiences. Topics include Asia's dynamic cultures, rich philosophical, religious, and linguistic traditions, vibrant economies, and various types of political systems. Students also reflect on how issues such as colonization, nation-building, gender, and migration shape contemporary Asia and its many representations.

**Note:** Credit will be granted for only one prefix (SOC, ANT, GWS, HIS, LANG, or PSC).

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Guaranteed Transfer:** GT-SS3

**Cross Listed Course(s):** ANT 1300, GWS 1300, LANG 1260, PSC 1300, SOC 1300

## **HIS 1270 - India and South Asia**

**Credits:** 3

**Description:** This course provides an overview of South Asian history from the ancient Indus Valley settlements through the emergence of modern nation-states like India, Pakistan, Bangladesh and Sri Lanka. It includes the rise and fall of empires, the interplay of multiple religions, and the region's vast cultural history.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

## **HIS 1300 - Introduction to Latin American History**

**Credits:** 3

**Description:** This course introduces students to the history of Latin America. It explores relationships among indigenous peoples, Europeans and Africans; the responses of each group to the dynamics of colonial contact; the development and maturation of colonial

society; and the ways that Latin Americans have sought to construct stable nation-states and dynamic economies since gaining their independence. Although the course focuses primarily on broader social, economic and political transformations of the last 500 years, it also pays considerable attention to the ways these changes shaped everyday life, and the way people made sense of those changes.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

## HIS 1600 - Women in World History

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading and writing pre-assessment placement tests

**Description:** This course will explore the role, experiences, and contributions of women in the family, the economy, the culture, the religions and the political structure from a broad, comparative framework. Students will become familiar with how women's history modifies the traditional interpretations of historical events.

*Note:* Credit will be granted for only one prefix: HIS or GWS.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

**Cross Listed Course(s):** GWS 1600

## HIS 1700 - Nature and Society

**Credits:** 3

**Description:** This course surveys the past using a "Big History" approach to time scales, beginning with the universe's origins and ending with the current global environmental crisis. Students explore how humans have shaped the environment and how the environment has shaped human history. This course employs a world systems approach to help students analyze how humans have responded to environmental changes over time and consider how history can inform us about present environmental challenges.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

## HIS 1940 - Survey of African History

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading and writing pre-assessment placement tests

**Description:** This course surveys the major developments on the African continent from ancient times to the modern period. It focuses on political, social, economic, legal, historical, and cultural developments in African civilizations from ancient Egypt to the present.

*Note:* Credit will be granted for only one prefix: AAS or HIS.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

**Cross Listed Course(s):** AAS 1130

## HIS 2090 - The Black Lives Matter Movement and the Origins of Modern Black Protest

**Credits:** 3

**Description:** This course applies sociological concepts and historical themes to an analysis of the origins and nature of the Black Lives Matter (BLM) movement. The course begins with brief coverage of black resistance in the colonial period to the Abolitionist Movement but provides an in-depth exploration of modern black protest in the post-World War II civil rights decades and continues into the late 20th century with high-profile instances of police brutality. The remainder of the course follows a chronology, beginning in 2013 with the creation of #BlackLivesMatter and the growth of a new era of black protest. In addition to high-profile incidences of police brutality, attention is given to movement dynamics as shaped by Internet social media platforms and cable news. The course also addresses the #SayHerName movement, which has highlighted police violence against black women. Issues concerning misogyny are also covered, including black radical feminist critiques of black male patriarchy, and debates within the black community about the movement's focus. Finally, students will come away with a broad understanding of what systemic institutionalized racism is, as distinguished from incidences of racial violence by individual acts of terrorism or white supremacist terrorist organizations.

*Note:* The course is crosslisted. Credit will be granted for only one prefix.

**Cross Listed Course(s):** AAS 2090, PSC 2090, SOC 2090

## HIS 3000 - Historical Writing and Thinking

**Credits:** 3

**Prerequisite(s):** ENG 1020 or equivalent and fulfillment of the General Studies Historical Requirement.

**Description:** This course hones writing and thinking skills essential to the study of history. It develops abilities to find relevant material, critically read historical literature, analyze primary sources, and persuasively make historical arguments. The course is recommended for History majors and minors and open to those students who seek to enhance their critical writing and thinking skills.

**General Studies:** Written Communication

**Guaranteed Transfer:** GT-CO3

## HIS 3001 - Magic in the British Isles, 1500-1700 (HWT)

**Credits:** 3

**Description:** Alchemy, sorcerers, ghosts, and witches in early modern England, Scotland, Ireland, and Wales provide the content for this Historical Writing and Thinking course. Its primary purpose is to hone students' abilities to find relevant material, critically read historical literature, analyze primary sources, and persuasively relate historical arguments.

## HIS 3120 - Medieval Europe and its Neighbors

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of C- or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** Students explore the rich tapestry of medieval history by examining Europe and the neighboring regions in the Mediterranean, North Africa, and the Middle East. Students examine a broad range of topics including the Viking and Mongol invasions, the rise of Islam, women's place in society, the Crusades, trade and merchant economies, and the Black Death. By interpreting primary sources, literature and art, alongside secondary source readings, students develop their own historical analyses of this vital period of history.

## **HIS 3130 - History of Cyprus**

**Credits:** 3

**Prerequisite(s):** Permission of instructor

**Description:** In this course, students explore the history of Cyprus and the eastern Mediterranean from antiquity to modern times. Students are offered the course in conjunction with a Study Abroad trip to Larnaca, Cyprus. Prior to travel, students will read two books and attend a lecture designed to give an overview of the history of the region. While in Cyprus, students visit a number of historical sites. Students conduct research on a project that they choose with the approval of the instructor. Upon return, students attend a seminar and present their projects.

## **HIS 3131 - Ancient Greece**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course will treat the history of the Greek world from the late Neolithic period to the rise of Macedonia. The Minoan and Mycenaean civilizations, the growth of the city-states such as Sparta and the development of democratic institutions at Athens, the Peloponnesian Wars and the rise of the kingdom of Macedonia will be covered.

*Note:* Students may not receive credit for both HIS 3031 and HIS 3131.

## **HIS 3132 - Age of Alexander and the Ancient Mediterranean World**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or permission of instructor

**Description:** This course explores the storied history of the collapse of Classical Greece, the exploits of Alexander the Great, and the imperial trajectories of his successor states. These transformations are examined through conflict, interaction, and connectivity in the ancient Mediterranean world and southwest Asia. Central themes of this course include economic, social, and technological developments that transformed Greek culture in one way or another with an emphasis on empires, trading networks, and cross-cultural experiences. The course includes analysis of the legacies of this ancient civilization within the region and beyond.

## **HIS 3140 - Renaissance and Reformation**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** Europe in the fifteenth and sixteenth centuries (1400-1600) underwent cataclysmic change. Spurred on by inventions such as the printing press, the compass, and gunpowder, Europeans recovered the learning of the ancients, created masterful works of art and literature, colonized the new world, and instituted centralized governments. These same factors, however, split Europe apart as scholars and the laity, influenced in part by Renaissance ideas, declared Roman Catholic dogma false. This course will try to come to terms with such monumental changes and to see how such changes affected intellectual ideas, economic progress, government, war, and daily life.

## **HIS 3160 - Rome and the Caesars**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course surveys the history of Rome from its founding in the eighth century B.C.E. to its demise in the sixth century C.E. The course emphasizes Rome's rise to power and the transformations that led to the decline of the empire.

*Note:* Students may not receive credit for both HIS 3060 and HIS 3160.

## **HIS 3170 - Early Christianity to 500 C.E.**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** The course covers the development of Christianity from the time of Christ to 500 C.E. It considers the complex political and social context in which Christianity developed and treats the interaction between Christianity and the wider society.

*Note:* Students may not receive credit for both HIS 3070 and HIS 3170.

## **HIS 3200 - Early Modern Europe, 1648-1789**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course covers European history from 1648 to 1789, including political, cultural and religious aspects of that history.

## **HIS 3210 - French Revolution and Napoleon 1715-1815**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** Students examine the French Revolution in detail, after studying causes. Also considered are the effects of the Revolution and Napoleon upon France and the major countries of Europe.

## **HIS 3230 - Nineteenth-Century Europe**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course is a chronological survey of the century of progress culminating in the tragic climax of the outbreak of World War I. Such topics as the industrial revolution, the consolidation of the nation-state, rise of the masses, liberalism, socialism, nationalism and imperialism are covered.

## **HIS 3245 - Russian History from Princes to Putin**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course explores the history of Russia from the Kievan Rus' to the creation of the Russian Federation. Course themes include state building and political legitimization, economic development, the role of religion in public life, ideologies in flux, elite and popular culture, and Russia's position within global geopolitics.

## **HIS 3260 - Twentieth-Century Europe, 1914-2000**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course covers Europe during and after World War I, the period leading up to World War II as well as World War II and its aftermath.

## **HIS 3270 - Issues in European History: Variable Topics**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course is an examination of various problems in European history. The topics will vary to accommodate student needs and interests.

*Note:* This course may be repeated as the course title changes for a maximum of 9 credits.

## **HIS 3290 - Nazi Germany**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This detailed survey examines the origins of Hitler's regime within the context of twentieth century Germany and Nazi domestic and foreign policies to 1939. World War II, given thorough coverage, is viewed as the logical culmination of Hitler's ideology and his ability to use the German nation as a means to achieve his ends.

## **HIS 3320 - Britain since 1714**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This interdisciplinary course traces the history of Great Britain from the eighteenth century to the present day. It examines political, economic, social and cultural developments; the idea of "Britishness"; the role of the British Empire in this history; the impact of the world wars on Britain; and Britain's relationship to the rest of Europe, among other topics.

## **HIS 3330 - Medieval England**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course examines the politics, society, and religion of medieval England. It investigates topics such as chivalry and military tactics, the relationship between the church and state, daily life in the Middle Ages, and the struggle among cities, barons and monarchs.

## **HIS 3331 - Tudor and Stuart England**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** In the sixteenth and seventeenth centuries the English witnessed a break with the Roman Catholic Church, the execution of a king, the exploration of the Americas, as well as tumultuous change in the realms of science, economics, and culture. This course analyzes how and why such changes occurred and their effects on the English polity and society.

## **HIS 3340 - Ireland and the Irish**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted

with HIS prefix, or permission of instructor

**Description:** This is a survey course in Irish history and culture from the earliest period of Celtic civilization up to the contemporary period. It explores the various developments in Irish history over the past 3,000 years and attempts to identify those trends that were uniquely Irish and those that were a part of the overall evolution of European civilization.

### **HIS 3360 - Women in European History**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course provides an historical analysis of the role and contribution made by women in the development of Western Civilization from Neolithic times to the present.

*Note:* Credit will be granted for only one prefix: HIS or GWS.

**Cross Listed Course(s):** GWS 3360

### **HIS 3400 - Issues in American History: Variable Topics**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course examines various topics in American history. The topics will vary to accommodate student needs and interests.

*Note:* This course may be repeated for credit as the course title changes for a maximum of 9 credits.

### **HIS 3410 - American Colonial History**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** Between the sixteenth and eighteenth centuries, North America was a vast and contested ground where European, Indigenous, and African cultures mingled with and challenged each other. In this course, we will explore this zone of collaboration and conflict as we examine the economic, political, environmental, and social dynamics that shaped colonial American society prior to the Revolutionary War.

### **HIS 3420 - American West**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course treats the American West as a region bounded in the east by the Missouri River and in the west by the Pacific Ocean. The course begins with a survey of Native peoples

who made their homes in this place for thousands of years. Next, students will encounter the complicated tangle of myth and history as they study mineral rushes, fur trades, mountain men, outlaws, massacres, railroads, cattle barons, vigilantism, and wars for control. The course concludes with a look at the "modern" west. From Silicon Valley in California to Silicon Mountain in Colorado, students will study dam building, water management, urbanization, sustainability, environmentalism, the military industrial complex, and ponder the future of this region.

**University Requirement(s):** Ethnic Studies & Social Justice

### **HIS 3425 - Colorado and the Nation**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course explores the history and geography of Colorado with primary emphasis on the period since 1800. It considers interactions among Native Americans, Hispanic communities, and Euro American explorers, trappers, and settlers. Students also examine miner and pioneer life; twentieth century developments; and aspects of the state's social, economic, and political history that illustrate and contrast with broader national trends.

### **HIS 3426 - Colorado Water and the American West**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** You will embark in this course on a deep exploration of the history of water in Colorado and the American West. You will critically examine the cultural, political, and environmental significance of water management across diverse historic periods and communities. You will start with the water practices of Ancestral Pueblo and other Indigenous peoples, as you analyze how human communities shaped their relationships with water, both as a resource and an expression of cultural identity. We will then move to the introduction of Hispanic water management practices in the West, exploring their enduring influence on regional water systems as expressed in the acequia system.

With Colorado as a case study, you will engage in a critical investigation of the development of American water law and management, considering how federal, state, and local interests intersected to create one of the most complex hydraulic societies in the world. Through readings, discussions, and projects, you will develop the skills to analyze the intersections of history, policy, and environmental/social justice, while gaining an understanding of contemporary water issues that continue to shape the West. By the end of the course, you will have the tools to critically evaluate historical water practices and their ongoing impact on social, economic, and environmental dynamics in the West, empowering you to think deeply about the challenges and opportunities of water management in the 21st century.

**University Requirement(s):** Ethnic Studies & Social Justice

## HIS 3427 - History of Denver

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course covers Denver and its major contiguous suburbs from its prehistory to the early 21st century with emphasis on the 1858-1990 period. Social, economic, and political history are treated as are the major events in the city's history.

*Note:* Students may not receive credit for both HIS 3010 and HIS 3427.

## HIS 3430 - American Revolution and Early National Period, 1763-1848

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course examines politics, society, and economics during the Revolutionary and Early National periods. Major topics will include American society on the eve of the Revolution, the causes of the Revolution, military and diplomatic aspects of the eras, the development of political parties, reform movements, the changing status of Native and African Americans, and the position of women.

## HIS 3440 - American Slavery

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor.

**Description:** Students in this class explore the origins of slavery in the early modern Atlantic world and trace its history until the age of emancipation. Although the primary focus is on African slavery in British North America and the United States, the course integrates the Atlantic and imperial contexts and includes comparative units on slavery in other empires, as well as enslavement of Native Americans. Students analyze the political and economic consequences of slavery, and they examine the slave cultures themselves, including religion, resistance, and family life.

*Note:* Credit will be granted for only one prefix: AAS or HIS.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** AAS 3440

## HIS 3463 - Getting Schooled: A History of American Education

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** Are schools engines of social justice, or do they preserve the existing power structure? Historically, have schools and educational policy served as engines of democracy or gateways to privilege? Students in this course explore these questions by examining American education from the colonial era to the present.

The course pays particular attention to the development of rural and urban schools; regional differences in education; the experiences of Native Americans, Black Americans, immigrants, girls and women, and the disabled; and competing philosophies and reform movements. Whether or not students plan to work in schools, they can take a close and critical look at the most widely shared and misunderstood institutions in American public life.

**University Requirement(s):** Ethnic Studies & Social Justice

## HIS 3490 - Native American History

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** In this course you will enter into an in-depth exploration of the complex history of Indigenous peoples in North America, from pre-colonial times to the present. Through a critical examination of historical texts, primary sources, and scholarly debates, you will engage with the profound impact of European and American colonialism, particularly how racial constructs and hierarchies shaped the dehumanization, dispossession, and violence against Native communities. You will analyze the intersections of race, power, and colonial structures while reflecting on how these systems continue to influence contemporary issues facing Indigenous peoples.

As a student in this course, you will develop a nuanced understanding of the distinctions between civil and sovereign rights, and explore how these concepts have influenced Native struggles for justice, recognition, and self-determination. Emphasis will be placed on the agency, resilience, and survival strategies of Native communities, allowing you to critically assess how Indigenous peoples have navigated and countered centuries of dispossession. Through readings, discussions, and writing assignments, you will sharpen your analytical skills and deepen your ability to think critically about the past and its relevance to current social and political realities.

*Note:* Students may not receive credit for both HIS 3090 and HIS 3490.

**University Requirement(s):** Ethnic Studies & Social Justice

## HIS 3520 - Civil War and Reconstruction

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course traces the background of the Civil War, the war itself, and the aftermath of the war. It also familiarizes students with Civil War and Reconstruction historiography.

## HIS 3530 - American Baseball History

**Credits:** 3

**Description:** The purpose of this course is to examine American baseball as a cultural reflection and catalyst in American life since the 1840s. Drawing on primary and secondary sources, as well as

guest lecturers the course will illustrate the place of the sport within American culture.

## **HIS 3540 - Emergence of Modern U.S., 1877-1920**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course traces the rise of industrialism; immigration and its impact; the urbanization of the nation; the westward movement; the organization of laborers and farmers; the growth of imperialism; and the reform spirit with attendant social, political, and constitutional adjustments. It also treats World War I and the War's immediate aftermath.

## **HIS 3560 - Chicana/o History, 1836 to the Present**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course is a historical survey of the Mexican population born and living in the Southwestern United States. Students in this course examine the era from the Texas Revolt in 1836 through the contemporary era of the 21st Century. Students will study complex racial, class, gender, regional, and generational identity issues affecting the intra-ethnic relations among Chicanas/os in the multicultural U.S. Special attention will be paid to Chicanos/as in Colorado history.

*Note:* Credit will be granted for only one prefix: CHS or HIS.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** CHS 3020

## **HIS 3570 - African American History I**

**Credits:** 3

**Prerequisite(s):** ENG 1010 or ENG 1009 or equivalent with a grade of D or better, or permission of instructor

**Description:** Students in this course learn about the early history of African Americans in the United States, beginning with their ancestry in West and West-Central Africa and culminating with the Civil War. Students analyze the cultural, social, economic, and political transformation of African Americans in the colonial and national history of the United States. Topics include the Atlantic Slave Trade, colonial identity, plantation slavery, slave communities, resistance, the Constitution and race, demographics of freedom, abolitionism, the Civil War and its aftermath.

*Note:* Credit will be granted for only one prefix: AAS or HIS

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** AAS 3570

## **HIS 3580 - African American History II**

**Credits:** 3

**Prerequisite(s):** ENG 1010 or ENG 1009 or equivalent with a grade

of D or better, or permission of instructor

**Description:** Students in this course focus on the collective experience of African Americans in American history, thought, and culture from Reconstruction to the present. Students learn about the process of freedom and citizenship for African Americans through an examination of the major political, economic, and social themes of the 19th and 20th centuries. Particular attention is paid to the agency of African Americans in community-building, migration, protest, and patriotism.

*Note:* Credit will be granted for only one prefix: AAS or HIS.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** AAS 3580

## **HIS 3590 - American Immigration History**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course concentrates on the historical movement of people into the United States. It considers the factors which caused them to migrate, their adjustment to their new homes, and the interactions between them and other Americans. Students will explore the ethnic backgrounds, customs, and identities of diverse groups including Mexican and Asian Americans among others.

## **HIS 3625 - American Environmental History**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course will examine the interactions between humans and plants and animals in North America from pre-Columbian times to the present, as well as U.S. attitudes toward landscapes, cities, and natural phenomena.

*Note:* Students may not receive credit for both HIS 3880 and HIS 3625.

## **HIS 3640 - U.S. World War I through World War II**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course covers the United States between 1912 and 1945 including politics, foreign policy, society, technology, economics, and culture. Among topics covered are the U.S. in World Wars I and II, culture, society and politics in the 1920s, the Great Depression, and the New Deal.

## **HIS 3650 - U.S. Women's History**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted



with HIS prefix, or permission of instructor

**Description:** This course emphasizes women's changing roles in American history. Students examine women's status, image and legal rights and how they evolved due to social and economic changes and as a result of activism of reformers and writers. Students study the nuances and differences between and among American women, assessing the intersectional relationship between gender, race, class, and sexuality. The course stresses both the changes and the continuities over the last 300 years.

*Note:* Credit will be granted for only one prefix: GWS or HIS.

**Cross Listed Course(s):** GWS 3651

## **HIS 3655 - Women of the American West**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course will provide students with an overview of the ways in which women of many cultures shaped the North American West. Women developed the West as a home place, borderland, and frontier. Course themes that will be explored in lectures, discussion, and assignments include gender, masculinity, class, race, ethnicity, sexuality, labor, and environment.

*Note:* Credit will be granted for only one prefix: HIS or GWS.

**Cross Listed Course(s):** GWS 3655

## **HIS 3660 - American Protest: The History of Social Movements from the Cold War to the Twenty-First Century**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 or Permission of Instructor

**Prerequisite(s) or Corequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** Students examine protest movements that emerged in the post-WWII period through the early twenty-first century in America. These social movements include: the African American Civil Rights Movement, Feminism, the Chicano/a Movement, the American Indian Movement, the Gay Liberation Movement, and recent Conservatism. Students contextualize each of these movements within the broader Cold War era and explore how these movements were in conversation with each other. While the focus is primarily on social movements in the United States, international student-led movements also feature significantly.

**University Requirement(s):** Ethnic Studies & Social Justice

## **HIS 3670 - U.S. Foreign Relations: Variable Topics**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course is an examination of various issues,

problems, or areas in American foreign policy from colonial origins to the recent past. The topics will vary to accommodate student needs and interests.

*Note:* This course may be repeated under different topics for a maximum of 9 credits.

## **HIS 3675 - The American Presidency**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course surveys the history and structure of the American presidency as an institution and probes the lives and administrations of individual presidents. Significant political themes and topics pertaining to the White House's historical political climate are likewise explored.

*Note:* Students may not receive credit for both HIS 3370 and HIS 3675.

## **HIS 3681 - Film as Social History**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course will examine how historical films can build national consensus--or create and perpetuate national myths--and how they often say more about the time they were made than about the time they portray.

*Note:* Students may not receive credit for both HIS 3861 and HIS 3681.

## **HIS 3683 - American Religious History**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This class will explore American religious practice, community, and culture from before colonization to the present. It will consider how Americans have both retained and adapted traditional faiths in new circumstances, and it will examine how the American faithful have articulated their spiritual identities and (sometimes) imposed these identities on others. Finally, it will explore how American religious leaders and followers have negotiated the meanings of ritual and belief, often creating new traditions that are firmly rooted in American history and society.

## **HIS 3690 - American Military History**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course is a study of American military history

from the wars of the colonial period through Vietnam. It considers battles, strategy, and organization.

## **HIS 3700 - Modern China**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with one, or permission of instructor

**Description:** This course covers the history of China since 1800, with emphasis on social, cultural, economic, and political developments. The course will discuss the traditional order in China, its breakdown both by internal and external challenges, and the Chinese people's struggle to adjust to the new world order imposed by foreign powers. It will also explore the efforts of the Chinese to remake their country through revolution.

## **HIS 3705 - 100,000 Years of War**

**Credits:** 3

**Description:** This course uses a broad comparative framework to introduce students to the economic, intellectual, political, and cultural impact that warfare has had from prehistory to modern times. One of every 150 people die violently in the world today. One of every 100 people died in this fashion a century ago, and one of every fifty people approximately 1,000 years ago. An astonishing one out of ten people died violently 10,000 years ago. Students will explore this contingent shift away from violence over time.

*Note:* Credit will be granted for only one prefix: ANT or HIS.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Cross Listed Course(s):** ANT 3650

## **HIS 3706 - Holy Land Archaeology**

**Credits:** 3

**Description:** This course examines important archaeological discoveries relevant to Holy Land historical contexts and interpretation. Students critically analyze both material and literary evidence, as well as historic and contemporary scholarship, to understand the benefits and challenges of correlating ancient literary sources, biblical narratives, and the archaeological record.

*Note:* Credit will be granted for only one prefix.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Cross Listed Course(s):** ANT 3640

## **HIS 3707 - Archaeology of Ancient Egypt**

**Credits:** 3

**Description:** This course examines a set of timeless historical and anthropological issues as experienced by ancient Egyptians. Students critically analyze the classic Egyptian discoveries and review the latest archaeological research.

**Cross Listed Course(s):** ANT 3630

## **HIS 3711 - Caribbean History and Culture**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course examines the evolution of Caribbean societies from the consolidation of slavery in the seventeenth century to the emergence of independent multi-ethnic nations in the twentieth century, and emphasizes the central role of the Caribbean in the Atlantic world.

*Note:* Credit will be granted for only one prefix: AAS or HIS.

Students cannot receive credit for both HIS 3811 and HIS 3711.

**Cross Listed Course(s):** AAS 3610

## **HIS 3715 - Food in World History**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent; completion of the General Studies Historical course requirement or permission of instructor.

**Description:** This course highlights the significance of food in society. Students examine food habits from the earliest hunter-gatherers to modern consumers of fast food. They consider the origins of agriculture, famine, the evolution of world cuisines and civilizations, the international exchange and spread of foods and food technologies, and the effects of the global economy on food, production, diets and health. In the process, students consider the role food plays in many aspects of human history, including evolution, religion, politics, class, family, national identity, technology and the economy. This course uses multiple disciplines and perspectives to explore eating habits and how they change over time.

## **HIS 3720 - Themes in World History: Variable Topics**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This seminar explores the field of World history from theoretical, conceptual, and content approaches. This course is aimed for advanced students in World history and for students interested in teaching World history at the elementary and secondary levels.

## **HIS 3725 - The World since 1900**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course explores the major historical developments of the 20th century, emphasizing their social, economic, cultural, and political dimensions.

## **HIS 3734 - World War I and the Making of the Modern World**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** The First World War was many things: the "war to end all wars," the "Great War," the start of the "short" twentieth century, the dawn of the "age of catastrophe." By the time the war ended, "Western civilization" was destroyed and new global patterns had emerged. From genocides to the rise of Communism and worldwide independence movements, the consequences of the war continue to shape the twenty-first century. This course examines the origins of the war in the "long" nineteenth century, the impact of total war on societies across the world, the Treaty of Versailles and the expectations of peace, and creation of an uncertain postwar world.

### **HIS 3735 - World War II, 1939-1948**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor.

**Description:** This course provides a detailed overview of the Second World War from multiple perspectives, including military, political, economic, social and cultural history. Special attention focuses on close reading of multiple personal accounts of the war from a variety of perspectives.

*Note:* Students may not receive credit for both HIS 3735 and HIS 4650.

### **HIS 3740 - Modern Japan**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course covers the history of Japan since the 1850s, with emphasis on the nation's social, economic, and political development. The course will discuss the traditional order in Japan, its modification over time, the nation's struggle to adjust to the new world order imposed by foreign powers, its defeat in World War II, and postwar efforts to rebuild.

### **HIS 3745 - History of Meso-America: Pre-Columbian and Colonial Periods**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course examines the history of Meso-America and its relationship to the American Southwest from pre-Columbian times to 1836. Particular attention will be paid to the dynamism of indigenous peoples and the hybrid nature of the region's culture after the Spanish conquest.

*Note:* Credit will be granted for only one prefix: CHS or HIS.

**Cross Listed Course(s):** CHS 3000

### **HIS 3746 - History of Modern Mexico**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course introduces students to major themes in the social and political history of Mexico from independence in the early nineteenth century to the present. The course stresses the importance of social movements in the making of modern Mexico, as well as the influence of large-scale historical transformations on everyday life. This course emphasizes historical thinking and analysis, including the critical evaluation of diverse sources and the ability to integrate their insights to answer historical questions.

### **HIS 3747 - Latin American Revolutions**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course examines the origins, development and continuing influence of twentieth century Latin American revolutions, with a focus on placing these struggles in comparative historical context. This course explores various approaches to revolution and the general role of left political formations in Latin America in an attempt to grasp both the promises and limitations of these important movements for social change.

### **HIS 3750 - India and South Asia since 1500**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** The course covers religious and linguistic diversity in India; the nature of the Indian state; comparative colonial regimes; the complexity of responses to colonialism; and ideas of gender in colonial and modern South Asia. Students gain a more developed understanding of the political, social and economic geography of South Asia, as well as some familiarity with several South Asian religions, including Hinduism, Islam, Buddhism and Sikhism.

### **HIS 3760 - Modern Middle East**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course explores the history of the Middle East and North Africa, with an emphasis on the nineteenth and twentieth centuries. Topics addressed include: the geography and resources of the region; political control and governance; warfare and terrorism; the Cold War; the geopolitics of oil; Zionism and the Arab-Israeli conflict; and the continuing influence of Islam on state and society.

## HIS 3770 - World of Islam [ARCHIVED FALL 2025]

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course surveys Islamic civilization from its origins in the Middle East through its expansion into Asia, sub-Saharan Africa, Europe, and the Americas from the seventh century to the present. It covers the political and military history of the Islamic Empire, as well as its cultural, religious, and scientific achievements. Considerable attention is also paid to the relationship between Islamic societies and states and their European and American counterparts.

## HIS 3780 - Issues in World History: Variable Topics

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course examines various topics in world history. The topics will vary to accommodate student needs and interests.

*Note:* This course may be repeated for credit as the course title changes for a maximum of 9 credits.

## HIS 3781 - Holocaust and Genocide: Memory and Method

**Credits:** 3

**Description:** This course explores the origins and implementation of the Holocaust and other genocides in world history. Students place the Holocaust and other cases of genocide in comparative historical contexts. Major themes for discussion are the origins of prejudice, hatred, dehumanizing policies, the intersection of law and recognition, and the international community's role in response to acts of genocide. Students will also learn oral history methodologies to understand the importance of survival testimony for documenting genocide.

## HIS 3782 - History of Human Rights

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course contextualizes our moral choices as part of a longer story of humanity. We explore the topic of human rights as both an intellectual history and as praxis. The course begins with the debate over the origins of human rights as a concept and a movement. Then it examines the evolution of "inalienable rights," the parallel rise of democracy and entrenchment of slavery, the growth of humanitarian movements since the 19th century, and the challenges of the 20th century for the international human rights movement.

*Note:* Some sections of this course may be taught as Service Learning.

## HIS 3785 - Science and Technology in World History

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course explores the role of science and technology in World history. Themes will include the relationship between the divine and empirical understandings of the natural world, the production of scientific knowledge and its practical application, the influence of culture on the production of scientific and technological knowledge, and the globalization of scientific and technological authority and practices. The goal of the course is to learn about the past from the perspective of ideas about nature within diverse social and cultural contexts while focusing on how this past has shaped our own understanding of nature and our place in it.

**General Studies:** Social and Behavioral Sciences, Global Diversity

## HIS 3790 - The United States and Vietnam

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor

**Description:** This course traces the 1960s conflict in Vietnam to its roots in nineteenth century colonialism, conflicting interests in World War II and the demise of French power in the 1950s. It details U.S. involvement and U.S. strategy from the 1950s until the defeat of South Vietnam in 1975. Attention is also paid to the U.S. home front and to the effects of the conflict.

## HIS 3830 - The Mexican Revolution

**Credits:** 3

**Prerequisite(s):** CHS 1000 or Permission of instructor

**Description:** This course traces the social, political, and economic forces that contributed to the Mexican Revolution (1910-1920). Furthermore, it provides a critical analysis of how leaders, women, the Mexican masses and the United States influenced revolutionary events.

*Note:* Credit will be granted for only one prefix: HIS or CHS.

**Cross Listed Course(s):** CHS 3010

## HIS 3855 - History of Sexuality

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent with a grade of D or better, and any course with HIS prefix or that is crosslisted with HIS prefix, or permission of instructor.

**Description:** How can we understand history better if we consider it through the lenses of gender and sexuality? In this course, we examine these concepts as they changed over time. We consider how different societies have defined and understood gender and sexuality, and how people who have claimed different gender identities experienced and expressed themselves in medicine, the law, labor, politics, religion, nationality, family life, and popular culture. How

does sex intersect with race and class? How have ideals of the body and gender expression shifted? Specific cultures, eras, and themes covered vary, depending on the instructor's specialization.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** GWS 3855

## HIS 3890 - Readings in History: Variable Topics

**Credits:** 1-2

**Description:** In this course, a student will read extensively in a selected area. Critiques of the works read will be submitted to the professor directing the reading.

*Note:* This course may be repeated for credit as the title changes. Variable Credit.

## HIS 3920 - Hip-Hop Culture and Rap Music

**Credits:** 3

**Prerequisite(s):** AAS 1010 or ENG 1020

**Description:** This course seeks to examine the long-standing cultural warfare that exists among core elements of Hip-Hop culture and the impact such challenges have on gender and social identities. Students will think critically about Hip-Hop music beyond the scope of entertainment through the examination of literature, films, and music that provide interdisciplinary discourse on Hip-Hop in our society.

**Cross Listed Course(s):** AAS 3920, MUS 3895, SOC 3250

## HIS 3930 - Public History

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** Students study and apply theories and practices from fields of public history. Public history encompasses history that is presented and interpreted for people outside an academic setting. Subject areas include historical sites, archives, museums, media, publishing, oral history, preservation, heritage tourism, and cultural resource management. Students also explore careers in the subject areas.

## HIS 3980 - Internship in History

**Credits:** 1-15

**Prerequisite(s):** Major in History; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## HIS 3990 - History Pedagogy Laboratory

**Credits:** 1

**Prerequisite(s):** Completion of 9 prior credits of HIS course work and permission of instructor

**Corequisite(s):** Enrollment in a 3xxx-level HIS course with the same instructor

**Description:** This course enables students to consult about course design, teaching and assessment strategies with a History instructor of an upper-division History class as the semester unfolds. It is designed to offer elementary and secondary licensure students pedagogy for History teaching. Students must simultaneously enroll in the same History instructor's section of an upper-division course.

*Note:* This course may be repeated two times.

## HIS 3991 - Undergraduate Teaching Assistant

**Credits:** 1-3

**Prerequisite(s):** 9 credit hours of coursework with HIS prefix with a grade of B or better

**Description:** This course provides students interested in history to gain on-the-job training in historical teaching methods and practices. Students learn pedagogical theory and strategies and the use of educational technology in a variety of course formats. Under close faculty supervision, students assist instructors in course teaching. In addition to attending class meetings of the assigned course, students meet regularly with faculty to discuss class goals, teaching and research strategies, and assistantship responsibilities specific to supervising instructor.

*Note:* (Variable credit; this course is repeatable for up to a maximum of 6 credit hours)

## HIS 4010 - Methods of Teaching Social Science: Secondary School

**Credits:** 3

**Prerequisite(s):** EDU 2111 or EDS 3130 or permission of instructor

**Description:** This course explores disciplinary strategies for teaching Social Studies subjects and analyzes their effectiveness. Students consider the political, social, and historical contexts for Social Studies teaching. The course also provides opportunities for practical application and critical review of theories, frameworks, and assessment techniques for teaching these disciplines in the secondary classroom in light of Colorado Department of Education Academic Standards and Teacher Quality Standards.

HIS 4020 - Field Experience in Teaching Social Studies in Secondary Schools is a recommended co-requisite course for students seeking Secondary Social Studies licensure.

**University Requirement(s):** Senior Experience

## HIS 4020 - Field Experience in Teaching Social Studies in Secondary Schools

**Credits:** 1

**Prerequisite(s):** EDS 3140

**Corequisite(s):** HIS 4010

**Description:** This field-based course provides opportunities to develop teacher candidates' professional and pedagogical skills in a Social Studies classroom. In coordination with the classroom teacher, teacher candidates will design and implement content lessons, use content strategies to improve both information acquisition and literacy skills, and adjust instruction for students with diverse needs, including Culturally and Linguistically Diverse backgrounds. Course assignments and evaluations are designed to help teacher candidates become reflective practitioners. HIS 4010 Methods of Teaching Social Science is recommended as a co-requisite course.

*Note:* Credit will be granted for only one prefix: GEG or HIS.

**Cross Listed Course(s):** GEG 4020

## HIS 4820 - Senior Seminar

**Credits:** 3

**Prerequisite(s):** ENG 1020 or equivalent with a grade of D or better and at least nine upper-division hours in history or in courses crosslisted with history, or permission of instructor

**Description:** This course refines students' knowledge of a historiography and their skills in the research and writing of history. As a culmination of the major, it asks students to think more analytically and extensively about a particular historical topic. Consult the instructor for specifics about the topic.

**University Requirement(s):** Senior Experience

## Honors

### HON 1000 - Introduction to Music

**Credits:** 3

**Description:** In this course, students investigate the function, structure, style and genre classifications, and aesthetic interpretations of a diverse variety of musical traditions. The students develop and employ a vocabulary for musical description and listen to many different traditions of musical expression. This course is intended for non-music majors.

*Note:* Credit will be granted for only one prefix: HON or MUS.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH1

**Cross Listed Course(s):** MUS 1000

### HON 1001 - Introductory Psychology

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on the reading, writing, and mathematics preassessment placement tests

**Description:** This course presents basic concepts, principles, and methods involved in the scientific study and understanding of human behavior. Attention is given to organic bases of human and other animal behavior with emphasis on perception, learning, motivation, maturation, physical and social adaptation, experimental techniques, individuality and personality, conflict and stress, adjustment and mental health, social behavior, and developmental processes.

*Note:* Required course for all psychology majors and minors. Credit

will be granted for only one prefix: HON or PSY.

**Cross Listed Course(s):** PSY 1001

### HON 1003 - Introduction to Chicana/o Studies

**Credits:** 3

**Description:** This course introduces students to the broad range of the interdisciplinary field of Chicana/o Studies. The course covers the major historical moments beginning with an overview of Pre-Columbian civilizations in the Americas and Medieval Spain, which have led to the contemporary social location of Mexican-origin population within the United States. In addition, the course introduces students to the broad scope of Chicana/o cultural production in the creative arts such as visual, film, music and literature. Resources draw from various disciplines, including but not limited to: sociology, history, political science, anthropology, education, art and art history, women and gender studies, and religious studies.

*Note:* Credit will be granted for only one prefix: CHS or HON.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** CHS 1000

### HON 1011 - The Big Questions: An Introduction to Philosophy

**Credits:** 3

**Prerequisite(s):** Acceptance into the Honors program

**Description:** Philosophy asks questions such as: What am I? How can I know things? What is real? Does God exist? Students confront questions like these in a rigorous, critical, and open-ended manner. Philosophy is unlike other disciplines: students learn not just what others have discovered, but also how to think about themselves, the world, and the relation between them.

*Note:* Credit will be granted for only one prefix: HON or PHI.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH3

**Cross Listed Course(s):** PHI 1010

### HON 1013 - Presentational Speaking

**Credits:** 3

**Description:** This course teaches students how to design and deliver effective, ethical presentations. The ability to adapt to different audiences and contexts - such as professional or public situations - is emphasized. The course provides instruction on and practice of organization, delivery and performance, technology, and research skills. Students also learn effective listening techniques and critical thinking skills. The course empowers students to become successful professional presenters and public speakers.

*Note:* Credit will be granted for only one prefix: COMM or HON.

Sections of this course may be offered in-person, in hybrid format, or online.

**General Studies:** Oral Communication

**Cross Listed Course(s):** COMM 1010

## HON 1023 - Comparative Politics

**Credits:** 3

**Description:** This course examines political societies and explores the basic ideas, structures, and issues of modern political systems in a comparative context.

*Note:* Credit will be granted for only one prefix: HON or PSC.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS1

**Cross Listed Course(s):** PSC 1020

## HON 1040 - World History since 1500

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading and writing pre-assessment placement tests

**Description:** This course provides an introduction to important theories, concepts, methods and content for understanding world history since 1500. Among others, it explores social, cultural, religious, economic, and political themes.

*Note:* Credit will be granted for only one prefix: HIS or HON.

**General Studies:** Historical, Global Diversity

**Guaranteed Transfer:** GT-HI1

**Cross Listed Course(s):** HIS 1040

## HON 1080 - General Biology I

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading, writing and mathematics pre-assessment placement tests

**Corequisite(s):** HON 1090

**Description:** This introductory course serves as the foundation for all other biology courses. Emphasis is placed on cellular and molecular biology, biochemical pathways, and genetics.

*Note:* Credit will be granted for only one prefix: BIO or HON.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

**Cross Listed Course(s):** BIO 1080

## HON 1090 - General Biology Laboratory I

**Credits:** 1

**Prerequisite(s):** Minimum performance standard scores on reading, writing and mathematics pre-assessment placement tests

**Corequisite(s):** HON 1080

**Description:** This mandatory laboratory accompanies HON 1080. This course introduces biology laboratory techniques, specifically exploring the scientific method.

*Note:* Credit will be granted for only one prefix: BIO or HON. The Biology Department requires students who do not attend the first week of scheduled laboratory sessions to drop that course. Those students who do not drop the course will not be permitted to attend labs the rest of the semester, will receive an F in the course, and will be responsible for all tuition and fees incurred.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

**Cross Listed Course(s):** BIO 1090

## HON 1501 - Dynamics of Health

**Credits:** 3

**Description:** This course investigates contemporary health topics. Subjects surveyed include current biological, psychological, sociological, and cultural factors that influence health. Experiential learning encourages students to plan and adopt healthier behaviors.

*Note:* Credit will be granted for only one prefix: HON or ITP.

**General Studies:** Social and Behavioral Sciences

**Cross Listed Course(s):** ITP 1500

## HON 2040 - Introduction to Nutrition

**Credits:** 3

**Description:** This course is designed to provide students with an understanding of the fundamental concepts of human nutrition, including digestion, absorption, metabolism, and the function of nutrients as they relate to human health and disease.

*Note:* Credit will be granted for only one prefix: HON or NUT.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC2

**Cross Listed Course(s):** NUT 2040

## HON 2110 - The Art and Science of Learning

**Credits:** 3

**Description:** In this course, students explore current theories, research, and applied practices regarding how people learn. Students analyze the assumptions underlying personal theories of learning in comparison to scholarly theory and research studies, collect evidence to support and challenge their views, and develop new ways of thinking about the learning process. Through the analysis of research-based strategies and emerging ideas about learning from social and behavioral sciences and other disciplines, students self-assess their own learning strategies and apply learning theories to their own practice.

**General Studies:** Social and Behavioral Sciences

## HON 2750 - History of the Self

**Credits:** 3

**Prerequisite(s):** Enrollment in the Honors Program or Permission from the Honors Director

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** In this interdisciplinary course, students learn about how grand narratives have shaped and transformed notions of subjectivity over time, from the ancient and/or medieval world through the present day. The focus is on works that have had a literary, philosophical, and artistic impact on the notion of the self. The goal is to comprehend significant changes over time in the relationship between the individual and the world. Students are encouraged to make thematic connections across disciplines.

*Note:* B- or better required for Honors credit.

**General Studies:** Arts and Humanities

## HON 2770 - Dynamics of Change

**Credits:** 3

**Prerequisite(s):** Enrollment in the Honors Program or Permission from the Honors Director

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** This course is an interdisciplinary inquiry where students learn about the dynamics of social change. Discussions focus on important examples of radical social transformation throughout history and from around the globe. Students explore definitions and theoretical models that can be used to explain and institute change. Students are also encouraged to learn about and connect with community-based organizations involved in creating change and promoting social justice. Some sections of this course may be offered as Service Learning courses.

*Note:* B- or better required for Honors credit. Some sections of this course may be taught as Service Learning.

**General Studies:** Social and Behavioral Sciences, Global Diversity

## HON 2800 - Scientific Revolutions

**Credits:** 3

**Prerequisite(s):** Enrollment in the Honors Program or Permission from the Honors Director

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course students learn about the initial discoveries that sparked new scientific fields and about the subsequent revolutions caused by such discoveries. By examining the role of the scientific method in the production of knowledge, students improve their own scientific literacy and learn to critically examine historical scientific experiments. Students investigate the methodologies used, the theories and hypotheses tested, and manipulate original data created in selected experiments. Course discussions also examine the complex relationship between science and world views.

*Note:* B- or better required for Honors credit.

**General Studies:** Natural and Physical Sciences

## HON 2850 - Technology and Society

**Credits:** 3

**Prerequisite(s):** Enrollment in the Honors Program or Permission from the Honors Director

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** Technology's impact on human life emerges in a wide array of fields such as agriculture, medicine, warfare, politics, education, transportation, space exploration, communication, data science and robotics. In this interdisciplinary course, students consider definitions of technology and examine the historical relationship between humans and technology. Course discussions also explore debates on the ethical uses of technologies and how technological developments impact our lives as individuals and collectively.

*Note:* B- or better required for Honors credit.

**General Studies:** Social and Behavioral Sciences

## HON 2950 - Introduction to Critical Theory

**Credits:** 3

**Prerequisite(s):** Enrollment in the Honors Program or Permission from the Honors Director

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** In the Modern Period, Critical Theory emerges as a decidedly multidisciplinary field that challenges the foundations of the existing social order through in-depth analysis of capitalism, culture, power, the family, and the individual. This course provides an overview of the development of the field of Critical Theory and examines some of its major currents. Topics may include: Psychoanalytic Criticism, Marxist Criticism, Discourse Theory, Feminist Criticism/Gender Studies/Queer Theory, Deconstruction, Race Theory, Postmodernism, New Historicism, Cultural Studies, Narratology, and Digital Media Studies.

*Note:* B- or better required for Honors credit.

**General Studies:** Arts and Humanities

## HON 3101 - Social Justice and Activism in the Chicana/o Community

**Credits:** 3

**Prerequisite(s):** CHS 1000

**Description:** This course is designed to provide in-depth sociological, historical and political analyses of community-based organizations, the process by which they originated, leadership styles, and information relative to their missions and functions within the Chicana/o community. Students will analyze theories regarding social change as they apply to social justice, activism and community organizing.

*Note:* Credit will be granted for only one prefix: CHS, HON, or SWK.

**General Studies:** Social and Behavioral Sciences

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** CHS 3100, SWK 3110

## HON 3460 - Chicana Feminisms

**Credits:** 3

**Prerequisite(s):** CHS 1000 or GWS 1001; or permission of instructor

**Description:** This course will provide students with a general background on Chicana feminist thought. Chicana feminism has carved out a discursive space for Chicanas and other women of color, a space where they can articulate their experiences at the intersection of race, class, gender, and sexuality, among other considerations. In the process, Chicana feminists have critically challenged Chicano nationalist discourse as well as European and North American feminism. The course will address the diversity in thinking and methodology that defines these discourses thus acknowledging the existence of a variety of feminisms that occur within Chicana intellectual thought. The course will also explore the diversity of realms in which this feminist thinking is applied: labor, education, cultural production (literature, art, performance, etc.), sexuality, and spirituality, among others.

*Note:* Credit will be granted for only one prefix: CHS, GWS, or



HON.

**Cross Listed Course(s):** CHS 3460, GWS 3550

## HON 3910 - Honors Colloquium

**Credits:** 3

**Prerequisite(s):** "C" or better in ENG 1020 or ENG 1021, Enrollment in the Honors Program or Permission from the Honors Director

**Description:** This variable topics course provides students with the opportunity to examine historical and/or contemporary issues from interdisciplinary perspectives. Course activities include relevant readings from a variety of perspectives and disciplines, discussions encouraging synthesis and analysis of conflicting or competing views, and written assignments.

*Note:* This course may be repeated under different topics for a maximum of 6 credits; B- or better required for Honors credit.

## HON 4948 - Honors Thesis Seminar

**Credits:** 1

**Prerequisite(s):** "C" or better in ENG 1020 or ENG 1021, Junior or Senior standing, Enrollment in the Honors Program and Permission from the Honors Director.

**Description:** This course is taken prior to the Senior Honors Thesis (HON 4950) and is only open to Honors students. This course familiarizes students with project organization and the scope and proper format of an undergraduate thesis project. Each student develops: a thesis statement, a project outline, an initial bibliography and a working abstract. Students also identify a primary Thesis Advisor for their projects. The Thesis Advisor is a faculty member with expertise in a discipline closely related to the topic of the thesis project.

*Note:* This course must be completed with a B- or better in order to advance to the Senior Honors Thesis.

## HON 4950 - Senior Honors Thesis

**Credits:** 3

**Prerequisite(s):** HON 4948 with B- or better, Senior standing, Enrollment in the Honors Program and Permission from the Honors Director, approval from student's department/degree program if taken in place of Departmental Senior Experience course.

**Description:** The Honors Thesis is the culmination of the Honors undergraduate experience. In this course, students complete an independent research and/or creative project under the direction of a primary Thesis Advisor and the Honors Director. The Thesis Advisor is a faculty member with expertise in a discipline closely related to the topic of the thesis project. Students submit a written thesis and deliver a public oral presentation of their work.

*Note:* Students are required to receive approval from their department chair if this course is taken in place of a departmental Senior Experience course. This course must be completed with a B- or better in order to count for Honors credit.

**University Requirement(s):** Senior Experience

## HON 4951 - Paired Senior Honors Thesis

**Credits:** 1

**Prerequisite(s):** HON 4948 with B- or better, Senior standing, Enrollment in the Honors Program and Permission from the Honors Director

**Prerequisite(s) or Corequisite(s):** This one-credit course must be paired with an upper division departmental Senior Experience, research or capstone course

**Description:** The Paired Honors Thesis is the culmination of the Honors undergraduate experience. This one-credit course must be paired with an upper division departmental Senior Experience, research or capstone course. In this course, students complete an independent research and/or creative project under the direction of a primary Thesis Advisor and the Honors Director. The Thesis Advisor is a faculty member with expertise in a discipline closely related to the topic of the thesis project. Students submit a written thesis and deliver a public oral presentation of their work.

*Note:* This course must be completed with a B- or better in order to count for Honors credit.

## Hospitality Leadership

### HLDR 0370 - Study Abroad in Hospitality

**Credits:** 0

**Description:** This is a zero-credit course to demonstrate that a student has engaged in a study abroad experience. Students who engage in study abroad will sign-up for this zero-credit course concurrently with the for-credit courses offered on their chosen study abroad in order to indicate that they completed a study abroad experience on their transcript.

### HLDR 1000 - Introduction to Hospitality

**Credits:** 3

**Description:** This course provides an overview of the historical development, organization structures, future growth, and dynamics of the tourism and hospitality industry from the perspective of the global economy. Hospitality leaders are integrated into the course to provide industry perspective and lessons in leadership successes and failures.

### HLDR 1040 - Hospitality and Tourism Technology

**Credits:** 3

**Description:** Hospitality and Tourism Technology is designed to offer an in-depth exploration of how technology intersects with key areas of the hospitality and tourism sectors. Focusing on conventional and emerging tools/software, the course emphasizes the broader applications and implications of technology, ensuring students are prepared for the ever-evolving technological landscape of hospitality and tourism.

### HLDR 1100 - Colorado Tourism and Recreation

**Credits:** 3

**Description:** This course explores the basic components and aspects of the tourism and recreation industries in Colorado. Students develop a comprehensive knowledge of market segments, key roles, and challenges in the industries.

### **HLDR 1200 - Cannabis 101 for Hospitality**

**Credits:** 3

**Description:** This class will give the student an overview of the recreational and medical cannabis industry in Colorado. What goes on in a dispensary, and the various products sold will be explored. Legal aspects of both medical and recreational cultivation, distribution and possession will be covered. Participants will learn of the guidelines for both consumption and sale of cannabis and related products. Cannabis and CBD in the kitchen will be discussed. Industry leaders will be available for specialized lectures.

### **HLDR 2000 - Career and Leadership Development for Hospitality**

**Credits:** 3

**Description:** Students develop career, personal and educational awareness through the three E's of career planning; Explore, Experience and Execute. Students explore career paths and leadership styles utilizing self-assessment instruments, case studies and evaluations, preparing a developmental roadmap to garner leadership experience through internships, service-learning, and civic engagement. Utilizing tools from the Classroom to Career (C2) Hub, students explore interview techniques, experience professional networking situations, and execute leadership strategies to launch their careers.

### **HLDR 2100 - Event Planning for the Professional**

**Credits:** 3

**Description:** This course presents an overview of the major segments of the events industry such as meetings, exhibitions, special events, and conventions. Students review the roles and responsibilities of destination marketing organizations and destination management companies and examine/evaluate the relationship between official service contractors and professional event planners in the context of their specific functions. This course will highlight the role of the event planner, whose responsibilities include planning, organizing, directing, and controlling various types of meetings and special events.

### **HLDR 2140 - Cannabis in the Global Economy**

**Credits:** 3

**Description:** This course examines the emergence, growth, and impact of the cannabis industry in the global economy. It offers a comprehensive exploration of the historical, legal, and cultural contexts of cannabis production, distribution, and consumption. Through a combination of lectures, discussions, case studies, and guest speakers, students will gain a deep understanding of the

opportunities and challenges facing the global cannabis market and the intersection with hospitality. This course is designed for students interested in pursuing careers in the cannabis industry and those looking to broaden their knowledge of this rapidly expanding sector.

### **HLDR 2200 - Quality Service Leadership**

**Credits:** 3

**Description:** This course explores the fundamental principles of services management emphasizing how hospitality service leaders create and deliver guest-driven service. Students evaluate methods to enhance value, build guest loyalty, and promote repeat business. Students learn theoretical and practical skills for effective management of service operations relating to front and back of the house, leadership, management principles, service styles, skills, and training of personnel.

### **HLDR 2201 - Intoxication and Responsible Vending in Hospitality**

**Credits:** 3

**Description:** Students in this course review the pervasive problem of addiction to alcohol, cannabis, and other drugs produced, served, and sold in hospitality settings. Student awareness begins with an understanding of how prevalent the problem of substance abuse and misuse occurs within the hospitality industry. By understanding the addictive nature of controlled substances, students become aware of the signs of intoxication, and misuse in the workplace. Activities and discussions center upon the methods of recognizing the signs of intoxication, and how to employ State and Federally required preventative and corrective actions to reduce the risk of harm to hospitality guests, employees, and the communities we serve.

### **HLDR 3010 - Sustainable Hospitality and Tourism**

**Credits:** 3

**Description:** This course explores the opportunities and challenges of creating sustainable tourism and hospitality experiences that positively impact cultures, environments, and economies while minimizing and mitigating negative consequences. Students will analyze land and leisure, environmental stewardship, responsible development, and human diversity in the context of sustainable tourism and recreation.

### **HLDR 3200 - Talent Leadership**

**Credits:** 3

**Description:** This course analyzes the processes of recruiting, selecting, developing, and retaining talent within a hospitality and tourism organization. Focus is on talent management strategies and initiatives which are integrated with organizational strategy and bottom-line objectives. Students conduct a personal inventory of their human relations, emotional intelligence, and leadership skills.

### **HLDR 3250 - Managerial Accounting for Hospitality**

**Credits:** 3

**Description:** This course concentrates on the analysis and interpretation of hotel, restaurant, event and tourism accounting procedures, and financial statements. The importance of Uniform System of Accounts for hospitality businesses, the completion of the accounting cycle, and ethical accounting practices are related to the production and analysis of balance sheets, income statements, and cash flow statements. Principles of budgeting, forecasting, pricing techniques, revenue management, financial ratios, and financial management are reviewed by conducting case analysis explicit to the hotel, restaurant, events, and tourism industries.

### **HLDR 3300 - Hospitality Marketing and Sales**

**Credits:** 3

**Description:** This course explores principles, concepts and systems utilized in marketing and sales within the hospitality industry. Students explore market segmentation, quality services and products, professional sales, branding, consumer behavior, market planning, digital marketing, paid media, and social media, in order to develop a marketing plan and sales strategy.

### **HLDR 3400 - Facilities Operations**

**Credits:** 3

**Description:** This course provides fundamental concepts of facilities operations in hospitality. Students learn how to work effectively with the engineering and maintenance departments. The course prepares students to responsibly manage with emphasis on the areas of accessibility, safety, energy, water, and waste management as related to their impact on the environment and facilities oversight.

### **HLDR 3420 - Laws and Regulation in the Cannabis Industry**

**Credits:** 3

**Description:** The local, state, and federal regulation of a cannabis business is a vital aspect of a cannabis business startup, license requirements, and operational policy development. Students in this course investigate the regulations and laws that both monitor and control the cannabis industry. Through discussion and critical reflection, students gain an understanding of the complex regulatory requirements and operational hurdles that cannabis businesses encounter.

### **HLDR 3500 - Hospitality Entrepreneurship**

**Credits:** 3

**Prerequisite(s):** HLDR 3300

**Description:** Hospitality Entrepreneurship is designed to equip students with the essential knowledge and skills to develop and manage successful entrepreneurial ventures within the hospitality industry. The course covers key areas such as opportunity identification, business planning, marketing strategies, financial management, operations, and customer service. Students engage in case studies, group projects, and simulations to apply theoretical

concepts and develop a comprehensive understanding of the entrepreneurial process in the context of the hospitality sector.

### **HLDR 3600 - Organizational Leadership for Hospitality**

**Credits:** 3

**Prerequisite(s):** HLDR 3200

**Description:** This course explores organizational leadership and behaviors in the hospitality industry with an emphasis on management philosophy, communication, motivation, organizational change, and culture. Students explore the interrelationship of ethics, social responsibility, power, politics, trust, and influence in hospitality and tourism.

### **HLDR 3800 - Servant Leadership in Hospitality**

**Credits:** 3

**Description:** This course combines academic instruction, meaningful civic engagement and community service, and critical reflective thinking to enhance student awareness and personal ability to identify and address complex problems that face our community and the hospitality industry. Students exhibit servant leadership through engagement with; non-profit and professional organizations, legislature, and governmental agencies to affect desired change, and develop an understanding of the value of an active civic role in the hospitality community.

*Note:* Some sections of this course may be taught as Service Learning.

### **HLDR 3850 - Capital Management for Hospitality**

**Credits:** 3

**Prerequisite(s):** HLDR 3250

**Description:** Students will develop an understanding of the strategic role that real estate plays in the commercial lodging industry in the United States. Topics include capital structure, financing, and investment decision-making processes, asset management and property valuation.

### **HLDR 3910 - Variable Topics in Hospitality**

**Credits:** 3

**Description:** This special topics course allows students to in-depth discussion and analysis for issues, topics, and/or trends within the hospitality field.

*Note:* The course may be taken under different course titles for a total of 9 credits.

### **HLDR 3920 - Directed Study in Hospitality Leadership**

**Credits:** 3

**Description:** This course provides an opportunity for upper-division students with a strong background in hospitality to pursue a specific

research topic or project of interest with a faculty member. The course requires the permission of the instructor and the dean of the School of Hospitality, Events, and Tourism.

### **HLDR 3950 - Product and Service Promotion for Hospitality**

**Credits:** 3

**Prerequisite(s):** HLDR 3300

**Description:** The Product and Service Promotion for Hospitality course is designed to provide students with a comprehensive understanding of the strategies and tactics used in promoting hospitality products and services in a rapidly changing market. This course will delve into various aspects of promotion, including pricing strategies, merchandising techniques, customer relationship management, promotional campaigns, and the impact of emerging trends and technologies on hospitality sales and marketing. Through a combination of lectures, case studies, group projects, and practical exercises, students will learn how to create and implement innovative promotional strategies that cater to evolving consumer preferences and the competitive landscape of the hospitality industry. This course will prepare students to become future leaders in the hospitality sector, with the ability to effectively promote hospitality products and services, foster customer loyalty, and adapt to the ever-changing dynamics of the industry.

### **HLDR 3980 - Internship in Hospitality**

**Credits:** 3

**Description:** This course facilitates a student's integration of the theoretical framework of their education into the hospitality industry. Students will rotate through multiple departments while learning how leaders engage in a variety of managerial responsibilities. Students will participate in a minimum of 150 internship hours in a paid, approved internship, in addition to course participation.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

### **HLDR 4000 - Cost Control for Hospitality and Tourism**

**Credits:** 3

**Prerequisite(s):** ACC 3120

**Description:** This course provides a comprehensive look at the methods, tools, and techniques for successful management of fixed and variable costs for hospitality and tourism. Students utilize spreadsheet tools for analysis related to areas including planning, budgeting, standard costing, menu development, principles of purchasing, and labor/volunteer costs. Emphasis is placed on the managerial role in identifying and controlling costs to ensure fiscal accountability in a sustainable environment.

### **HLDR 4100 - Hospitality Law and Risk Management**

**Credits:** 3

**Description:** This course provides an overview of the legal fundamentals that apply to operations and leadership in the hospitality and tourism industries with an emphasis on preventive risk assessment, management, and mitigation practices. Students identify potential legal liabilities, advocating specific business decisions based upon their risk assessment.

### **HLDR 4340 - Hospitality Industry Analytics**

**Credits:** 3

**Description:** Hospitality Industry Analytics is designed for hospitality students who seek to develop a strong foundation in data analysis and its applications within the hospitality sector. This course will introduce students to the principles of data analytics, including data collection, data visualization, and introductory statistical analysis, and how these principles can be applied to improve various aspects of hospitality operations such as revenue management, customer experience, and operational efficiency.

### **HLDR 4400 - Strategic Management for Hospitality**

**Credits:** 3

**Prerequisite(s):** HLDR 3300

**Description:** Students approach strategic management in the hospitality and tourism industry by evolving leadership techniques to acquire, develop, and manage internal resources such as talent, financial capital, physical assets, and intellectual capital.

### **HLDR 4500 - Applied Leadership in Hospitality**

**Credits:** 3

**Prerequisite(s):** HLDR 3600, senior standing or permission of Department

**Description:** This comprehensive senior-level capstone course completes the transformation of students into hospitality leaders incorporating disciplines throughout the curriculum. The primary focus is on the successful development, execution and application in the creation of a leadership concept.

**University Requirement(s):** Senior Experience

### **HLDR 4800 - Applied Hospitality and Tourism Concept Development**

**Credits:** 3

**Prerequisite(s):** Senior Standing in the School of Hospitality

**Description:** The Applied Hospitality and Tourism Concept Development course culminates students' academic journey in hospitality and tourism. In this course, students integrate and apply the knowledge and skills they have acquired throughout the program. Students learn the necessary resources to lead project planning and production (e.g., special events, gala, etc.). Students embrace an interdisciplinary approach to hospitality and tourism management, recognizing the interconnectedness of various aspects of the field. Students comprehensively examine crucial industry concepts and challenges, fostering critical thinking, problem-solving abilities, and

practical experience in real-world scenarios.  
**University Requirement(s):** Senior Experience

## Hospitality, Tourism, and Events

### HTE 1030 - Introduction to Hospitality, Tourism and Events

**Credits:** 1

**Description:** In this course, students are provided an overview of the hotel, restaurant, tourism, and event industries. Basic operations, development, and management of those industries are covered. The course includes career opportunities and industry interrelations across these four professions.

### HTE 1035 - Academic and Career Development

**Credits:** 2

**Corequisite(s):** HTE 1030

**Description:** In this course, students gain an overview of the Hospitality, Tourism and Events Department at MSU Denver and learn how to maneuver through the University systems to become a successful student. The course includes career self-appraisal, academic management, scholarship application processing, cover letter instruction, interviewing skills, and strengths weakness opportunities threats analyses. At the conclusion of the semester, students attend a departmental career expo where students apply skills learned in class.

### HTE 1040 - Hospitality, Tourism, and Event Fundamentals

**Credits:** 3

**Description:** In this course, students are provided an overview of the hotel, restaurant, tourism and event industries. Basic operations, development, and management of those industries are covered. The course includes career opportunities and industry interrelations across these four professions. Students gain an overview of the Hospitality, Tourism and Events Department at MSU Denver, and learn how to maneuver through the university systems to become a successful student. The course includes career self-appraisal, academic management, scholarship application processing, cover letter instruction, interviewing skills, and strengths weakness opportunities threats analyses.

*Note:* Course must be taken within first 30 credit hours of declaring EVT, HTL, RST, or TTM major.

### HTE 1041 - Hospitality Service Systems

**Credits:** 3

**Description:** This course covers aspects of interpersonal, intercultural and nonverbal components of service to the customer. Students will examine the cycle of service, critical points of service, various customer service systems, methods used to evaluate customer

service systems and effective training and development for delivery of successful customer service.

### HTE 1052 - Gaming Management

**Credits:** 3

**Description:** This course introduces the student to a thorough understanding of the operational, management, and legal aspects of the gaming and casino industry business.

### HTE 3250 - Managerial Accounting for Hospitality

**Credits:** 3

**Prerequisite(s):** ACC 1010 or ACC 2010

**Description:** This course concentrates on the analysis and interpretation of hotel, restaurant, event and tourism accounting procedures and financial statements. The importance of Uniform System of Accounts for hospitality businesses, the completion of the accounting cycle, and ethical accounting practices are related to the production and analysis of: balance sheets, income statements, and cash flow statements. Principles of budgeting, forecasting, pricing techniques, revenue management, financial ratios and financial management are reviewed by conducting case analysis explicit to the hotel, restaurant, events, and tourism industries.

### HTE 3310 - Global Cuisine

**Credits:** 3

**Prerequisite(s):** HTE 2613

**Description:** In this course, students explore the culinary history and development of cuisines from global, cultural perspectives. Students will study and experience cuisines from worldwide regions utilizing authentic ingredients and tools for preparation and service. An emphasis is placed on the influences that have developed cultural traditions, taboos and dining etiquette, as practiced by the global populations.

### HTE 3550 - Human Resources in Hospitality

**Credits:** 3

**Description:** In this course, students examine the human resources and management issues that are prevalent in the hotel, restaurant, tourism, and events industries. The course explores planning, organizing, goal setting, and communicating effectively. Equal Employment Opportunity (EEO), diversity, recruitment, and training are also covered in this course.

### HTE 3570 - Marketing for Hospitality

**Credits:** 3

**Description:** In this course, students apply the principles of marketing and advertising to the specific needs of the hotel, restaurant, tourism, and event industries. Students will conduct field work in their area of concentration, analyze particular marketing concepts, and provide current application.

## HTE 3580 - Legal Aspects of Hospitality

**Credits:** 3

**Description:** This course provides an overview of the legal fundamentals that apply to operations and management in the hospitality and tourism industries with an emphasis on preventative management practices. Legal procedures, Civil Rights, contract law, negligence, relationships with guests, and specialized liabilities related to food and alcohol service and tourism companies are covered. Additional topics of contemporary legal issues as they relate to employment practices, market regulations, and franchising.

## HTE 3623 - Food Production and Service II

**Credits:** 3

**Prerequisite(s):** HTE 2613 and NUT 2040

**Description:** This course is designed to teach the student how to manage quantity food production and front of the house operations through laboratory work and real-world dining experiences. The student will learn culinary vocabulary, garnishing and plate presentation, buffet and a la carte dining service, work simplification, sanitation, merchandising, food cost control, inventory procedures, time management, employee management and equipment operation.

## HTE 3833 - Garde Manger

**Credits:** 3

**Prerequisite(s):** HTE 2613 and HTE 3603

**Description:** This course immerses the student in the art and science of garde manger cuisine that emphasizes hot- and cold-plated foods, buffets, showpieces, current plating trends, and profit accountability. Students will produce and manage all aspects of a la carte and banquet events to include front-of-the-house buffet design, artistic showpieces, layout and design of food stations, and guest interactions.

## HTE 3980 - Internship in Hospitality, Tourism and Events

**Credits:** 1-15

**Prerequisite(s):** Permission of Department

**Description:** This internship requires specialized skills that students may apply in hospitality, tourism and events settings. A written learning contract between student, faculty supervisor, site supervisor, agency, and department chair is required. Activities include finding and working in an approved hospitality, tourism or events setting. Academic credit is determined according to a ratio of 50 clock hours worked as equivalent to 1 credit hour.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*  
*Note: This course is variable credit and may be repeated for up to 15 credit hours.*

## HTE 4000 - Hospitality Field Experience

**Credits:** 3

**Prerequisite(s):** Completion of twelve hours in major concentration and senior standing

**Description:** In this course, students apply the theoretical concepts of hospitality and tourism to a practical, on-site, learning experience. The course includes 30 hours of field experience in an internship, community volunteer program, or a study-abroad setting.

**University Requirement(s):** Senior Experience

## HTE 4010 - Hospitality Special Project

**Credits:** 1

**Prerequisite(s):** Completion of twelve hours in major concentration, senior standing, and completion of General Studies requirements.

**Description:** In this course, students apply the theoretical concepts of hospitality and tourism to a practical on-site learning experience. This course includes 45 hours of field experience in an internship, community volunteer program, or a study-abroad setting.

## HTE 4040 - Hospitality Senior Research

**Credits:** 3

**Prerequisite(s):** Completion of twelve hours in major concentration, senior standing, and completion of General Studies requirements.

**Description:** This course provides the approaches and techniques necessary for senior students to analyze and synthesize needs, create and develop a major research project in Hospitality, Tourism, and Events, and effectively interpret results and their application to their major concentration area.

**University Requirement(s):** Senior Experience

## HTE 4592 - Current Topics: Lodging

**Credits:** 3

**Prerequisite(s):** At least junior standing

**Description:** The course considers various problems, subjects, and trends related to changing environments and events in the hotel industry. Subjects related to career as well as personal development may also be studied.

*Note:* This course may be repeated under different topics three times for a maximum of nine total credits earned.

## HTE 4730 - Hospitality Negotiations and Sales

**Credits:** 3

**Prerequisite(s):** HTE 3580 or Approval of Department

**Description:** This course provides an overview of the legal, ethical, and practical environment which impacts the negotiation of meeting contract and the execution of the events in which they represent. It examples the strategies of negotiation and sales.

## HTE 4750 - Hospitality Leadership

**Credits:** 3

**Prerequisite(s):** HTE 3550

**Description:** In this course, students explore theoretical findings concerning leadership and brings them to life through practical application. Students complete a series of self assessment to identify their management and leadership styles and traits. The course addresses the importance of leadership, charisma and characteristics of leaders. The meaning of ethics, social responsibility, power, and politics in the hotel, restaurant, tourism, and event industries are investigated through role play and debate.

## **HTE 4800 - Strategic Management for Hospitality**

**Credits:** 3

**Prerequisite(s):** ACC 1010 or ACC 2010

**Prerequisite(s) or Corequisite(s):** HTE 3250, HTE 3570, HTE 3580

**Description:** In this course, students analyze various approaches to strategic management in a hospitality and related industry context. Course content overviews strategy concepts and ideas while illustrating relevant examples from current hotel, restaurant, tourism, and events industry cases. Student compare managerial techniques to acquire, develop, and manage internal resources such as people, knowledge, financial capital, and physical assets. Strategies for restructuring, entrepreneurship, innovation, organization design, and global alliances are analyzed to best suit stakeholder interest in hospitality and related industry businesses.

## **HTE 4860 - Hospitality Security and Safety**

**Credits:** 3

**Prerequisite(s):** HTE 3580 or Permission of instructor

**Description:** This course examines security, loss prevention, safety, and risk management as related to the hospitality and tourism industries. Legal concepts specific to industry operations are applied in detail through case studies, role playing, and site visits. Students conduct a risk assessment survey and compose a loss prevention management plan.

## **Hotel Management**

### **HTL 1010 - Hotel Industry Fundamentals**

**Credits:** 3

**Description:** In this course, students integrate theoretical knowledge with practical experience, focusing on key areas in a hotel, such as front office, housekeeping, food and beverage, administration and leadership, and marketing and sales. Students explore the structure of hotel organizations, the functions of various departments, and how they collaborate to ensure smooth operations. In addition to lectures, students participate in a hands-on learning component, shadowing different departments at the on-campus SpringHill Suites at MSU Denver or similar hotel. This immersive approach helps students gain a comprehensive understanding of departmental roles and responsibilities while building essential skills for a successful career in hotel management.

*Note:* Course must be taken within first 12 hours of entering HTL major

### **HTL 2512 - Hotel Front Office**

**Credits:** 3

**Description:** This course examines hotel-front office procedures by detailing the flow of business through a hotel, from the reservations process to check-out and settlement. Students identify effective front-office management, with particular attention to the planning and evaluation of front-office operations. Front-office procedures and management are placed within the context of the overall operation of the hotel.

### **HTL 2600 - Casino and Gaming Management**

**Credits:** 3

**Description:** This course will allow students to analyze the key operational components of managing a casino floor and sportsbook. Accounting controls, games and gaming development, guest service, career opportunities and the future of the casino industry will be explored.

### **HTL 3500 - Resort Operations**

**Credits:** 3

**Prerequisite(s):** HTL 1010

**Description:** Students in this course complete a comprehensive examination of resort operations, emphasizing the distinctive elements of managing and developing various types of resorts. Students explore the unique characteristics of resort properties, such as recreational facilities, amenities, and service offerings, and analyze how these differ from traditional hotels. Students gain a thorough understanding of the environmental impact of resort development, planning and design considerations, and best practices in managing resort amenities and guest services.

### **HTL 3522 - Hotel Housekeeping**

**Credits:** 3

**Description:** This course demonstrates how to manage housekeeping operations in the hotel industry. Students study the management of direct housekeeping day-to-day operations from the big picture perspective down to technical details. This course examines the interrelation of hotel departments, and maximum guest service and profitability.

### **HTL 3652 - Hotel Property Management**

**Credits:** 3

**Description:** In this course, students examine blueprint reading, building construction safety, utility requirements, and mechanical systems as they relate to managing a hospitality property.

### **HTL 4000 - Current Trends in Lodging Industry**

**Credits:** 3

**Description:** In this course, students will discuss, analyze, evaluate, and formulate solutions to various current topics and trends taking place in the lodging industry. May include on-site visits to local hotels and will also include a variety of guest speakers from the lodging industry.

## **HTL 4100 - Revenue Management**

**Credits:** 3

**Prerequisite(s):** HLDR 3250

**Description:** This course provides students with the foundational metrics and definitions that are used throughout the lodging industry. Students will analyze various types of lodging industry data, interpret the results of a variety of reports, and make strategic inferences based on their analyses. In addition, this course prepares students for the exam required to obtain the Certification in Hotel Industry Analytics (CHIA). This certification is recognized internationally by the lodging industry as a knowledge benchmark for revenue management.

## **HTL 4200 - Lodging Regulatory Environment**

**Credits:** 3

**Description:** This course will help prepare students to effectively manage the ever-changing legal environment of the lodging and food-service industries. Decision-making techniques will be introduced to allow students to demonstrate effective critical thinking in case study analyses and exercises.

## **HTL 4500 - Applied Hotel Management**

**Credits:** 3

**Description:** This course will focus on the business decisions made at the management and executive levels of a hotel and how those decisions affect not only the property itself but also a hotel's competitive set. A real market dynamic is simulated for a hotel that students will manage, with a focus on the financial results of key areas such as market share, revenue optimization, forecasting, capital investment, channel management, and food & beverage revenue sourcing. Utilizing simulation software, students will develop a competitive and operational strategy, implement the strategy, and review the results of their decisions in a simulated market environment.

**University Requirement(s):** Senior Experience

## **Human Services and Counseling**

### **HSP 1010 - Introduction to Human Services and Counseling**

**Credits:** 3

**Description:** Students receive an overview of the Human Services profession. Students examine the attitudes, values, and skills crucial for becoming effective Human Services professionals. Understanding

and working with various populations and cultural groups are essential for those working in Human Services. Students will examine various types of human service theories, models, programs, and current best practices. Students will also survey a variety of client populations and agencies.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

### **HSP 1020 - Introduction to Trauma Informed Care**

**Credits:** 3

**Description:** Students will be introduced to the concept of Trauma-Informed Care (TIC) and how agencies and Human Services professionals can utilize this model to benefit clients. Students will describe and define what TIC is and ways in which a traditional treatment setting can be modified to increase the sense of safety experienced by clients and those who work with them. Students will learn how to incorporate trauma-informed practices into treatment with diverse populations, especially those with Posttraumatic Stress Disorder (PTSD). Although trauma treatment approaches will be considered, this class will not teach how to intervene using trauma specific treatment.

**General Studies:** Social and Behavioral Sciences

### **HSP 1470 - Addictive Experiences: Sex, Drugs, Rock and Roll**

**Credits:** 3

**Description:** In this class, students will examine addictive lifestyles and experiences in contemporary America in the context of theories of addiction. In addition, they will focus on the process of developing healthy habits and non-addictive lifestyles.

### **HSP 2010 - Introduction to High-Impact Nonprofit Organizations**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021 or permission of instructor

**Description:** This survey course introduces the elements necessary for nonprofit organizations to achieve meaningful and lasting impact in their communities. Students will choose a single nonprofit to investigate throughout the semester, culminating in a report on the organization that includes suggestions for improving its impact.

**Cross Listed Course(s):** BUS 2010

### **HSP 2020 - Small Group Dynamics: Theory and Experience**

**Credits:** 4

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent

**Description:** Students will be introduced to the basic theories of small groups with experiential learning experiences to develop skills and strategies for effective group participation and leadership. The universality of feelings and concerns are shared to recognize the



dynamics of interpersonal interaction, predict dynamics, accurately demonstrate effective leadership skills, and learn to facilitate the group process and interpersonal interactions in small-group situations.

### **HSP 2030 - Theory and Practice of Counseling**

**Credits:** 4

**Prerequisite(s):** HSP 1010; or permission of instructor

**Description:** This course familiarizes students with major theoretical approaches to counseling and psychotherapy and basic interview techniques. Emphasis will be placed on introducing behavioral intervention techniques common to most behavioral therapies. Students examine and practice effective interviewing skills and learn how to gather essential information about clients using the fundamental theories of counseling and psychotherapy.

### **HSP 2040 - Family Systems**

**Credits:** 4

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** This class provides a brief review of family systems and the roles of family members in traditional and nontraditional families. The theoretical basis of family therapy modalities that serve as guidelines for therapy is described.

### **HSP 2070 - Pre-Field Placement Seminar**

**Credits:** 1

**Prerequisite(s):** ENG 1009 or ENG 1010 and HSP 1010 or permission of instructor

**Description:** The Pre-Field Placement Seminar is designed to support student success in human services field placement experiences. Students will learn what to expect from and how to prepare for a field placement as well as develop a resume and participate in a mock interview process. Students will engage in an active learning process to begin to define their own learning goals and relate those goals to the selection of an appropriate field placement site.

### **HSP 2080 - Human Services Practicum I**

**Credits:** 8

**Prerequisite(s):** HSP 1010; HSP 2010 or HSP 2020; HSP 2030 or HSP 3810; HSP 2070 and HSP 2330 or permission of field coordinator

**Description:** This practicum provides a beginning field experience in a human service agency or setting. In addition to the field service hours, students participate in an interactive seminar that supports the effectiveness of student learning at the placement site and allows students to apply theoretical knowledge learned in the core human services curriculum to real life situations and experiences. Students participate in a variety of hands-on activities to develop clinical and/or nonprofit management skills depending on the nature of the placement.

### **HSP 2105 - Foundations of Trauma Counseling**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** HSP 1020 or permission of instructor

**Description:** In this class, students will develop a foundation for understanding trauma counseling utilizing various evidenced based theories and models. Students will be introduced to the impact of trauma on the cognitive, affective, behavioral, and neurological functioning of the individual. In addition, emphasis will be placed on the importance of the therapeutic relationship in the efficacy of treatment. Foci will include an overview of multidisciplinary teams in the treatment of trauma, as well as a focus on cultural humility, healthy boundaries, and self-care on the part of the professional treating clients diagnosed with trauma.

### **HSP 3000 - Community Change in Human Services**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, and HSP 1010; or permission of instructor

**Description:** This course reviews the theories and techniques of organizing groups to promote change in the community, and the role community organizers and other human service professionals play in community change. The course examines several distinct contexts for change and why and how change occurs or fails to occur. Strategies and tactics for promoting change are also included.

### **HSP 3010 - Foundations of Addiction and Mental Health Counseling**

**Credits:** 3

**Description:** Students are introduced to the etiology, assessment and treatment of mental health and substance use disorders. Students also examine therapeutic communication and counseling skills, trauma informed care and clinician self-care. Although designed to assist students in transitioning to the Masters of Science in Clinical Behavioral Health, Emphasis in Addiction Counseling, the course is available for anyone interested in addiction and mental health counseling.

### **HSP 3040 - Brief Therapy for Couples**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, HSP 1010, HSP 2030, and HSP 2040; or permission of instructor

**Description:** Students will study the counseling of persons involved in emotionally intimate relationships from the perspective of childhood experiences with parents or other primary caretakers. Topics covered will include the influence on the clients of emotional abandonment, childhood wounds, male and female issues, and the tendency to project unmet childhood needs onto adult relationships. Counseling interventions to improve the communication skills of couples will be addressed.

## **HSP 3070 - Advanced Behavioral Analysis**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, HSP 1010, and HSP 2030; or permission of instructor

**Description:** This course explores applications of the scientific method, the principles and the technology of behavior analysis to understand, explain, and change human behavior.

## **HSP 3090 - Human Services Practicum II**

**Credits:** 8

**Prerequisite(s):** HSP 2070; HSP 2080; HSP 2330

**Description:** This practicum provides a field experience in a human service agency or setting. These experiences are all in conjunction with the Addictions concentration offered in the Human Services major. In addition to the field service hours, students participate in an interactive seminar that supports the effectiveness of student learning at the placement site and allows students to apply theoretical knowledge learned in the core human services curriculum to real life situations and experiences. Specifically, students will address topics like co-occurring disorders, clinical note skills, transference and counter-transference, and clinical assessments. Students participate in a variety of hands-on activities to develop clinical skills depending on the nature of the placement. Students in Addiction Studies complete these hours with Colorado Addiction Counselor (CAC III) supervisors providing direct feedback.

## **HSP 3105 - Exploring the Impact of Trauma Counseling**

**Credits:** 3

**Prerequisite(s):** HSP 2105

**Description:** Students will have an in-depth examination of the impact of early childhood trauma as well as the impact of trauma on all aspects of functioning (e.g., emotional, cognitive, behavioral, physical). Students will examine ethical considerations when working with traumatized clients as well as focus on documentation and note writing for counselors. Students critically examine their own motivations for joining the field of trauma and develop a plan to identify and address vicarious trauma.

## **HSP 3220 - Conflict Resolution and Decision Making**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** Students in this class will examine why conflict is unavoidable and how viewing it this way can remove the fear that keeps individuals from approaching it directly and positively. An analysis of the psychological roots of intractable conflict will help students gain knowledge and skills to resolve conflict effectively. Students will also learn about the use of negotiating skills in leadership situations.

## **HSP 3230 - High Risk and Offender Youth**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, and HSP 1010; or permission of instructor

**Description:** This course is designed to provide an overview and analysis of differential theory and approaches to working with high risk and offender youth. Special emphasis will be given to the role of community, family and youth-specific risk and protective factors. Prevention of not only alcohol and drug problems, but other serious contemporary youth issues, such as violence, teen pregnancy, sexually transmitted diseases, suicide, and school drop-out, will be addressed. Special topics will also include multicultural issues, intervention techniques, and innovative alcohol- and drug-treatment approaches found to be particularly effective with this population.

## **HSP 3260 - Systems Serving Youth**

**Credits:** 2

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, HSP 1010, and HSP 2040; or permission of instructor

**Description:** This is an advanced course designed to introduce the potential youth advocate counselor to the range of issues, services, and systems involved in the care and treatment of high-risk youth including: alcohol and drug treatment; mental health; education; social services; law enforcement; vocational/employment; and others. The course focus is on understanding and building interdisciplinary partnerships on behalf of youth in a variety of professional contexts. An emphasis is on learning to work effectively across and between systems as well as within them.

## **HSP 3330 - Ethical and Legal Issues in Human Services**

**Credits:** 3

**Prerequisite(s):** Completion of General Studies Written Communication and HSP 1010

**Description:** Students in this course gain a basic understanding of the legal and ethical issues in the human services profession and provides an opportunity for students to apply standards from codes of ethics as well as laws in situations that often arise in agencies providing case management and counseling. Students will analyze and evaluate ethical case studies, apply knowledge contextually and develop skills to recognize ethical challenges in the work place.

## **HSP 3400 - Pharmacology of Drugs and Alcohol**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, and HSP 1010; or permission of instructor

**Description:** This is a course in the composition, classification, effects, uses, and abuses of drugs and alcohol. Students learn the ways that psychoactive substances impact the central nervous and immune systems. Related social and political issues are integrated into the course content.

## **HSP 3405 - Human Trafficking: Public Health Response**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** Students explore human trafficking utilizing global public health frameworks to examine the interprofessional nature of community response in Colorado. A review of multidisciplinary perspectives on labor and sex trafficking provides a comprehensive understanding of this human rights issue. Further, students examine the tactics used by traffickers to recruit and control victims and the effects of abuse on survivors. Students will be presented with an overview of the United Nations, U.S. federal and Colorado state laws to curb trafficking. Finally, students evaluate global and local efforts of the current anti-trafficking movement, including ways to be involved.

*Note:* Credit may be granted for only one prefix.

**Cross Listed Course(s):** AAS 3405, CJC 3650, GWS 3400, PUB 3400, SWK 3405

## **HSP 3425 - Pharmacology of Drugs and Related Infectious Diseases**

**Credits:** 4

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** Students explore the composition, classification, effects, uses, and abuses of drugs and alcohol. Students learn the ways that psychoactive substances impact the central nervous and immune systems. Students also examine diseases and health issues including communicable and sexually transmitted diseases that are most likely to affect individuals with substance use disorders. In addition, the course addresses health issues found among individuals who might abuse mind-altering chemicals. Students perform risk assessments and prepare educational materials for clients. Related social and political issues are integrated into the course content. Satisfactory completion of this course meets the Pharmacology I, Advanced Pharmacology, and Infectious Disease course requirement for Colorado Certified Addiction Specialist (CAS).

## **HSP 3430 - Addictive Behaviors**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, HSP 1010, and HSP 2030; or permission of instructor

**Description:** This course provides a detailed study of specific addictive behavior patterns and the most common treatment methods. The range of addictions studied includes a variety of non-substance-using behaviors, such as gambling and eating disorders, as well as addictions involving substances. This course will help students clarify a theory of addiction, gain knowledge about the etiology of specific addictions and be introduced to current treatment approaches utilized in the field.

## **HSP 3450 - Crisis Intervention**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG

1021, HSP 1010, and HSP 2030; or permission of instructor

**Description:** This course focuses on crisis intervention. Course work is designed to give the student an opportunity for competencies development, and increased understanding of emergency procedures and therapeutic interventions.

## **HSP 3460 - Addiction, Immunity, and Infectious Diseases**

**Credits:** 2

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, and HSP 1010; or permission of instructor

**Description:** This course emphasizes diseases and health issues including communicable and sexually transmitted diseases that are most likely to affect addicted individuals. This course addresses health issues found among individuals who might abuse mind-altering chemicals. Students perform risk assessments and prepare educational materials for clients. Satisfactory completion of this course meets the infectious disease course requirement for Colorado Certified Addiction Specialist (CAS).

## **HSP 3470 - Counseling the Substance Abuser**

**Credits:** 4

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, HSP 1010, and HSP 2030; or permission of instructor

**Description:** This course is specifically oriented to assessing and counseling the addicted client. Course work is designed to provide the trainee with knowledge of and experience in applying the fundamentals of research, evidence-based treatment, client assessment, treatment planning, client records, and individual counseling skills. Satisfactory completion of the course will meet the requirements for Principles of Addiction Treatment, Client Record Management, and Addiction Counseling Skills for Colorado Addiction Counselor Certification and Domestic Violence Counselor Certification.

## **HSP 3490 - Multicultural Issues in Human Services**

**Credits:** 4

**Prerequisite(s):** ENG 1009 or ENG 1010, ENG 1020 or ENG 1021, and HSP 1010; or permission of instructor

**Description:** Students will learn through Ethnic Studies, examples of historical social injustices enacted upon communities of color and other marginalized people who have been oppressed by white supremacy power-over engagements. Students will be prepared to recognize and challenge such conduct through identifying and questioning relationships of power and privilege that can arise in counselor-client clinical interactions. The course addresses these concerns by introducing critical theories that instill social justice principles into the conducting of mental health and addiction counseling.

**University Requirement(s):** Ethnic Studies & Social Justice

## **HSP 3550 - Intimate Partner Violence**

**Credits:** 3

**Prerequisite(s):** ENG 1020

**Description:** This course will provide information about intimate partner violence (IPV) or domestic violence (DV). Students will learn about the complex nature of IPV, the history of IPV, causes of IPV, how offenders think and use power and control over their intimate partners and how survivors (victims) respond and overcome IPV. This class will also focus on the other barriers that impact the on-going nature of IPV.

### **HSP 3560 - Motivational Interviewing**

**Credits:** 2

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, HSP 1010, or permission of instructor

**Description:** This course describes the change process in clients and prepares the counselor to identify readiness for change. Students are taught interviewing skills specific to various stages of recovery and relapse. The focus of the process taught is to minimize or avoid resistance and to promote essential changes in substance abuse or domestic violence clients.

### **HSP 3570 - Case Management in Human Services**

**Credits:** 2

**Prerequisite(s):** ENG 1010, ENG 1020, HSP 1010, and HSP 2330; or permission of instructor

**Description:** This course will provide an opportunity to evaluate treatment as a part of a coordinated system that includes evaluating client needs and providing links with needed services, including physical health, behavioral health, and social services. Students will learn the process of identifying specific client needs and supporting clients in meeting identified needs and treatment goals.

### **HSP 3575 - Motivational Interviewing for Health Professionals**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** Motivational Interviewing (MI) is an evidence based counseling intervention to assist clients in the change process. It is most helpful in working with clients struggling with ambivalence. This course reviews the theory and practice of MI as it relates to the health professions. The course prepares healthcare workers with the skills to properly identify clients' readiness for change and implement appropriate and effective communication strategies to assist them in their change process. This course does not meet the criteria for CAC credentials. Students needing CAC credit should enroll in HSP 3560 - Motivational Interviewing.

### **HSP 3580 - Therapeutic Resistance**

**Credits:** 1

**Prerequisite(s):** Meet General Studies requirement for written communication, HSP 1010 and HSP 2030

**Description:** Students in this class will gain an understanding of therapeutic resistance in the counseling process from both the perspective of the client and the counselor. Various factors that contribute to therapeutic resistance are examined along with models to practice overcoming clinical resistance.

### **HSP 3590 - Counseling the Resistive Adolescent Client**

**Credits:** 2

**Prerequisite(s):** Meet General Studies requirement for written communication

**Description:** In order to be effective in working with youth, students must understand how to counsel resistive and ambivalent adolescents. In this class, students will learn how to apply principles related to working with resistance, building rapport, approaches to dealing with anger in the context of understanding the stages of change model, and gain an understanding of cultural nuances in effective counseling. Various therapeutic models will be examined and demonstrated including trauma informed care and strengths based counseling.

### **HSP 3610 - Financial Accountability and Organizational Control in Nonprofit Organizations**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, and HSP 2010; or permission of instructor

**Description:** The course will include the skills needed to properly manage financial resources and organizational controls in a variety of nonprofit organizations. Topics will include financial record keeping systems and statements, budgeting, tax compliance, cost control, and program accountability and evaluation.

### **HSP 3660 - Advanced Motivational Interviewing and Applied Counseling Skills**

**Credits:** 2

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021; or permission of instructor

**Prerequisite(s) or Corequisite(s):** HSP 3560 or permission of instructor

**Description:** This course prepares students to provide advanced individual counseling in behavioral health services. The course will review the principle of Motivational Interviewing and provide Advanced Motivational Interviewing and other techniques for students to practice counseling with other students. Students will experientially focus on skill demonstrations and giving and receiving appropriate feedback. Satisfactory completion of the advanced skills will meet the Colorado Certified Addiction Counselor III requirement.

### **HSP 3710 - Research Methods and Program Evaluation in Human Services**

**Credits:** 4

**Prerequisite(s):** ENG 1020, HSP 3330 or permission of instructor

**Description:** Students will explore the many ways to study a research question, how to select the best method of investigation, how to safeguard the rights of participants, how to analyze data, report their findings, and the limitations of research. In addition, students will learn the essentials of program evaluation and its required steps. This course will allow all the students to design and complete a small research study or support the research interest of a program in the community. Finally, the students will be required to present their research projects.

## **HSP 3760 - Motivational Interviewing for Client Change**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, HSP 1010, or permission of instructor

**Description:** Students are exposed to the change process and how to identify and work with clients in various stages of change. Using role-plays and activities, students review and demonstrate the principles, spirit and skills of introductory and advanced Motivational Interviewing (MI). Students also learn how to provide effective feedback regarding the use of MI skills and interventions. Completion of the course meets the requirements for the Behavioral Health Administrations Motivational Interviewing and Advanced Motivational Interviewing courses and can be applied towards the Certified Addiction Technician and Specialist credentials.

## **HSP 3800 - Federal Law Enforcement**

**Credits:** 3

**Prerequisite(s):** CJC 1010 and CJC 2210 OR CJC/CYB 2500

**Description:** Students in this course will examine the United States federal law enforcement system by focusing on the various federal agencies and their relationships with the criminal justice system, including historic foundations and emerging issues. The relationships between federal and local/state/private law enforcement are presented within the context of administrative partnerships, collaborative efforts, and unified missions that pertain to domestic and international crime threats, homeland security collaborations, and delivery of services to include technological advances.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** CJC 3800

## **HSP 3860 - Social Entrepreneurship**

**Credits:** 3

**Prerequisite(s):** Junior standing

**Description:** This course provides an overview of social entrepreneurship, explains the skills required to identify unmet social needs and analyze their potential for solution with a viable social enterprise.

*Note:* Students may receive credit for only one prefix: HSP or MGT.

**Cross Listed Course(s):** MGT 3860

## **HSP 3940 - Victim Advocacy for Survivors of Interpersonal Violence**

**Credits:** 3

**Prerequisite(s):** GWS 1001 and six additional hours in Gender, Women and Sexualities Studies or HSP 1010 and six additional hours in Human Services

**Description:** This course provides a foundation to the field of interpersonal violence victim advocacy to complement trainings provided by local victim advocacy agencies and police departments. The primary focus is victim advocacy as it relates to interpersonal violence (i.e., relationship violence, sexual violence, and stalking). This course helps prepare students to engage in advocacy by providing a broad understanding of the role of power and control in violence and its root causes, the historical perspective on anti-violence movements, the impact of trauma and biopsychosocial considerations, intersectional identities and vulnerability, laws and policies surrounding interpersonal violence, methods of justice and healing, community activism, and resources available to survivors.

*Note:* Credit will be granted for only one prefix: GWS or HSP.

**Cross Listed Course(s):** GWS 3940

## **HSP 3980 - Internship in Human Services**

**Credits:** 1-15

**Prerequisite(s):** Major in Human Services; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## **HSP 3990 - Study Abroad: Human Services**

**Credits:** 3

**Description:** This course involves the study and visitation of distinct, select Human Services programs and agencies in Scotland. Students will have an opportunity to compare these services to those offered in the United States through travel, site visits and lectures about addictions interventions, the treatment of people involved in gangs, the mental health and criminal justice systems and social services.

## **HSP 4025 - Peer Health Education- Field Experience**

**Credits:** 3

**Prerequisite(s):** Senior Standing and Approval of Instructor

**Description:** As a senior experience and service learning course, students (or MSU Peer Health Educators) in this course learn about the design, implementation and evaluation of health education

programs through a direct community experience. In the course students gain knowledge on the importance and application of evidence-based public health education. Students are trained in a selected evidence-based health education curriculum and facilitating the delivery of health education sessions to students in identified local high schools. The selected health education curriculum builds students' facilitation skill in delivering health information through different instruction modalities (i.e. lectures, discussions, and engagement activities) and focuses on areas such as sexual and behavioral health, substance abuse, mental health, and overall well-being. MSU PHE students are trained to provide information and resources to support skill development in high school students when making health behavior choices. The course includes training on the health education curriculum guided by the course instructor and additional support from teachers and staff at the participating schools and community partners.

*Note:* Credit is granted for one prefix only. Some sections of this course may be taught as Service Learning.

**University Requirement(s):** Senior Experience

**Cross Listed Course(s):** PUB 4020

## HSP 4040 - Cognitive Behavior Therapy

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, HSP 1010, and HSP 2030; or permission of instructor

**Description:** This course examines the early and current development of cognitive behavior therapy as pioneered by Drs. Aaron Beck and Albert Ellis. Cognitive behavior has become one of the most widely used therapies during the last two decades. Students will apply C.B.T. by examining thoughts and beliefs connected to moods, behaviors, physical experiences, and events.

## HSP 4105 - Advanced Trauma Counseling Skills

**Credits:** 3

**Prerequisite(s):** HSP 3105

**Description:** Students will be provided an overview of the evidence-based screening and assessment tools utilized in assessing the impact of trauma. Interventions for working with individuals with a trauma history are emphasized. Students will examine and explore special populations uniquely impacted by trauma. Tools for avoiding compassion fatigue such as clinical supervision and boundary maintenance will be reviewed. Students will be expected to demonstrate advanced trauma counseling skills, interventions, and documentation.

## HSP 4160 - Human Trafficking

**Credits:** 3

**Prerequisite(s):** GWS 1001, or AAS 1010, or CJC 1010, or HSP 1010, or SWK 1010; upper-division standing; or permission of instructor

**Description:** This course explores human trafficking on international and local levels. A review of multidisciplinary perspectives on labor and sex trafficking provides comprehensive understanding of this human rights issue. Students examine the tactics used by traffickers

to recruit and control victims and the effects of abuse on victims.

This course provides an overview of U.S. federal and local laws to curb trafficking, including federal Trafficking Victims Protection Act. Finally, students evaluate global and local efforts of the current anti-trafficking movement, including ways to be involved.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** AAS 4160, CJC 4160, GWS 4160, HSP 4160, SWK 4160

## HSP 4200 - Child Abuse and Neglect

**Credits:** 2

**Prerequisite(s):** Meet General Studies requirement for written communication, HSP 2040

**Description:** Students in this course will gain an historical understanding of child abuse, neglect, and sexual exploitation. We will also look at some of the social and psychological factors related to healthy and unhealthy sexual behavior, while recognizing the social and cultural influences on how we study, view, research and understand child sexual abuse.

## HSP 4250 - Counseling the Gay, Lesbian, Bisexual, or Transgender Client

**Credits:** 2

**Prerequisite(s):** Meet general studies requirements for written communication

**Description:** Students in this course will explore lifestyle patterns and therapeutic issues related to sexual and gender identity. Students will learn about the potential impact of homophobia (external and internal), homo-negativity, heterosexism, and historic oppression on gay, lesbian, bisexual, and transgender individuals. Emphasis will be placed on creating a supportive environment for diverse GLBT clients and developing an awareness of community resources

## HSP 4290 - Posttraumatic Stress Disorder and Trauma Informed Care

**Credits:** 1

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021 and HSP 2030; or permission of instructor

**Description:** This course explores the causes and symptoms of PTSD and trauma informed treatment. The relationship of the disorder to substance abuse and violence in the form of domestic disturbances is studied along with interventions and treatment.

## HSP 4300 - Trauma Resilience to Terrorism, Disaster and War

**Credits:** 1

**Prerequisite(s):** Meet General Studies requirement for written communication

**Description:** With the increase of terrorist events, catastrophic disasters and war worldwide, it is important to prepare and be ready to respond to catastrophe. Students will learn about trauma resilience.

The topics covered in this class include preparedness, intervention, and mitigation. Students will learn how to assist others in catastrophic situations.

### **HSP 4310 - Human Resource Development in Nonprofit Organizations**

**Credits:** 3

**Prerequisite(s):** Completion of General Studies Written Communication

**Prerequisite(s) or Corequisite(s):** HSP 2010

**Description:** Students in this course engage in a comprehensive study of the use of human resources in a variety of roles within nonprofit organizations, including hiring and retention, staff development and evaluation, and labor management issues.

### **HSP 4320 - Psychopathology and the Mental Health Clinician**

**Credits:** 4

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, HSP 1010, and HSP 2030; or permission of instructor

**Description:** This course introduces and describes psychopathology nomenclature so that students will be able to recognize psychopathology. Biological, psychosocial, and sociocultural etiological perspectives of psychopathology will be discussed. The course will introduce the basic treatment approaches and critically analyze the advantages and disadvantages of mental disturbance labeling and societal implications.

### **HSP 4360 - Interpersonal Psychotherapy**

**Credits:** 3

**Prerequisite(s):** Meet General Studies requirement for written communication, HSP 1010, HSP 2030, HSP 2040

**Description:** This advanced theory and application skill development course focuses on the application of interpersonal psychotherapy utilizing attachment theory premises of psychological development and its influences on interpersonal relations. Learning these interventions will solidify student's competencies in assisting clients beyond introductory courses in the theory and practice of counseling.

### **HSP 4490 - Contemporary Issues in Human Services: Variable Topics**

**Credits:** 1-4

**Prerequisite(s):** At least junior standing or Permission of instructor

**Description:** This is a variable-titled course focusing on current issues and trends in the field of human services. The course is designed to provide the human services professional with an opportunity to explore new or alternative modalities in assessment, intervention, and treatment of dysfunctional behaviors.

*Note:* This course may be repeated for credit under different topics.

### **HSP 4520 - Grief Counseling**

**Credits:** 3

**Prerequisite(s):** Meet General Studies requirement for written communication

**Description:** Loss is a natural consequence of living. Losses come in many forms, from divorce and aging to illness and death.

Understanding grief, loss, change and mourning is an integral part of understanding the human condition as it will present itself in a clinical setting. Students will gain an academic framework for understanding grief, as well as the experiential skills and self-awareness necessary to be an effective and compassionate clinician.

### **HSP 4540 - Youth, Drugs, and Gangs**

**Credits:** 2

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, HSP 1010, HSP 2030, and HSP 2040; or permission of instructor

**Description:** Child abuse, neglect, and substance abuse are underlying issues for gang members. This course explores the reasons youth are attracted to and join gangs and the correlation between psychoactive substances and violence.

### **HSP 4660 - Clinical Supervision in Human Services**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, HSP 1010, HSP 2030, HSP 3470, or permission of instructor

**Prerequisite(s) or Corequisite(s):** HSP 3760

**Description:** Students will examine the theoretical principles and practical applications of clinical supervision in the human services field. They will explore specific Colorado regulatory requirements for clinical supervision when working with clients with substance use disorders. The course will also address evidence-based support for counseling and clinical supervision. Successful completion of this course fulfills the Clinical Supervision course requirement for Colorado Addiction Specialist (CAS) certification and the requirements for Domestic Violence Counselor Supervisors.

### **HSP 4710 - Critical Issues for Nonprofits**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, HSP 2010, and one of the following: HSP 3610 or HSP 4310; or permission of instructor

**Description:** The course investigates and analyzes the critical economic, political, and social issues affecting the nonprofit sector.

### **HSP 4780 - Human Services Internship II**

**Credits:** 8

**Prerequisite(s):** Senior status, all general studies, HSP 3560, HSP 3710, HSP 4770

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be

established prior to enrollment in this course in consultation with the Applied Learning Center.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

**University Requirement(s):** Senior Experience

## **HSP 4800 - Designing the 21st Century Nonprofit Organization**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, HSP 2010, and HSP 3810; or permission of instructor

**Description:** In this course students will participate in designing a model nonprofit organization (NPO) through assessment of community needs and in consideration of current economic and political factors and philanthropic trends. Students will design program activities, determine staffing and human resource needs, identify funding resources and marketing strategies, and establish financial parameters of the NPO based on its mission and values.

## **HSP 4840 - Human Services Internship**

**Credits:** 5-20

**Prerequisite(s):** HSP 1020; HSP 2020; HSP 2030; HSP 2070; HSP 3330, HSP 3490 or permission of Field Director

**Description:** This Internship provides a beginning field experience in a human service agency or setting. In addition to the field service hours, students participate in an interactive seminar that supports the effectiveness of student learning at the placement site and allows students to apply theoretical knowledge learned in the core human services curriculum to real life situations and experiences. Students participate in a variety of hands-on activities to develop clinical and/or nonprofit management skills depending on the nature of the placement.

*Note:* Human Service Majors are required to complete 400 hours (10 credits) in either one semester or over 2 semesters (5 credits each). The course can be repeated for either 5 credits or 10 credits as an elective.

**University Requirement(s):** Senior Experience

## **HSP 4880 - Addiction Studies Internship**

**Credits:** 5 or 15

**Prerequisite(s):** HSP 3470; HSP 3400 AND HSP 3460; HSP 4320; HSP 4840 or approval of Field Director

**Prerequisite(s) or Corequisite(s):** HSP 2040; HSP 3220; HSP 3710; HSP 4040; HSP 4660

**Description:** This specialized internship experience allows students to participate in a variety of hands-on activities to develop clinical skills within a substance abuse treatment setting. In addition to the field service hours, students participate in an interactive seminar that allows students to apply theoretical classroom knowledge to actual clinical situations and experiences. Students must complete a total of 600 hours to meet the state requirements for clinical hours for a Certified Addiction Technician.

*Note:* The course can be completed in one semester (15 credits/600 hours) or spread over 3 semesters in 5 credit (200 hour) increments.

**University Requirement(s):** Senior Experience

## **Industrial Design**

### **IND 1000 - Introduction to Industrial Design**

**Credits:** 1

**Description:** This course defines, describes, and explains opportunities in the field of industrial design. It identifies and allows for the discussion of career options, evaluates employment trends in the field, and reviews academic and professional requirements for entry into the field. Instruction and background in the use of the design process for industrial design is also provided.

### **IND 1010 - Woods: Materials and Fabrication**

**Credits:** 3

**Description:** An introductory course designed to give the student basic information about wood material properties, species selection criteria, practical design applications, and ordering and specifying protocol. The design process is presented and applied in the development of a furniture design and a fabrication plan, which is utilized to construct the design. The course also provides instruction for basic skill development in the use of wood working tools, machines, and processes. Wood finishing materials and processes are also studied and utilized in student projects.

*Note:* Credit will be granted for only one prefix: IND or ART.

**Cross Listed Course(s):** ART 1300

### **IND 1100 - Materials I: Materials and Fabrication**

**Credits:** 3

**Description:** This course is an introduction to working safely and efficiently with tools in the woods, metals, and plastics labs. Students will study basic information about material properties and learn fundamental fabrication and finishing techniques through various simple design projects incorporating wood, metal, and plastic materials. Lectures will also cover shop tools and considerations, along with safety and emergency procedures.

### **IND 1130 - Plastics: Materials and Fabrication**

**Credits:** 3

**Description:** This course is an introduction to the basic manufacturing processes and techniques used in the plastics industries. A variety of forming, casting, and reinforced plastic processes will be examined.

### **IND 1250 - Metals: Materials and Fabrication**

**Credits:** 3

**Description:** This course covers the manipulation of sheet metal, machining of metals, welding of metals, fasteners, and bench metal



working. Finishing of metals is also covered, including mechanical processes, sandblasting, polishing, and painting techniques. Emphasis is placed on factors necessary to create products that involve metals and metal components. The design process is introduced and applied in the development of short-term design projects.

## **IND 1300 - Materials II: Design and Application**

**Credits:** 3

**Prerequisite(s):** IND 1100

**Description:** This studio and lecture course helps students apply advanced woods, metals, and plastics fabrication techniques to create original products. Students design and manufacture items in response to an assigned design brief through appropriate design considerations and material selection. The design process is documented throughout the semester to generate a detailed set of construction drawings and presentation materials.

## **IND 1450 - Technical Drawing and CAD**

**Credits:** 3

**Description:** An introductory course designed to give students information about creating production drawings. The technical drawing process is presented and applied to a variety of products using both manual drafting tools and computer software. Additional topics include hand lettering, orthographic projections, Geometric Dimensioning and Tolerancing (GD & T), and creating Computer Numerical Controlled (CNC) data for part production. The design process is addressed with the aid of a short-term design project with accompanying technical drawings and CNC production.

## **IND 1470 - Design Drawing Techniques**

**Credits:** 3

**Description:** This course introduces students to the basic concepts and skills used in industry to communicate ideas through a hand-drawn, two-dimensional format. Students will develop drawing skills which represent objects as the eye sees them using perspective, shading, and a variety of graphic techniques. Instruction and practice incorporates the study of visual reality, graphic form, visual impact, and the logic and proof of what we see.

## **IND 2000 - Design Aesthetics**

**Credits:** 3

**Prerequisite(s):** IND 1000

**Description:** Students will investigate and practice the basic visual elements and principles of design through both 2D and 3D approaches. Emphasis will be placed on form development and visualization techniques.

## **IND 2100 - Digital Composition**

**Credits:** 3

**Prerequisite(s):** IND 1000

**Description:** This lecture/lab course prepares students to capture

their original works digitally with various documenting equipment and to edit them with computer software. Studio and location photographic projects require students to use the camera for documentation, research and communication. Visual compositions that include digital and nondigital elements and presentation page layout principals will be introduced and practiced for students' department portfolio review preparation.

## **IND 2450 - Beginning Industrial Design Studio**

**Credits:** 4

**Prerequisite(s):** ART 1101, ART 1141, IND 1300, IND 1450, IND 2100, and IND 3050

**Prerequisite(s) or Corequisite(s):** ART 1501, IND 3480, and IND 3660

**Description:** In laboratory and studio environments, the design process is introduced and practiced as students apply learned fundamental skills, critical thinking, problem solving, and aesthetic refinement to assigned design projects. Students are required to address the historical context of their designs as they research technological evolution, market trends, aesthetic preferences, and consumer behavior. Students are required to document their work and create page layouts that depict and describe their projects according to the Department portfolio screening criteria.

## **IND 2455 - Industrial Design Studio for Non-Majors**

**Credits:** 3

**Prerequisite(s):** IND 1000, IND 1100, IND 1300, IND 1450, and IND 1470

**Prerequisite(s) or Corequisite(s):** IND 1130, IND 2830, IND 3950

**Description:** This course is for non-majors. In laboratory and studio environments, the design process is introduced and practiced as students apply fundamental principles to three-dimensional forms, structures, and products. Students address the historical context of their designs as they practice critical thinking, research, problem solving and aesthetic refinement. Students create sketches, drawings, models, research reports and presentation of their design concepts.

## **IND 2810 - Technology and Design: Global Perspectives**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** This course teaches students about the relationship between technology, design, and global cultures. Historical perspectives provide a foundation for discussion about how technology and design have affected, and continue to affect, the daily lives of people throughout the world. Emphasis is placed on relevant technologies developed in societies outside the U.S., and on the effects that those technologies have had on global societies, including the U.S. Particular attention is paid to communications, product design, food production, work and jobs, transportation, the military, sustainability, and ethical issues.

**General Studies:** Social and Behavioral Sciences, Global Diversity  
**Guaranteed Transfer:** GT-SS3

## **IND 2830 - Manufacturing Materials and Processes**

**Credits:** 3

**Description:** This course provides an overview of a wide range of mass-production manufacturing methods and materials most commonly utilized by industrial designers. It provides students with knowledge that will enable them to make appropriate material, manufacturing, and finishing selections for their own designed products.

## **IND 3000 - Design Thinking**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** In a dynamic learning environment, students engage with real-world case studies to develop critical thinking and problem-solving skills through Design Thinking, viewed through the lens of Social and Behavioral Sciences. Combining collaborative teamwork and facilitated discussions, students explore concepts like empathy, problem definition, ideation, prototyping, and testing, while integrating insights from psychology, sociology, anthropology, and other social sciences. Through hands-on projects and collaborative work, students apply Design Thinking to address social challenges in areas such as public health, education, social justice, and community development. Students discover systematic ways human-centered design can address complex challenges and foster innovative solutions to improve individual and community well-being. By the end, students will be equipped to design creative, effective interventions grounded in human behavior and social context.

**General Studies:** Social and Behavioral Sciences

## **IND 3050 - Advanced Sketching**

**Credits:** 3

**Prerequisite(s):** IND 1470

**Description:** In this course students will develop rapid visual communication skills through traditional sketching techniques and gain experience with various media. This course will develop students' abilities to quickly capture their design ideas by depicting 3D volumes on a 2D plane. Various rendering techniques in mixed media will also be explored to develop skill in representing color, texture, and material.

## **IND 3100 - Composites: Materials and Fabrication**

**Credits:** 3

**Prerequisite(s):** IND 1130 or permission of instructor

**Description:** This course is a combination lecture/studio course that employs hands-on exercises and project fabrication to address various aspects for designing objects made of advanced composites, assessing the constraints of composites-related designs, and apply these topics through construction of a self-directed final project.

## **IND 3200 - Bicycle Design and Fabrication**

**Credits:** 3

**Prerequisite(s):** IND 1010, IND 1130, IND 1250, IND 1450, IND 1470

**Description:** A lecture and laboratory course providing instruction in the history of the bicycle, requiring research into appropriate building materials for bicycles, and that will provide students an opportunity to design and fabricate a working prototype based on that research. The course will also provide instruction and practice of the basic metal fitting skills and subsidiary tooling required to fabricate a working bicycle prototype and selection of material appropriate finishes.

## **IND 3260 - Direct Digital Manufacturing**

**Credits:** 3

**Prerequisite(s):** MET 1210 or IND 3660 with a grade of "C" or better

**Description:** In this combination lab lecture course, students explore the latest applications of digital 3D scanning and direct digital manufacturing. Through this course, students are introduced to current developments and the critical challenges of digital 3D technologies. Emphasis is placed on practical experience in utilizing departmental equipment to produce digital 3D tiles and output them to appropriate direct digital manufacturing equipment. Students will apply knowledge of 3D scanners for reverse engineering and direct digital manufacturing purposes.

*Note:* Credit will be granted for only one prefix: IND or MET.

**Cross Listed Course(s):** MET 3260

## **IND 3330 - Furniture Design**

**Credits:** 3

**Prerequisite(s):** IND 1010 or ART 1300; IND 1450

**Description:** This lecture/lab course employs furniture fabrication projects to address the furniture design process, aesthetic design issues, structure, ergonomics, functionality, materials technology and manufacturability. Students utilize the design process to formulate concepts, communicate those design concepts, and fabricate a quality furniture piece based on their research and design solutions.

## **IND 3400 - Product Usability and Ergonomics**

**Credits:** 3

**Prerequisite(s):** IND 2450 or instructor's approval

**Description:** This combination lecture and laboratory course stresses the importance of user interaction with products as a measure of product market viability and manufacturability. User interface components, anthropometries and psychologically intuitive design solutions for manufacture are addressed in the course.

## **IND 3450 - Intermediate Industrial Design Studio**

**Credits:** 4

**Prerequisite(s):** IND 2450

**Description:** Students will produce functional, aesthetic designs for mass-market consumer products. Students will also learn and adapt the design developmental process used in industry. This includes finding and analyzing problems, conducting and documenting research, generating and proposing concepts, and presenting solutions in public. Projects emphasize materials, manufacturing methods, concept visualization, market relevance, and historical context.

### IND 3480 - Industrial Design Model Making

**Credits:** 3

**Prerequisite(s):** IND 1100, IND 1300, or permission of instructor

**Description:** In a studio and laboratory environment, students will gain experience with a variety of model making techniques and materials. Students will learn to construct different levels of design models, from form study mockups in various scales to presentation quality models. Students will also learn how to use them to evaluate and communicate product design concepts.

### IND 3550 - Textiles: Materials and Fabrication

**Credits:** 3

**Prerequisite(s):** IND 1450, IND 1470

**Description:** In this course, students are provided with instruction in textile material characteristics, selection criteria, and appropriate textile design applications. The course will also provide an opportunity for basic skill development in fabrication techniques, including the use of sewing machines and pattern design.

### IND 3600 - Digital Visualization Techniques in ID

**Credits:** 3

**Prerequisite(s):** IND 2450

**Description:** The objective of this studio course is to develop 2D digital concept visualization skills using computer programs and equipment. Instruction emphasizes professional level presentation techniques with various 2D computer programs, including vector and bitmap based programs.

### IND 3660 - Computer Aided Modeling

**Credits:** 3

**Prerequisite(s):** IND 1450 or CET 1215 or MET 1200

**Description:** In a computer laboratory environment, students use software to model/render objects and designs in virtual three-dimensional space.

### IND 3680 - Computer Modeling for Manufacturing

**Credits:** 3

**Prerequisite(s):** IND 3660

**Description:** This combination lecture and laboratory course serves as an advanced, computer-aided modeling course in sequence with IND 3660. The course focuses on the material and assembly testing tools within appropriate solid modeling software to create products for manufacture. Appropriate software for analysis of a product's

readiness for manufacturing is also introduced. Emphasis is placed on developing models that facilitate direct digital manufacturing and advanced manufacturing methods.

### IND 3700 - Public Furniture Design

**Credits:** 3

**Prerequisite(s):** IND 2450

**Description:** This is a combination lecture and laboratory course in which students investigate and apply the key considerations for the design of public furniture. Instruction will be provided in the preparation of presentation materials for public use furniture competitions and furniture fabrication techniques. The application of these topics will be employed in the design and fabrication of a piece of furniture for public use.

### IND 3800 - Design for Marketability and Manufacturing

**Credits:** 4

**Prerequisite(s):** IND 3450

**Description:** In this course, students gain knowledge of design for production criteria by developing a product and optimizing its design for specific mass manufacturing technologies. Students gain experience through the design development process, including market feasibility research, brainstorming new concepts, refining concepts, and constructing alpha and beta prototypes that are designed for mass manufacturing. Projects are based upon real-world, new product development principles. Students learn fundamentals of industrial production, ecological design, consumer safety and entrepreneurship.

### IND 3850 - International Design Workshop

**Credits:** 3

**Prerequisite(s):** Instructor Approval

**Description:** This course is designed to provide the student with a fundamental understanding of global design culture that must be considered in order to design products for the global market. In this course, the student will participate in a multidisciplinary and multicultural design workshop that also includes pre and post-workshop lectures at MSU Denver.

*Note:* This course may be repeated up to 4 times under different areas of travel.

### IND 3950 - History of Industrial Design

**Credits:** 3

**Description:** This course provides an overview of the major personalities, organizations, styles, and evolutionary events that shaped the course of industrial design, from the Industrial Revolution to the present. There is a focus on the refinement of industrial design in Europe, the congruence of American design and industry, and the emergence of Asian design and manufacturing.

### IND 3980 - Elective Internship Experience

**Credits:** 1-3

**Prerequisite(s):** IND 2450

**Description:** This internship is designed to allow students to acquire additional work experience in the design profession. The experience must be supervised by a design professional in conjunction with an Industrial Design faculty member.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at c2hub@msudenver.edu.*

*Note:* Students may take this course twice for a total of 6 credits.

## **IND 4090 - Advanced Modelmaking Fabrication Techniques**

**Credits:** 3

**Prerequisite(s):** IND 3480

**Description:** This course will provide students with the opportunity to fabricate finished product models using different types of computer controlled prototyping processes. A variety of materials, processes, and Computer Numerical Control (CNC) machines will be utilized in the model fabrication process.

## **IND 4210 - Utilization of Composites in Manufacturing**

**Credits:** 3

**Prerequisite(s):** IND 3100

**Description:** In this combination lecture and laboratory course, students build upon the skills and knowledge acquired in IND 3100 - Composites: Materials and Fabrication utilizing design and fabrication projects to inform how they can use composite materials for advanced manufacture. The course will provide instruction in advanced composite fabrication techniques and relevant equipment for composite-based manufacture.

## **IND 4410 - Surface Modeling for Industrial Design**

**Credits:** 3

**Prerequisite(s):** IND 1450 or permission of instructor

**Description:** This lecture/lab provides instruction upon the skillset acquired in IND 1450 - Technical Drawing and CAD. Students will learn the principles of a NURBS (Non-uniform Rational B-Spline) based 3D modeling and visual rendering program. The modeling program will be used to produce digitally generated, realistic, visual imagery to maximize the effectiveness of design presentations and the design decision-making process.

## **IND 4450 - Advanced Industrial Design Studio**

**Credits:** 4

**Prerequisite(s):** IND 3450

**Description:** This course is a continuation of IND 3450, extending industrial design to user-centered research, conceptualization, and

presentation. In this course, students learn advanced product conceptualization techniques, use additional product development tools, and produce professional quality product presentation materials. Special emphasis is given to human factors in product design.

## **IND 4460 - Professional Industrial Design Studio**

**Credits:** 4

**Prerequisite(s):** IND 4450

**Description:** Students develop a semester-long design project under the guidance of a primary instructor and specialized mentor. Students compliment knowledge and skills from previous coursework with in-depth, qualitative research to create design solutions.

## **IND 4540 - Concept and Portfolio Development**

**Credits:** 4

**Prerequisite(s):** IND 4450

**Description:** In this course, students develop futuristic 'blue sky' concepts that are based on new technologies and user-centered research. Students also develop a professional design portfolio of their best work. The portfolio showcases students' skills as aligned with program and student learning outcomes. Evaluation of portfolios provides data for ongoing assessment of the IND program.

## **IND 4550 - Advanced Textiles**

**Credits:** 3

**Prerequisite(s):** IND 3550

**Description:** This course will provide students all the required information to create manufacturing drawings for softgoods. The final product will include sketches, finished orthographic renderings, and a multi-page techpack. The finished techpack will include all details required to make the finished good. The students will also make finished models of their chosen design. This course will cover how to produce manufacturing drawings for packaging, including how to pattern typical packaging materials and create finished art. Finished art means graphics and die lines are set up in an industry specific way.

## **IND 4860 - Research in Industrial Technology**

**Credits:** 2

**Prerequisite(s):** Senior standing; IND major

**Description:** This course provides in-depth research, laboratory experimentation, and/or development of a student-selected and faculty-approved topic in one technical system. The areas of research are: communications, manufacturing, and transportation/power. The course allows the student the opportunity to further develop problem-solving abilities. At the same time, the process enhances the student's knowledge and skills in a technical concentration.

## **IND 4870 - Special Studies in Industrial Design**

**Credits:** 1-5

**Prerequisite(s):** Permission of instructor

**Description:** A study and investigation of a selected topic in the field of industrial design. Student may repeat this course in alternate concentrations.

## **IND 4960 - Professional Internship**

**Credits:** 3

**Prerequisite(s):** Completion of General Studies requirements; senior standing; and IND 4450.

**Description:** The internship provides an opportunity for senior students to gain experience under the guidance of an industry professional. Students must complete a total of 150 hours during the semester in a placement relevant to the practice of Industrial Design.

**University Requirement(s):** Senior Experience

## **Integrative Healthcare**

### **ITP 1000 - Health Career Foundations**

**Credits:** 3

**Description:** This course is designed for students desiring a career in a health profession or a health related field. Through familiarization with health care trends and key concepts, students will have a solid foundation for their journey. Using design thinking, students will explore possible pathways through their academic education and extra-curricular activities to increase the probability that they will enter a health career that aligns with their values, interests, talents, and goals. Connecting students with campus, community, pre-professional, and professional resources to support their health career aspirations will increase their ability to successfully achieve their goals.

### **ITP 1500 - Dynamics of Health**

**Credits:** 3

**Description:** This course investigates contemporary health topics. Subjects surveyed include current biological, psychological, sociological, and cultural factors that influence health. Experiential learning encourages students to plan and adopt healthier behaviors.

*Note:* Credit will be granted for only one prefix: HON or ITP.

**General Studies:** Social and Behavioral Sciences

**Cross Listed Course(s):** HON 1501

### **ITP 1600 - Herbal Medicine**

**Credits:** 3

**Description:** This introductory course welcomes students of all levels and majors who are interested in learning about medicinal herbs. The class begins with a review of the history of herb use, Federal Drug Administration regulation, herb preparations, and potential actions of plant chemicals in the body. For each bodily system, lectures and readings will cover herbs traditionally used to

benefit that system and to modulate specific ailments, including summary statements of scientific evidence for efficacy and safety.

### **ITP 1700 - Medical Terminology**

**Credits:** 3

**Description:** This course introduces students to the basic Latin and Greek word parts that are combined to create medical terms and definitions of those terms. This will include terminology related to body structure, disease and treatment, and individual body systems. This course is a valuable introduction for any student interested in pursuing a career in a health-related field.

### **ITP 2500 - Complementary Medicine**

**Credits:** 3

**Prerequisite(s):** Satisfaction of General Studies Written Communication Requirement

**Description:** Students will be acquainted with a variety of nontraditional health and healing modalities in use in the United States today. Students will have a basis for understanding the mechanisms and principles by which therapeutic responses are produced. The student will be prepared to develop and present a report related to a specific therapeutic modality within the complementary medical field.

### **ITP 2700 - Holistic Dimensions of Wellness**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** This course is designed to allow students the opportunity to explore health from a holistic perspective, which includes seven dimensions of wellness (Spiritual, Physical, Mental, Financial, Social, Environmental, and Vocational).

### **ITP 2720 - Cannabis as Medicine**

**Credits:** 3

**Description:** Students in this course will explore the historical and current use of cannabis as a medicine. The major focus will be the current research and evidence of cannabis from an herbal and pharmacological perspective which includes the chemical constituents with physiological and psychoactive properties; medicinal uses, indications and dosage; current research and evidence based approaches; and the contraindications, side effects and adverse reactions related to the medical use of cannabis.

### **ITP 2800 - Health, Society, and the Environment**

**Credits:** 3

**Prerequisite(s):** BIO 1080 or ITP 1500 or ITP 2500 or PSY 1001 or SOC 1010

**Description:** This course examines the reciprocal relationship between human social organization and the natural environment. Students will gain a deeper understanding of how this relationship affects human health. Furthermore, they will learn to

consider individual health challenges in the context of imbalances in personal, social, and environmental health.

## **ITP 2820 - Anger In Men: A Whole Approach**

**Credits:** 3

**Description:** This class will allow students to address issues of anger in men, with an exploration of responsible anger, cultural perspectives on aggression and violence, the physiology of anger, and self-reflection on one's own anger, including the triggers and expression of anger.

## **ITP 2950 - Wellness Coaching I**

**Credits:** 3

**Description:** Students are introduced to the principles and tools of wellness coaching practice. Topics include scope of practice, ethics and values, effective communication, relationship building, and facilitating results to illuminate the discipline of wellness coaching. Research based techniques and best practices for facilitating behavior change are included.

*Note:* Credit will be granted for only one prefix: ESS or ITP.

**Cross Listed Course(s):** ESS 2700

## **ITP 3000 - Men's Health**

**Credits:** 3

**Prerequisite(s):** General Studies Written Communication requirement

**Description:** This course is an in-depth study of health issues specific to men. It will take a holistic approach, encompassing the physical, mental, emotional, social, and spiritual aspects of men's lives and the impact of each on health. This course emphasizes dialoguing between students to encourage active engagement with issues that boys and men encounter in today's world.

**General Studies:** Social and Behavioral Sciences

## **ITP 3100 - Health Education and Counseling**

**Credits:** 3

**Prerequisite(s):** ENG 1020, and ITP 1500 or NUT 2040, and junior standing

**Description:** This course provides students with a basic understanding of the various methods of communication used in the health professions and enhances their communication skills through practice. This class focuses on developing educational materials and counseling and interviewing patients.

## **ITP 3111 - Aging Warriors: Understanding the Health Issues of Aging Men**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010; and ENG 1020 or ENG 1021

**Description:** This course examines the health issues of aging men. It

is an integrative perspective on contributing factors to the health, disease, and demise of aging men such as masculinity, behavioral factors, environmental influences, and cultural influences. The course will include physical health, socio-emotional health, mental health, and sexual health issues of men growing older.

## **ITP 3200 - Ethics in Health Care**

**Credits:** 3

**Prerequisite(s):** Completion of General Studies requirements in Written Communication and Oral Communication.

**Description:** Students entering health care will become familiar with ethical theories and issues that are encountered within the medical field.

## **ITP 3222 - Anxiety: A Holistic Approach**

**Credits:** 1

**Description:** Students in this course will explore the trend of increased anxiety diagnoses, and the history and cultural perspectives on anxiety. Students will learn the pathophysiology of anxiety and the science behind holistic treatments for anxiety.

## **ITP 3230 - Bodies and Embodiment**

**Credits:** 3

**Description:** Students in this course examine multiple interdisciplinary discourses about gendered, sexed, raced, classed, and able bodies, beginning with Simone de Beauvoir's *The Second Sex*. Through discussion, lecture and critical evaluation of key theories in Body and Embodiment Studies (by Michel Foucault, Judith Butler, Susan Bordo, bell hooks, and Iris M. Young) students in this course explore the inscribed, as well as the lived, body--bodies that are gazed at, desired, fashioned, heard, and eroticized. In order to historically situate these discourses, the body is presented as a social construct that is controlled and manipulated but that also has unique experiences which cannot be verbalized and/or managed.

*Note:* Credit will be granted for only one prefix: ITP, SOC, or GWS.

**Cross Listed Course(s):** SOC 3230, GWS 3230

## **ITP 3300 - Homeopathy**

**Credits:** 3

**Prerequisite(s):** ENG 1010 and ENG 1020

**Description:** Students will become familiarized with the field of homeopathy. This includes the history, laws, principles and uses of homeopathy in the current healthcare system. Students are introduced to various homeopathic remedies and their uses. Contemporary research findings are presented and potential research designs identified.

## **ITP 3400 - Ayurveda**

**Credits:** 3

**Prerequisite(s):** Completion of ENG 1010 and ENG 1020

**Description:** The student will learn the basic principles underlying

the Indian health care system known as Ayurveda. It includes yoga, breathing techniques, meditation, herbal remedies, dietary practices, and the theories and research behind these practices.

### **ITP 3450 - Dynamics of Disease**

**Credits:** 3

**Description:** This course will acquaint students with the processes, dynamics and treatment of diseases with special focus on chronic diseases. It will also explore the psychosocial aspects of health as it relates to patients, families and caregivers; psychological crises; and death and dying.

### **ITP 3500 - Traditional Chinese Medicine**

**Credits:** 3

**Prerequisite(s):** ENG 1010 and ENG 1020

**Description:** The student will learn a basic understanding of the mechanisms and principles by which traditional Chinese medicine is practiced. Students explore different therapeutic modalities. Course content includes traditional Chinese philosophy as applied to treatment in acupuncture, herbal medicine, massage therapy, T'ai Chi, and Qi-Gong. Individuals will need to be open to learning about different philosophical beliefs upon which Chinese medicine is based.

### **ITP 3600 - Energy Medicine**

**Credits:** 3

**Prerequisite(s):** ITP 2500

**Description:** An experiential and conceptual exploration of energy medicine, the student will learn to combine theoretical foundations, such as quantum physics and chakra anatomy, with a strong, practical emphasis, including energy field assessment, basic healing techniques, and distance healing.

### **ITP 3700 - Physiology of Aging**

**Credits:** 3

**Prerequisite(s):** BIO 2310 and BIO 2320

**Description:** This course views aging from biological perspectives, explores theories of aging, and examines individual and cultural variations in the aging process. These themes form a backdrop to a detailed study of age-related structural and functional changes in the bodily systems, as well as the common diseases associated with each system. Successful aging will be emphasized through an examination of the modifiable risk factors for senescence and age-associated diseases.

**Cross Listed Course(s):** BIO 3530

### **ITP 3750 - Integrative Health Study Abroad**

**Credits:** 3

**Prerequisite(s):** Major within the Health Professions Department, 2.5 GPA and permission of instructor

**Description:** This is a variable topics course conducted in a study abroad format. The countries visited will vary as to where the course is offered. Students will study the health care of the country visited, including how people access healthcare, health care programs available, and how health care policy, environment, and tradition impact the health of the population.

### **ITP 3800 - Stress and Sleep: Impact on Health and Disease**

**Credits:** 3

**Prerequisite(s):** BIO 2310 or ITP 1500

**Description:** This course provides an in-depth study of stress, sleep, and the relationship between the two. Students will learn the physiologic mechanisms of acute and chronic stress, diseases associated with stress overload, and evidence-based ways to manage stress. They will also learn about sleep needs over the life cycle, circadian rhythms, major sleep disorders, and the dangers of sleep deprivation.

### **ITP 3810 - Men Across Cultures**

**Credits:** 3

**Prerequisite(s):** ENG 1010 or ENG 1009

**Description:** The purpose of this course is to address men/boys' health by bridging the understanding of how ethnic and cultural influences directly affect men's beliefs and behaviors about health and healthcare. Students in this course will explore the theoretical and practical influences on the experience of being a man in various cultures, which includes the major ethnicities in the U.S., as well as subcultures within those groups. Additionally, the content includes intersections of other populations and forms of identity and their influences on male health behaviors and outcomes.

**University Requirement(s):** Ethnic Studies & Social Justice

### **ITP 3850 - Lifestyle Medicine**

**Credits:** 3

**Description:** This class is an overview of lifestyle medicine and its use in disease prevention and enhancing overall health and wellbeing. Students will gain a basic understanding of the most common medical conditions that are impacted by lifestyle behaviors. In addition, we will explore the importance of motivation and behavior change in the field of lifestyle medicine and the importance of self-care/self-advocacy for optimal health. Students will learn about the importance of referral to appropriate health professionals.

**General Studies:** Social and Behavioral Sciences

### **ITP 3911 - Fathers and Health: A Global Perspective**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** This course is designed to enrich student's knowledge and understanding of global fathering practices through the lens of health. Students will be exposed to cross-cultural medical literature that looks at how father's health behaviors such as diet, lifestyle, and

physical health, in their own childhood, during peri-conception and in the developing years of his child's life, are determinant factors on various dimensions of children's health. Further, the course content includes emerging international research on the impact of fathering on a man's own identity and health - his longevity, his predisposition to depression, his heart health status, cancer risks, and societal influence. Student will then study various cultural influences that affect the health of fathers, and the influence on children and how those influences percolate across borders.

### **ITP 3920 - Gender Politics of Health**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or SOC 1010 or PSY 1001

**Description:** This course focuses on health issues specific to women and the challenges historically faced by women in the health care arena. Students will learn about the role of patriarchal medical mythologies that exist throughout various cultures in the oppression of women, especially minority women, and how women have reclaimed healing, health, and communities of medical knowledge production. This course specifically explores feminist, physiological, psychological, and sociological factors in women's health within a global context.

*Note:* Credit will be granted for only one prefix: PSY, SOC, GWS, or ITP.

**Cross Listed Course(s):** PSY 3920, SOC 3920, GWS 3920

### **ITP 3980 - Internship in Integrative Therapeutic Practices**

**Credits:** 1-15

**Prerequisite(s):** Permission of department

**Description:** This internship requires specialized skills that students may apply in educational or professional health care settings. A written learning contract between student, faculty supervisor, site supervisor, agency, and department chair is required. Activities include finding and working in an approved health care setting under the auspices of the office management or the clinical management. Academic credit is determined with 45 worked hours being equivalent to 1 credit. Therefore, 3 credits would be 135 worked hours, and 6 credits would be 270 worked hours.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

### **ITP 4000 - Pediatric Holistic Health**

**Credits:** 3

**Prerequisite(s):** Completion of General Studies requirements in Written Communication and Oral Communication.

**Description:** This course provides an overview of facts promoting the biological, psychological, and social health of children. The content emphasizes health maintenance, illness/injury prevention, and a holistic approach to common childhood illnesses. For each illness reviewed, lectures and readings will cover the etiology, diagnosis,

conventional treatment, complementary therapies, and home management.

### **ITP 4100 - Women's Holistic Health**

**Credits:** 3

**Description:** This course takes an in-depth, holistic approach to women's health. While highlighting new research findings, the class will explore the optimal integration of conventional medicine and complementary modalities for common women's health concerns. Students will deepen their awareness of tools women can utilize to maintain health and prevent illness.

*Note:* Credit will be granted for only one prefix: GWS or ITP.

**Cross Listed Course(s):** GWS 4100

### **ITP 4200 - Aromatherapy**

**Credits:** 3

**Prerequisite(s):** CHE 1100 or CHE 1800

**Description:** The student will engage in a comprehensive and practical study of aromatherapy. The student will gain information needed to develop skills and knowledge in integrated aromatherapy. The student will develop understanding of clinical and research trials, pharmacokinetics and chemistry of essential oils, physiological effects of essential oils, practical applications, and therapeutic blending. Individual oils will be profiled.

### **ITP 4300 - Botanical Pharmacology**

**Credits:** 3

**Prerequisite(s):** CHE 1100 or CHE 1800

**Description:** The student will gain an in-depth exploration of commonly used plant medicines. The review of each botanical will include its history, botanical classification, chemical constituents, modern uses, the scientific research supporting those uses, contraindications, potential side effects, and drug interactions.

### **ITP 4400 - Wellness Coaching II**

**Credits:** 3

**Prerequisite(s):** ITP 2950 or ESS 2700

**Description:** This advanced course in wellness coaching allows students to better understand ethics, professionalism, communication, behavior change, and coaching sessions. Students create coaching agreements, behavior change plans, and document interactions to support the eventual creation of a coaching business.

*Note:* Credit will be granted for only one prefix: ESS or ITP.

**Cross Listed Course(s):** ESS 4700

### **ITP 4600 - Clinical Pathophysiology**

**Credits:** 4

**Prerequisite(s):** BIO 2320

**Description:** This course is designed to familiarize the student with the nature of human pathophysiology using major conceptual areas. Pertinent biochemical and metabolic derangements are correlated



with the cellular structure by applying systems theory. The course focuses on the effects of the disease process on all of the major bodily systems, pathogenesis, and related clinical manifestations.

## **ITP 4700 - Community Health Education and Lifestyle Medicine**

**Credits:** 3

**Prerequisite(s):** ITP 3850

**Description:** Students gain a more in-depth understanding of lifestyle medicine in areas such as healthy eating, physical activity, stress reduction, and healthy sleep habits. They work with various community groups to identify wellness educational needs, and then develop lifestyle medicine educational programs to assist community members with improving their wellbeing. Students learn about health promotion concepts, create dynamic educational presentations/materials, and serve a community through sharing what they have created. Through service learning, students assist various communities with disease prevention and enhance overall health and wellbeing through lifestyle medicine.

*Note:* Some sections of this course may be taught as Service Learning.

## **ITP 4800 - Lifestyle Medicine Across Gender and Lifespan**

**Credits:** 3

**Prerequisite(s):** ITP 3850

**Description:** This class will focus on how lifestyle choices impact health across the lifespan from childhood/adolescence through early adulthood and into late adulthood. It will also focus on how lifestyle medicine impacts women's health, men's health, and LGBTQ health. Students will understand how areas of lifestyle medicine topics such as healthy eating, physical activity, stress reduction, healthy sleep habits impact the health of these various groups in different ways. They will also learn about lifestyle medicine topics that are of particular importance to certain populations of people.

## **ITP 4900 - Theories and Application of Knowledge for Integrative Health**

**Credits:** 3

**Prerequisite(s):** Senior standing and ITP major

**Description:** This course explores the history, theories and philosophies surrounding the acquisition of health-related knowledge and understanding of the mind-body-spirit complex. The performance of a basic level Holistic Health assessment and knowledge of when and how to initiate appropriate referrals to traditional and complementary health team members will be covered, along with understanding the transformational nature of personal change.

**University Requirement(s):** Senior Experience

## **ITP 4950 - Community Coaching for Health**

**Credits:** 3

**Prerequisite(s):** HPS 4700 or ITP 4400 and Senior Standing

**Description:** Lifestyle medicine knowledge is meant to be applied in the community setting, in order to truly impact the health of others. Students utilize their competencies in lifestyle medicine, wellness coaching, and patient navigation in the community. Through community and campus partnerships, students will have the opportunity to apply their skills in real-world situations to impact the health and wellbeing of clients. Students will complete a coaching log that may be utilized when applying for the National Board Certification for Health and Wellness Coaching. Professionalism, documentation skills, and refinement of their coaching skills will be emphasized.

**University Requirement(s):** Senior Experience

**Cross Listed Course(s):** ESS 4950

## **ITP 4999 - Applied Learning with Lifestyle Medicine**

**Credits:** 3

**Prerequisite(s):** Senior Standing

**Description:** Full appreciation for lifestyle medicine and other areas of health care is best realized through applying the knowledge outside of the classroom. Students who are interested in this applied learning experience will utilize lifestyle medicine and/or health care principles to address various situations related to health. Experiential learning will be tailored to students' areas of interest, current skill set, desired knowledge and skills, post-graduate plans, and current activities. Opportunities to engage in health-related research, community service, health activism, and teaching others about health will be given as available.

*Note:* This course may be repeated 3 times for a maximum number of 12 credits.

**University Requirement(s):** Senior Experience

## **Italian**

### **ITA 1010 - Elementary Italian I**

**Credits:** 5

**Description:** This is a basic course in Italian, with emphasis primarily on pronunciation, speaking, and understanding, supplemented by grammar, reading, and writing. Attention will also focus on understanding the culture and customs of Italy.

**General Studies:** Oral Communication

### **ITA 1020 - Elementary Italian II**

**Credits:** 5

**Prerequisite(s):** ITA 1010 or equivalent

**Description:** This course is a continuation of ITA 1010 and focuses on skills development in listening, speaking, reading, and writing with emphasis on the use of functional, communicative language for oral and written proficiency and cultural competency.

**General Studies:** Arts and Humanities, Global Diversity

### **ITA 1021 - Bridging Cultures on the Job**

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** ITA1020, or instructor's permission

**Description:** This one-credit course complements the existing ITA 1020 - Elementary Italian II or its equivalent. It adds a professional dimension to the study of Italian, with two main objectives: enhancing students' ability to communicate in specific, career-relevant situations in the target language, and developing intercultural expertise for effective communication with individuals from diverse cultural backgrounds.

**General Studies:** Arts and Humanities

## ITA 1800 - International Italian Year I

**Credits:** 3-6

**Description:** This is a variable credit course, designed for first-year students learning Italian in a study-abroad setting. The course provides an approved study-abroad educational experience in Italian speaking, comprehension, reading and writing.

*Note:* Student can earn a maximum of 6 credit hours.

## ITA 2010 - Intermediate Italian I

**Credits:** 3

**Prerequisite(s):** ITA 1020 or Instructor's Permission

**Description:** This course is the first of a two-semester, integrated, second-year sequence focusing on the further development of listening, speaking, reading, and writing skills. The course emphasizes the use of functional, communicative language for achieving oral and written proficiency, and cultural competence. Classes are conducted mostly in Italian and will include a variety of interactive activities designed to help students develop their knowledge of Italian and their ability to use it productively in situations of communication.

## ITA 2020 - Intermediate Italian II

**Credits:** 3

**Prerequisite(s):** ITA 1020 or Instructor's Permission

**Description:** This course is a continuation of ITA 2010 and is the second of a two-semester, integrated, second-year sequence focusing on the further development of listening, speaking, reading, and writing skills. The course emphasizes the use of functional, communicative language for achieving oral and written proficiency, and cultural competence. Classes are conducted mostly in Italian and will include a variety of interactive activities designed to help students develop their knowledge of Italian and their ability to use it productively in situations of communication.

## ITA 2110 - Italian Reading and Conversation

**Credits:** 3

**Prerequisite(s):** ITA 1020 or Instructor's Permission

**Description:** This course is designed to deepen students' knowledge of the geographical, historical, economic, and sociological aspects of Italian culture. It strengthens conversational ability through the use of

group discussions, role-playing, oral presentations, and debates. Conducted in Italian.

## ITA 2800 - International Italian Year II

**Credits:** 3-6

**Prerequisite(s):** One year of college Italian or equivalent

**Description:** This variable-credit course focuses a second-year study of Italian language and culture in an approved study-abroad setting.

*Note:* Student can earn a maximum of 6 credit hours.

## ITA 3010 - Italian Culture Through Film

**Credits:** 3

**Prerequisite(s):** ITA 2020 or Instructor's Permission

**Description:** This course is designed to expand students' knowledge of the culture and civilization of modern Italy primarily through film. It will focus on a selection of Italian movies from World War II to the present with the purpose of analyzing the historical, cultural, and socio-economic complexity of contemporary Italy. Classes will be conducted in Italian.

## ITA 3110 - Advanced Conversation

**Credits:** 3

**Prerequisite(s):** ITA 2020 or Instructor's Permission

**Description:** This course focuses on refining language skills while providing insight into Italian society and culture. It helps students expand vocabulary and communication strategies while revising complex grammatical structures. Conducted in Italian.

## ITA 3140 - Advanced Italian Grammar

**Credits:** 3

**Prerequisite(s):** ITA 2020 or Instructor's Permission

**Description:** This course systematizes and reinforces the language skills presented in lower-level courses through a review of complex grammatical points, and through the analysis of literary texts and newspaper articles. Classes will be conducted in Italian.

## ITA 3220 - History and Culture of Southern Italy through Literature

**Credits:** 3

**Prerequisite(s):** ITA 2020 or equivalent

**Description:** In this course taught in Italian, students explore the culture of Southern Italy through literature, history, and cinema. Students analyze a rich selection of literary texts, historical narratives, and essays. Discussions include contrasting views on the relationship between Southern and Northern Italy, bringing together the perspectives of two different worlds.

## ITA 3250 - Readings in Italian Literature

**Credits:** 3

**Prerequisite(s):** ITA 2020 or Instructor's Permission

**Description:** This course is designed as an introduction to the study of Italian literature. It helps students gain confidence and increase their effectiveness in reading Italian texts, develop vocabulary, and become familiar with idiomatic expressions through discussions, oral reports, and essays. Conducted in Italian.

### ITA 3310 - Contemporary Italy: Culture and Society

**Credits:** 3

**Prerequisite(s):** ITA 2020 or Instructor's Permission

**Description:** This course is designed to deepen students' knowledge of Italian language and society. Students will examine the political, cultural, and social history of Italy from the post-war period to the present. Students will use different idiomatic expressions, review grammatical structures, present oral reports, and write essays on the topics discussed in class. Conducted in Italian.

### ITA 3340 - Twentieth-Century Italian Culture Through Songs

**Credits:** 3

**Prerequisite(s):** ITA 2020 or equivalent

**Description:** This course further develops students' conversational skills through the study and enjoyment of Twentieth-Century Italian music. Students also deepen their knowledge of Italian society and history. Music helps to understand the character of a people and their identity. Listening to and discussing Italian songs from the 1920s to the 1990s offers a peek into Italy's past and present and a better understanding of the country's major historical and social changes.

### ITA 3800 - International Italian Year III

**Credits:** 3-6

**Prerequisite(s):** Two years of college Italian or equivalent

**Description:** This course focuses on upper-division study of language, culture, and society in a study-abroad setting. It uses a variety of methods and includes reading, writing, and discussion seminars in Italian.

*Note:* Student can earn a maximum of 6 credit hours.

## Japanese

### JPS 1010 - Elementary Japanese I

**Credits:** 5

**Description:** This basic course in Japanese emphasizes pronunciation, speaking, and understanding, supplemented by grammar, reading, and writing.

**General Studies:** Oral Communication

### JPS 1020 - Elementary Japanese II

**Credits:** 5

**Prerequisite(s):** JPS 1010 or equivalent

**Description:** This course is a continuation of JPS 1010 and focuses on skills development in listening, speaking, reading, and writing with emphasis on the use of functional, communicative language for oral and written proficiency and cultural competency.

**General Studies:** Arts and Humanities, Global Diversity

### JPS 1021 - Bridging Cultures on the Job

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** JPS 1020 or permission of the instructor

**Description:** This one-credit course complements the existing JPS 1020 - Elementary Japanese II or its equivalent. It adds a professional dimension to the study of Japanese, with two main objectives: enhancing students' ability to communicate in specific, career-relevant situations in the target language, and developing intercultural expertise for effective communication with individuals from diverse cultural backgrounds.

**General Studies:** Arts and Humanities

### JPS 2010 - Intermediate Japanese I

**Credits:** 5

**Prerequisite(s):** JPS 1020 or advisor permission

**Description:** This is the first semester of a two-semester intermediate Japanese language sequence specifically designed to strengthen grammatical skills and proficiency in speaking, understanding, reading, and writing. The course will also introduce students to a sampling of social, cultural and literary topics central to the understanding of Japan and the Japanese people.

### JPS 2020 - Intermediate Japanese II

**Credits:** 5

**Prerequisite(s):** JPS 2010 or advisor permission

**Description:** This second course in the JPS 2010 and JPS 2020 sequence is designed to continue strengthening grammatical skills and proficiency in speaking, understanding, reading, and writing. It will also present further examples of sociocultural issues central to Japan and the Japanese people.

### JPS 2110 - Conversational Japanese I

**Credits:** 3

**Prerequisite(s):** JPS 1020 or advisor permission

**Description:** This conversation course is designed to improve oral proficiency and further develop fluency in the Japanese language. Students will study a variety of model dialogues and will learn useful conversational formulas applicable to different scenarios of everyday life in Japan.

### JPS 2120 - Kanji I

**Credits:** 3

**Prerequisite(s):** JPS 1020 or advisor permission

**Description:** This Japanese course introduces 464 kanji: their etymology, meaning and usage. Students will learn to recognize and apply these selected kanji in both reading and writing.

## **JPS 3110 - Conversational Japanese II**

**Credits:** 3

**Prerequisite(s):** JPS 2020 or advisor permission

**Description:** In this Japanese conversation course, students further develop the skills addressed in Conversational Japanese I by using the grammar points and vocabulary learned in JPS 2020. Students learn to speak more readily and with improved fluency. Students learn a variety of dialogue models that are useful in different scenarios of everyday life in Japan, and improve their communication skills, as they increase their knowledge of Japanese culture and intercultural understanding.

## **JPS 3120 - Kanji II**

**Credits:** 3

**Prerequisite(s):** JPS 2120 or advisor permission

**Description:** This course is a continuation of Kanji I. The course introduces 232 additional, new kanji characters, their etymology, meaning, and usage. Students will be able to recognize and use them in reading and writing.

## **JPS 3200 - Japanese through Media Culture**

**Credits:** 3

**Prerequisite(s):** JPS 2020 or advisor permission

**Description:** This course focuses on the Japanese language, as well as on social and cultural customs through the prism of media. Materials studied include, but are not limited to: manga, online publications, and film.

## **JPS 3210 - Advanced Japanese: Major Topics**

**Credits:** 3

**Prerequisite(s):** JPS 2020 or instructor permission

**Description:** Advanced course for those who have taken two years of basic Japanese. The variable topics in this course will target specific aspects of the language to further the understanding of the culture.

*Note:* This course may be repeated under different topics

## **Journalism and Media Production**

### **JMP 1000 - Introduction to Journalism and Mass Media**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading, writing, and mathematics assessment tests

**Description:** This survey course introduces students from all

academic disciplines to the historical development of journalism and mass media and its relationship to contemporary society. Students will explore the functions and impact of newspapers, books, television, radio, magazines, films, public relations and issues such as technology convergence, censorship, economic control, and privacy.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

### **JMP 1010 - Critical Thinking through 21st Century Media**

**Credits:** 3

**Description:** Through the lens of 21st century media, this course teaches students to be critical media producers and consumers through critical thinking and inquiry learning skills. It reviews the similarities and differences between traditional and 21st century media, with attention focused on bias, perspective, author's intent, audience, social and ethical responsibilities, and the impact on a media communication process. 21st century media will be examined through both primary sources and current media to provide historical context for understanding media communication.

**General Studies:** Arts and Humanities

### **JMP 1100 - Journalism Fundamentals**

**Credits:** 3

**Description:** This course emphasizes writing and editing using Associated Press style guidelines, proper punctuation for news copy, and the basic skills required of journalists. This course introduces students to the ethical and legal considerations for journalists with a special emphasis on libel and privacy laws. Students are regularly tested on their use of Associated Press guidelines. Students develop their ability to edit copy.

### **JMP 1450 - Media Literacy**

**Credits:** 3

**Prerequisite(s):** ENG 1020

**Description:** Students review basic Internet standards and refine electronic communication skills, using digital media and current online technologies. This course builds media literacy skills, including visual, information, and news literacies. Students analyze media messages using the frameworks of intent, audience, bias, ownership, human representation, production aesthetic, and historical context. Students examine human representation in the media through the lens of race, gender, physical ability, socio-economic status, and so forth. Media for advocacy and digital storytelling are also introduced to begin media production concepts and skills.

### **JMP 2100 - Reporting**

**Credits:** 3

**Prerequisite(s):** JMP 1100

**Description:** This course allows students to refine the news-gathering, interviewing, and writing techniques that were learned in JRN 1100 by introducing students to beat reporting. Students spend

time perfecting their skills in a writing laboratory. Students are required to cover events outside of class.

## **JMP 2210 - Beginning Layout and Design**

**Credits:** 3

**Prerequisite(s):** JMP 1100

**Description:** This course will provide students with basic knowledge of layout and design for newspapers, magazines and other mass media publications, including the Internet, via a variety of software platforms.

## **JMP 2400 - Video Editing I**

**Credits:** 3

**Description:** Students in this course learn the fundamental principles, aesthetics, and procedures necessary to perform nonlinear video editing. Students learn video editing, the importance of aesthetics in editing, and how to translate editing theory to practical applications.

## **JMP 2420 - Video Production I**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** JMP 2400

**Description:** Students learn the basics of audio and video techniques and standards for producing on location single camera programs. Students engage in project development and pre-production, manual video and audio recording, professional image and soundtrack composition, production lighting operation and safety, and non-linear video editing.

## **JMP 2430 - Introduction to Media Production**

**Credits:** 3

**Description:** This course is a survey of basic media production. Basic production techniques, terminology, equipment characteristics, media selection, advantages and disadvantages are studied.

## **JMP 2435 - Multimedia Writing and Production**

**Credits:** 3

**Prerequisite(s):** JMP 1100

**Description:** Students receive instruction and produce work designed to meet the requirements for a variety of media and audiences. Online writing, public relations writing, broadcast writing, scriptwriting, technical writing, interactive media writing, and writing for mobile and social media audiences are among the areas covered.

## **JMP 2450 - Basic Media Production and Leadership**

**Credits:** 3

**Description:** Students explore interactive media and practice front-end website development. Students learn the basics of digital media - text, image, audio, video, animation, and interactivity. Professional

message design including audience analysis, content outlines, flowcharts, wireframes, and interfaces are also covered. HTML and CSS are used to produce a small website.

## **JMP 2460 - Raster Graphics**

**Credits:** 3

**Description:** Raster (bitmap) graphics are the core of image processing, photo retouching, graphic design, special effects, video animation, print design, and so forth. In this graphic production course, students create numerous image manipulation and graphic design projects. Other topics include visual literacy and how it integrates with professional communication. Graphic design principles including spatial layout, visual hierarchy, eye movement, color theory, and typography are also demonstrated.

## **JMP 2465 - Vector Graphics**

**Credits:** 3

**Description:** Vector graphics are the core of logo design, typeface design, information graphics, user interface design, vector animation and so forth. In this graphic production course, students create numerous vector design projects and technical illustrations. Other topics include telling a complex data-driven story with information graphics and contemporary user interface design.

## **JMP 2480 - Introduction to Animation**

**Credits:** 3

**Description:** This course introduces students to traditional animation techniques and the planning and production of computer animation. The course focuses on techniques used to create 2D objects and animate them in order to communicate a professional message. Students will create numerous computer animations to be viewed on the Internet.

## **JMP 2600 - Beginning Photojournalism**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** JMP 1000

**Description:** Students in this course receive beginning-level instruction in photojournalism and techniques used in still photography for print media and online media. The photojournalist's use of the camera is emphasized, and students are introduced to the mechanical limitations of the camera and how to best use the instrument. Students receive instruction in the use of light, pre-visualization of photographs, and the ethics of photojournalism.

## **JMP 2610 - Introduction to Technical Writing**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** This course provides students with the skills to analyze and produce clear and effective technical and scientific documents and materials. Students determine the style, purpose, content, and format for numerous industry-specific reports and technical support

documents. Students analyze and produce accessible materials for expert, technical, lay, and intercultural audiences. Students also develop, incorporate, and cite visual elements, including images, tables, and the representation of numeric data, to support the message delivered towards a specific audience.

### **JMP 2700 - Fundamentals of Public Relations**

**Credits:** 3

**Prerequisite(s):** JMP 1100

**Description:** This course is an introductory analysis and practical exploration of the roles and functions of public relations as it relates to an organization's internal and external publics. Development of practical skills include persuasive strategies, media relations, and effective news releases.

### **JMP 2800 - Introduction to Audio Production**

**Credits:** 3

**Description:** An introduction to the physics, perception, recording, and editing of sound-based media. Students work with digital audio recorders, various microphones, professional recording techniques, and non-linear audio editing software in creating original digital audio projects for a variety of media.

### **JMP 2890 - Overview of the Social Documentary**

**Credits:** 3

**Prerequisite(s):** Completion of General Studies Written Communication Requirement

**Description:** This course covers the different production elements required to produce a documentary for either a video or still photo program. It covers documentary styles, scripting techniques, production considerations and editing methods that are relevant to the documentary. Various documentary programs are viewed and critiqued.

### **JMP 3001 - Producing Social Documentaries**

**Credits:** 1

**Prerequisite(s):** ENG 1009 or ENG 1010 or equivalent

**Corequisite(s):** JMP 4890

**Description:** This course is designed for students who are interested in taking a Social Documentary class. Topics covered include news values, news writing, feature writing, photojournalism, camera management and camera operation. Students practice in each area before embarking on their Social Documentary work.

*Note:* This course is a co-requisite for non majors who desire to enroll in JMP 4890.

### **JMP 3063 - Sports Photojournalism**

**Credits:** 3

**Prerequisite(s):** JMP 2600

**Description:** Students in the course gain an introductory level of instruction in sports photojournalism and techniques used in

capturing sports action, sports reaction and sports feature photography for print and online media. Students must have working knowledge of DSLR cameras.

### **JMP 3130 - Sports Writing**

**Credits:** 3

**Prerequisite(s):** JMP 1100

**Description:** This course will provide students with knowledge of sports coverage for newspapers, magazines and other mass media publications, including the Internet, via a variety of software platforms. Students will cover a sport during a season, writing game reports and features, as part of the course.

### **JMP 3200 - News Editing**

**Credits:** 3

**Prerequisite(s):** JMP 2100

**Description:** This course provides advanced training in the complex problems of copy editing, headline and caption writing, and applying news judgment. Students also work on page design and photo editing. Students spend time perfecting their editing skills in a laboratory setting.

### **JMP 3300 - Multimedia Journalism I**

**Credits:** 3

**Prerequisite(s):** JMP 2100

**Description:** This course provides students with the tools to become effective storytellers with several forms of media. Students will create stories using still pictures or video with audio and supported by text. Students will gain skills to produce multimedia pieces while learning the tenets of several computer programs. Students spend time perfecting their work in a multimedia lab.

### **JMP 3310 - International Technical Communications**

**Credits:** 3

**Prerequisite(s):** At least Junior standing or Permission of instructor

**Description:** This course introduces students to the requirements of international technical communications. It defines the characteristics of an international requirement of technical communicators and provides students with opportunities to practice necessary skills.

### **JMP 3330 - Technical Writing for Translation**

**Credits:** 3

**Prerequisite(s):** JMP 2610 or Permission of instructor

**Description:** This course prepares technical writers, editors, and scriptwriters to develop text and scripts in a manner that facilitates translation for international use.

### **JMP 3400 - Short-form Nonfiction Writing**

**Credits:** 3

**Prerequisite(s):** JMP 2100

**Description:** Students study and practice various types of short-form nonfiction writing that are common in traditional magazine and online news and feature outlets. These include personality profiles, music and restaurant reviews and human interest features. They survey the traditional and digital outlets that publish short-form nonfiction articles.

### **JMP 3410 - Writing for Broadcast Media**

**Credits:** 3

**Prerequisite(s):** JMP 1100 or JMP 2435

**Description:** This course focuses on writing for broadcast electronic media. Students will learn the important elements, aspects, and processes involved in the creation of content specifically written for electronic media production and distribution. Students will explore the unique demands of electronic media forms, their audiences, the related terminology, and writing techniques.

### **JMP 3420 - Video Production II**

**Credits:** 3

**Prerequisite(s):** JMP 2420; or permission of instructor

**Description:** Crew-based production process is the focus of this professional-practice course in audiovisual storytelling. Students work in standard industry group-assigned collaborative roles to produce an intermediate level video production in fiction, documentary, and/or social/informational media.

### **JMP 3425 - Creating Informational Media**

**Credits:** 3

**Description:** Informational media is at the forefront of modern-day digital publishing for business, the sciences, education, and commerce. Students in this course learn, apply, and combine concepts, techniques, and research used in creating meaningful content through digital still photography, speaker support presentations, video, and archived historical media. Aspects of audience-specific content research, design, and delivery are covered to equip students with the necessary skills to bring clarity and purpose to their work.

**General Studies:** Social and Behavioral Sciences

### **JMP 3430 - Performance for Broadcast**

**Credits:** 3

**Prerequisite(s):** JMP 2435 or permission by instructor

**Description:** This is an introductory course for "on air" performance, designed to meet the needs of radio-television-multimedia news anchors and announcers. Instruction is designed to develop pleasing and persuasive vocal and visual communication, either on-camera or on-mic, as a means of improving a variety of performance-driven broadcast, multimedia and Internet delivery presentations.

### **JMP 3431 - The Role of the Video Director**

**Credits:** 3

**Prerequisite(s):** JMP 2420 and JMP 3440, or permission of the instructor

**Description:** Students learn the creative and technical considerations required in directing fiction, nonfiction, or other types of films and videos. Students explore principles used in directing and designing fiction and nonfiction videos, as well as film and video analysis.

### **JMP 3435 - The Role of the Video Producer**

**Credits:** 3

**Prerequisite(s):** JMP 2420 and JMP 3440, or permission of instructor

**Description:** Students learn the many of the roles and processes required of a video producer. Topics and hands-on activities include: production research and development, budgeting and funding, scheduling and hiring, legal and insurance considerations, and standard tasks required to deliver and distribute a video project.

### **JMP 3440 - Scriptwriting for Video**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** Through a series of hands-on scriptwriting assignments, students engage with several video script formats standardized by the various production industries they serve. Students engage in script research and development, scene and story construction, visual writing for audiovisual production, industry formats and language, and script editing through multiple drafts.

### **JMP 3445 - Television Production**

**Credits:** 3

**Prerequisite(s):** JMP 2400 or permission of instructor

**Description:** This course is an introduction to television production, operation of broadcast studio equipment, vocabulary, and experience in direction of multi-camera productions. Specific attention is focused on preproduction, including identification of audience by age, gender, and culture. Students will participate in production activities and procedures on a variety of projects.

### **JMP 3450 - Intermediate Interactive Production**

**Credits:** 3

**Prerequisite(s):** JMP 2450 or Permission of instructor

**Description:** Students in this course dig a little deeper into front-end website documentation and development. Producing accessible content using Universal Design, students create a device-independent, responsive website. Interactive forms and e-commerce options are also developed.

### **JMP 3451 - Sports Broadcasting: Techniques and Practices**

**Credits:** 3

**Prerequisite(s):** JMP 1100 or HPS 2730

**Description:** By examining all aspects of sports broadcasting, this course explores the aesthetics and technical skills of reporting, writing leads, developing style, editing, managing production, and adhering to ethics, as well as guidance on working in amateur and professional sports media. Through discussion, examples, pre- and post-production activities, students focus on the new demands and necessary skills needed for sports media in the broadcast domain.

### **JMP 3461 - Producing the TV Newscast**

**Credits:** 3

**Prerequisite(s):** JMP 2435

**Description:** This course introduces students to producing television news. This includes writing for TV news, in-studio production techniques, as well as post-production considerations in the creation of news packages. Business aspects of the broadcast news industry are explored, as well as legal and ethical issues that arise in news production.

### **JMP 3462 - Producing for Radio and Podcasts**

**Credits:** 3

**Prerequisite(s):** JMP 2800 or permission of instructor

**Description:** This course allows students to work with Podcasting and Radio Broadcast through Media Center facilities and Student Media facilities. Students are given real-world, hands-on training and practice opportunities with up-to-date broadcast/podcast techniques and technologies.

### **JMP 3470 - Writing for Interactive Media**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** This course covers the techniques of designing, writing for, and documenting interactive media, which includes online, fixed, mobile, and social media for various devices. The student will create content outlines, flowcharts, storyboards, wireframes, and a variety of preproduction documents.

### **JMP 3485 - Motion Graphics I**

**Credits:** 3

**Prerequisite(s):** JMP 2400 or JMP 2460 or ART 1531

**Description:** Students in the Motion Graphics I course create keyframe and preset-based animations for use in broadcast, online, and other professional video productions. Students incorporate raster and vector graphics, digital audio, video footage, typographic treatments, and appropriate visual effects to construct their animated messages. Rendering techniques and video compression are also practiced. Students conclude the course with demo reel presentations.

### **JMP 3500 - Topics in Journalism: Variable Topics**

**Credits:** 1-3

**Prerequisite(s):** JMP 2100

**Description:** This course will provide students with a brief look at a variety of topics in journalism, including specialized areas of reporting, writing, public relations, and content delivery. Topics vary each semester.

*Note:* This course may be repeated for up to 6 semester hours of credit.

### **JMP 3510 - Portfolio Presentation**

**Credits:** 1

**Prerequisite(s):** A journalism major or minor with at least junior standing

**Description:** This course helps prepare students to enter the vocation of journalism. Emphasis is placed on preparing a portfolio of work, crafting resumes and cover letters, and researching markets for employment.

### **JMP 3530 - Drone Video Masterclass**

**Credits:** 3

**Prerequisite(s):** JMP 2430 or JMP 3425, or permission of instructor

**Description:** Students gain practical experience flying small unmanned aerial systems for photographic imaging within a variety of indoor and outdoor environments. Topics include aviation principles for drone piloting, FAA, state, and local regulations, aerial imaging techniques, newsgathering, and the ethical use of drones in public areas. Upon successful completion of the course, the student will be prepared to sit for the FAA license exam required for professional drone operations in the United States.

### **JMP 3540 - Mobile and Social Media Communication**

**Credits:** 3

**Prerequisite(s):** JMP 2435

**Description:** This course explores the principles of using mobile and social media to accomplish a communication goal. Social media is investigated for its collaborative and community-building properties. Mobile media is examined through the lens of technology-enhanced communication.

### **JMP 3550 - Data Visualization and Presentation**

**Credits:** 3

**Prerequisite(s):** JMP 1100 or JMP 2610

**Description:** Data visualization is the graphic representation of information and data. Using visual elements like tables, charts, graphs, diagrams, color, and typography, etc., data visualization is an effective way to understand and present trends and patterns in data. Information is a powerful commodity and being able to efficiently analyze and present information is a sought-after skill for journalists, technical writers, and media producers. Great storytelling can happen when data visualization happens.



## **JMP 3560 - Column Writing**

**Credits:** 3

**Prerequisite(s):** JMP 2100

**Description:** This course teaches students how to share anecdotes and ideas, as well as develop their voices as journalists. By the end of the course, students should be skilled in writing descriptive and critical reviews, thoughtful commentary on the day's news, and powerful profiles about news makers and everyday people. This course is designed to improve the quality of news column writing and to address the opportunities for inexpensive news communication in a digital age.

## **JMP 3570 - Covering the Environment**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or JMP 1000 or Permission of the JMP Department

**Description:** Students in this course analyze corporate and public environmental issues in the West and how they are covered. Students employ ethical paradigms in comparing and contrasting environmental issues and their coverage. Ultimately students compose journalism projects that detail the impact of environmental policy on end users.

## **JMP 3580 - Making Media Social**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** JMP 2435

**Description:** This course explores the principles of what makes media social from both a theoretical and applicable standpoint. Using a variety of tools, students not only create products and content for social media, but also understand their creation using a larger theoretical, rhetorical, and communication framework.

## **JMP 3590 - Streaming Media Technologies**

**Credits:** 3

**Prerequisite(s):** JMP 2430 or permission of instructor

**Description:** This course explores the history of streaming media and prepares students for the preproduction and production processes, current technologies, and streaming media deployment. Students develop a website, which incorporates streaming media technology.

## **JMP 3600 - Intermediate Photojournalism**

**Credits:** 3

**Prerequisite(s):** JMP 2600

**Description:** Students in this course build on their beginning level understanding of photojournalism and techniques used in still photography for print and online media. Students take their working knowledge of DSLR cameras and produce photojournalism images. Students will be in the field taking photos and editing on a regular basis. Finished work will be critiqued by faculty to reinforce instruction.

## **JMP 3620 - Introduction to Technical Editing**

**Credits:** 3

**Prerequisite(s):** JMP 2610 or Permission of instructor

**Description:** This course presents techniques for editing technical documentation including all levels of editing and teamwork with writers.

## **JMP 3625 - UX and UI: The User Experience**

**Credits:** 3

**Prerequisite(s):** JMP 2610

**Description:** This course is designed to provide students with the knowledge and practical experience of usability testing commonly known in the field as UX (User Experience) and UI (User Interface) Testing. Students will learn the usability issues and the strategies for planning and conducting a test, with or without a lab. Students will conduct usability tests on websites, instruction manuals, and other media to evaluate the user experience. The course will also focus on working in a team to plan, prepare, and conduct a usability test, then analyzing and presenting the results in a written report.

## **JMP 3630 - Producing Digital Documents**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** JMP 2610

**Description:** Students focus on message design for a professional audience when creating digital documents. Graphic design principles including spatial layout, typography, and color theory are incorporated into projects. Automation techniques, such as master pages, style sheets, content generation, etc., are examined. Students create several print documents, as well as a long-format book, interactive PDF, eBook, or mobile app. Students learn about printing methods, traditional and digital prepress, and finishing options. Document accessibility is also emphasized throughout, preparing students to create and repair documents for universal accessibility.

## **JMP 3645 - Writing Software and Hardware Documentation**

**Credits:** 3

**Prerequisite(s):** JMP 2610

**Description:** This course prepares students to write audience appropriate instructional materials and other end-user documentation for software applications, as well as preparing students to write audience appropriate materials for assembly, maintenance, operations, and service manuals (hardware documentation). This course emphasizes audience analysis, vocabulary, format and style, use of graphics, effective writing techniques, and production.

## **JMP 3660 - Variable Topics in Industrial and Technical Communications**

**Credits:** 3

**Prerequisite(s):** JMP 2610 or Permission of instructor

**Description:** This is a current-topics course that studies communication models and techniques for reporting industrial and governmental information to specialized and general audiences to advance corporate or agency goals and interests. The content of the course will change from semester to semester.

*Note:* It may be repeated for credit.

## **JMP 3670 - Writing for the Environmental Industry**

**Credits:** 3

**Prerequisite(s):** JMP 2610 or permission of instructor

**Description:** This course presents communication models and techniques for reporting industrial and governmental information related to the environment for specialized and general audiences. The course content necessarily includes a discussion of ethical concerns related to environmental issues both past and present, analyzing the context of an environmental message for optimum reception, practicing different discourse strategies based upon audience and context and document format, and exploring the basics of Plain English and readability for different audience levels. Material in the course will examine the issue of credibility as it relates to statistical material, presented both in text and in visuals or tables. Researching the CFR database for specific regulations related to environmental concerns will be taught, with a secondary goal of revising these regulations for readability of the targeted audience.

## **JMP 3700 - Public Relations Writing**

**Credits:** 3

**Prerequisite(s):** JMP 2700 or permission of instructor

**Description:** Students in this course apply public relations theory, principles, techniques, and practices to produce writing for specific publications and documents, such as news releases, press kits, public service announcements, newsletters and other communication materials.

## **JMP 3720 - Media and Influencer Relations**

**Credits:** 3

**Prerequisite(s):** JMP 2700

**Description:** Students in this course explore the relationship between organizations and individuals, social media, traditional media, and the public at large. Special attention is focused on how these groups influence one another and how the intersection of these mediums and interests produce influence in perceptions.

## **JMP 3740 - Public Relations Research, Planning and Measurement**

**Credits:** 3

**Prerequisite(s):** JMP 2700

**Description:** Students in this course build on the fundamentals of Public Relations. They are introduced to and use PR research tools, including web-based software platforms, general business research methods and qualitative interview and focus group methods. They practice drawing insights from research results and applying those

insights to the PR planning process. They learn to connect PR goals and objectives to basic research.

## **JMP 3780 - Communication Law**

**Credits:** 3

**Prerequisite(s):** 6 credits of JMP courses or permission of instructor

**Description:** This course presents U.S. legal practices that impact professional communicators and technical media producers. It places special emphasis on the federal and state court systems, as well as emerging international laws for communication delivered over the Internet. The course covers copyright, fair use, defamation, intellectual property, privacy, and federal trade regulations as applied to print and digital media in physical and electronic distribution.

## **JMP 3800 - Audio Post-Production**

**Credits:** 3

**Prerequisite(s):** JMP 2435 and JMP 2800 or permission of instructor

**Description:** Using multi-track audio editing software, students engage hands-on with advanced digital audio equalization, processing and filters, non-linear soundtrack editing, mixing, and mastering to create professional, distribution-ready sound mixes.

## **JMP 3890 - Generative AI for Journalism and Media Production**

**Credits:** 3

**Description:** In this course students get an overview of generative artificial intelligence (AI) for the journalism and media production industries. The focus is on practical applications, ethical considerations, and related topics such as misinformation, defamation, intellectual property rights, privacy, and data security. Students learn how to use no-code generative AI tools to create engaging content, such as articles, images, audio, and video, as well as how to evaluate the potential risks and benefits of using these tools in a media context.

## **JMP 3970 - Journalism Field Experience**

**Credits:** 3

**Prerequisite(s):** JMP 2100 or Permission of Instructor

**Description:** The student, under supervision, will report and write publishable news and feature stories for the news products of the Office of Student Media at Metropolitan State University of Denver, including *The Metropolitan*.

## **JMP 3980 - Internship: Journalism and Media Production**

**Credits:** 3

**Prerequisite(s):** JMP 2100 or JMP 2430 or JMP 2700

**Description:** This course gives students an internship experience at a mass media outlet, media production operation or public relations setting where students are able to use the skills learned in the

classroom in a supervised, professional environment. Students work as writers, reporters, editors, videographers, public relations practitioners, convergent media specialists and photojournalists at newspapers, magazines, agencies, corporations, nonprofit entities and other media outlets.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

## **JMP 4000 - News Media Leadership**

**Credits:** 3

**Prerequisite(s):** JMP 2100

**Description:** This course helps students recognize leadership, understand the theories that define leadership, and apply these theories to real-world cases of news media leadership. This course is driven by case studies and student participation.

## **JMP 4010 - Media Entrepreneurship**

**Credits:** 3

**Prerequisite(s):** JMP 1100

**Description:** Disruption in the media industry - the result of always-on digital media sources and a more discriminating consumer - requires that everyone considering a media career develop an entrepreneurial mindset. Working within an established media business, professionals must continually assess and adapt to the marketplace and changing customer habits and desires. More frequently, media professionals are striking out on their own, developing new ways to gather and present information to ever-expanding slices of the audience.

Students in this course learn to analyze entrepreneurial opportunities, to apply their media knowledge to address those opportunities and to take the steps necessary to put their ideas into action.

## **JMP 4100 - Investigative Reporting**

**Credits:** 3

**Prerequisite(s):** JMP 2100

**Description:** Students receive an in-depth look at reporting issues using investigative techniques with a special emphasis on the use of documents as a research tool and the triangulation of sources.

## **JMP 4210 - Advanced Layout and Design**

**Credits:** 3

**Prerequisite(s):** JMP 2210

**Description:** Students use laboratory time designing pages that meet industry standards for the layout and design of newspapers, magazines, newsletters, brochures, and other professional publications, and Web pages. Students apply news judgment in photo editing, layout, use of graphics, editing, and headline writing.

## **JMP 4300 - Multimedia Journalism II**

**Credits:** 3

**Prerequisite(s):** JMP 3300

**Description:** This course is designed to build upon the fundamentals of news presentation using multiple platform dissemination. It tightens the scope from introductory multimedia instruction to look at work focused on specific news assignments. Emphasis will be placed on having students build multimedia journalism packages that combine sound, visuals, and newsgathering techniques. Students will need to come with the basics of multimedia production already secured. This course allows them to further their real-world experience in multimedia storytelling.

## **JMP 4400 - Long-form Nonfiction Writing**

**Credits:** 3

**Prerequisite(s):** JMP 2100 or Permission of Instructor

**Description:** Students study and practice conceiving of, researching and writing the types of long-form nonfiction articles that are published in traditional magazines and in online news and feature outlets. Students produce two publishable long-form nonfiction article. They research likely outlets for long-form articles and practice proposing articles for publication in those outlets.

## **JMP 4403 - Electronic Media Management**

**Credits:** 3

**Prerequisite(s):** JMP 2435 or permission of instructor

**Description:** This course examines management tasks and functions as they exist in a variety of electronic media. The course focuses on relevant management theory, technical operations, economics, business functions and practices, programming, regulation, marketing, sales, and audience considerations specific to electronic media.

## **JMP 4420 - Video Production III**

**Credits:** 3

**Prerequisite(s):** JMP 3420; or permission of instructor

**Description:** Advanced video production tools and processes spanning pre-production, production, and post-production are covered. Course topics include developing an advanced video project, working in models of real-world production settings (field and studio), completing advanced video projects to meet current standards of production.

## **JMP 4443 - Advanced Television Production**

**Credits:** 3

**Prerequisite(s):** JMP 3445; or permission of instructor

**Description:** This is an advanced course in digital production skills for both studio and the field projects. Specific focus is on digital, high-definition workflow and file-based capture and finishing. This course allows students independence and the opportunity for formative research, including team building, financing possibilities, target audience evaluation, and potential distribution venues.

## **JMP 4450 - Advanced Media Production and Leadership**

**Credits:** 3

**Prerequisite(s):** JMP 2450

**Description:** Students in this course get experience defining and working through the leadership skills required in media production projects. Advanced message design, information architecture, and documentation are produced. A variety of skills, including project management, graphic design, photography, copy writing / editing, and HTML/CSS coding all come together to deliver a professional project benefitting the community.

## **JMP 4465 - Video Thesis**

**Credits:** 3

**Prerequisite(s):** JMP 4430

**Description:** Students take individual video projects from script to screen under guided professor mentorship in this immersive capstone video production course.

## **JMP 4485 - Motion Graphics II**

**Credits:** 3

**Prerequisite(s):** JMP 3485

**Description:** In the advanced motion graphics course, students hone professional skills including project documentation and personal branding. Students develop animated broadcast packages for several audience and industry profiles. Automation techniques and animation in 3D space are also practiced. The course concludes with demo reel presentations.

## **JMP 4500 - Ethical and Legal Issues in Journalism**

**Credits:** 3

**Prerequisite(s):** JMP 2435

**Description:** Students undergo an intensive study of the ethical, constitutional, and legal conflicts in the news media.

**University Requirement(s):** Senior Experience

## **JMP 4600 - Advanced Photojournalism**

**Credits:** 3

**Prerequisite(s):** JMP 3600

**Description:** Students in this course receive advanced instruction in photojournalism and techniques used in still photography for print and online media. Students build upon their working knowledge of DSLR cameras.

## **JMP 4740 - Public Relations in Crises**

**Credits:** 3

**Prerequisite(s):** JMP 1100

**Description:** Students in this course examine and develop public relations approaches for identifying, managing and responding to

crises. Students explore multiple channels for communicating crises plans and for communicating during crises. Multiple publics are considered in planning and action for public relations professionals in this area.

*Note:* Some sections of this course may be taught as Service Learning.

## **JMP 4750 - Public Relations Laboratory**

**Credits:** 3

**Prerequisite(s):** JMP 3700

**Description:** PR Lab is MSU Denver's student-run PR agency. Students learn how a PR firm operates and gain real-world experience working with local corporate and nonprofit organizations as account executives. Students apply knowledge and practice of strategic planning, media relations, social media management, press release and blog writing, and event planning.

*Note:* Some sections of this course may be taught as Service Learning.

## **JMP 4760 - Advanced Internship in Journalism or Media Production**

**Credits:** 1-12

**Prerequisite(s):** Twelve credit hours completed in the Journalism and Media Production department including JMP 2435

**Description:** This advanced, on-the-job learning experience in a technical communications emphasis enables students to work in their chosen career fields. An approved plan from a cooperating organization serves as the course outline for a specific internship, but the outline must fulfill the general requirements of the course. The student must merit the internship experience and provide an acceptable plan of work before being granted permission to register for this course.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

## **JMP 4790 - Senior Seminar**

**Credits:** 3

**Prerequisite(s):** Senior standing, and 12 or more hours of JMP or AES designated courses, or permission of instructor

**Description:** This course gives the advanced student an opportunity to write a paper of publishable quality and present a seminar based on in-depth research or an application of state-of-the-art practices in an area of Technical Writing and Editing, Media Production, Video Production or other field.

**University Requirement(s):** Senior Experience

## **JMP 4890 - Social Documentary**

**Credits:** 1-4

**Prerequisite(s):** JMP 2100

**Description:** Students create photos/essays for publication and portfolios working independently or in teams. Emphasis is placed upon producing stories and images that deal with cultural definitions that impact social change. Finished work emphasizes the marriage between text and image.

*Note:* Students may repeat this course for up to 12 credits.

## K-12 Physical Education

### PETE 1601 - Introduction to Teaching Physical Education

**Credits:** 3

**Description:** The course will introduce the student to the professional preparation for the physical educator in the broadest sense. Thus, the students' experiences in the course will include learning about the history of physical education, being introduced to the steps for teacher licensure, learning of professional dispositions including attendance/punctuality, self-initiative, reliability, communication skills, and response to feedback. Important physical education concepts will be covered including; standards, objectives, lesson plan design, as well as unit planning. Students will learn how to use campus resources important to their success as students.

### PETE 1665 - Methods of Teaching Outdoor Education

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** PETE 1601

**Description:** This course is intended for K-12 Physical Education teaching majors and covers outdoor education experiences and methodology. Topics will include an array of outdoor and adventure education activities throughout various seasons.

*Note:* PETE 1601 must be taken concurrently with or prior to PETE 1665, PETE 1670, PETE 1680, PETE 2010, PETE 2030, PETE 2040, PETE 2090.

### PETE 1670 - Curricular Aspects of Elementary Physical Education

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** PETE 1601

**Description:** This course is intended for K-12 Physical Education teaching majors. It is a course designed to acquaint students with theories, rationale, activities and materials used to teach physical activities and rhythms to children at the elementary school level.

*Note:* PETE 1601 must be taken concurrently with or prior to PETE 1665, PETE 1670, PETE 1680, PETE 2010, PETE 2030, PETE 2040, PETE 2090.

### PETE 1680 - Curricular Aspects of Secondary Physical Education

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** PETE 1601

**Description:** This course is intended for K-12 Physical Education teaching majors. The course is designed to acquaint students with theories, rationales, activities and materials used to teach physical activities to students at the secondary school level.

*Note:* PETE 1601 must be taken concurrently with or prior to PETE 1665, PETE 1670, PETE 1680, PETE 2010, PETE 2030, PETE 2040, PETE 2090.

### PETE 2010 - Methods of Teaching Team Activities

**Credits:** 3

**Prerequisite(s):** PETE 1601

**Description:** This course covers various methodologies of teaching team activities for the K-12 Physical Education major. It is designed to develop the teaching skills, strategies, and presentation techniques necessary to effectively teach a variety of team activities. Students will also learn the skills associated with performance analysis, classroom management, and teacher feedback as they relate to team activities.

*Note:* PETE 1601 must be taken concurrently with or prior to PETE 1665, PETE 1670, PETE 1680, PETE 2010, PETE 2030, PETE 2040, PETE 2090.

### PETE 2030 - Teaching Weight Training and Fitness Education

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** PETE 1601

**Description:** This course covers methods of teaching weight training and physical fitness for the K-12 Physical Education major. It is designed to develop the skills, strategies and presentation techniques necessary to effectively teach the principles of weight training and fitness education in a physical activity and/or classroom setting. Students will also learn the skills associated with exercise prescription, exercise testing, and fitness testing administration.

*Note:* PETE 1601 must be taken concurrently with or prior to taking PETE 1665, PETE 1670, PETE 1680, PETE 2010, PETE 2030, PETE 2040, PETE 2090.

### PETE 2040 - Methods of Teaching Individual/Dual Activities, Level I

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** PETE 1601

**Description:** This course covers various methodologies of teaching individual and dual activities for the K-12 Physical Education major. It is designed to develop the teaching skills, strategies, and presentation techniques necessary to effectively teach a variety of the selected activities. Students will also learn the skills associated with performance analysis, classroom management, and teacher feedback as it relates to individual/dual activities.

*Note:* PETE 1601 must be taken concurrently with or prior to taking PETE 1665, PETE 1670, PETE 1680, PETE 2010, PETE 2030, PETE 2040, PETE 2090.

## **PETE 2090 - Methods of Teaching Individual/Dual Activities, Level II**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** PETE 1601

**Description:** This course covers various methodologies of teaching individual and dual activities for the K-12 Physical Education major. The students will learn skill themes, movement concepts, and advanced locomotor and manipulative skills as they relate to individual/dual activities. Additionally, this class will focus on teaching styles and pedagogical concepts important to diversity (culture, race, gender, etc) and exceptionality (physical, emotional, mental and developmental abilities).

*Note:* PETE 1601 must be taken concurrently with or prior to PETE 1665, PETE 1670, PETE 1680, PETE 2010, PETE 2030, PETE 2040, PETE 2090.

## **PETE 2130 - Health and Physical Education for Elementary Teachers**

**Credits:** 2

**Description:** This course provides prospective early childhood and elementary teachers with a basic background in elementary school health and physical education programs. Students will learn the health and physical education content appropriate for elementary school children.

## **PETE 3000 - School Health Education**

**Credits:** 3

**Prerequisite(s):** ITP 1500, PETE 1601

**Corequisite(s):** PETE 3010

**Description:** School Health Education examines the determinants and barriers of health that impact children and adolescents. Knowledge, attitude and skill associated with behavior change are emphasized. Understanding the components of Coordinated School Health in creating a healthy school environment is also covered. Students will implement effective teaching strategies to create active-learning health lessons.

## **PETE 3010 - Clinical Experience in School Health Education**

**Credits:** 2

**Prerequisite(s):** ITP 1500, PETE 1601

**Corequisite(s):** PETE 3000

**Description:** This course is a companion course to and must be taken concurrently with PETE 3000. The course converts content, theory, and conceptual aspects of academic and professional teacher education into standards-based instruction through assignments, assessments management plans, and curriculum projects. Students plan and micro-teach lessons integrating Colorado Teacher Quality Standards and collaborate to develop interdisciplinary lessons. Students design a variety of models of instruction and approaches to classroom management to support learner's growth toward Quality Standards for Colorado teachers.

## **PETE 3130 - Foundation of Educational Psychology and Philosophy**

**Credits:** 4

**Prerequisite(s):** Satisfactory completion of general studies requirements in social and behavioral sciences; at least sophomore status; at least provisional admission to the School of Education

**Prerequisite(s) or Corequisite(s):** PETE 3010 or PETE 3410 or PETE 3510

**Description:** Teacher candidates in this course will explore psychological and philosophical theories of education as they apply to secondary classrooms. Candidates will investigate four questions essential to future teachers: 1) Why do we have schooling? 2) How do people learn? 3) Who decides what and how students are taught? and 4) What do teachers do? Candidates address these questions by making connections between the fields of developmental psychology, educational philosophy, social policy, and school governance. Teacher candidates will demonstrate their understanding of these essential questions by articulating their educational philosophy and creating learning designs grounded in theory and best practices. This course-informed by current research on cognition, motivation, and culture -is designed to promote a deeper understanding of the rewards and challenges associated with becoming an effective teacher.

## **PETE 3200 - Movement Science for Teacher Education**

**Credits:** 4

**Prerequisite(s):** BIO 1000

**Description:** Movement Science includes basic knowledge in anatomical, biomechanics, kinesiology, physiology, and exercise physiology as it applies to the practice of physical activity, fitness, and exercise in K-12 Physical Education. The course will apply movement concepts to analyze technique as it applies to K-12 Physical Education curriculum during lecture and lab portions of the class.

## **PETE 3400 - Methods of Teaching Secondary Physical Education**

**Credits:** 3

**Prerequisite(s):** Grade of "C-" or better in PETE 1601, PETE 1680 and provisional or formal admission to the teacher licensure program.

**Corequisite(s):** PETE 3410

**Description:** This course is a companion course to and must be taken concurrently with PETE 3410. The course teaches students how to convert content, theory, and conceptual aspects of academic and professional teacher education into standards-based instruction through assignments, assessments, management plans, and teacher work samples. Students plan and micro-teach lessons integrating Colorado Teacher Quality Standards and collaborate to develop interdisciplinary lessons. Students design a variety of models of instruction and approaches to classroom management to support learner's growth toward Teacher Quality Standards for Colorado teachers.

## **PETE 3410 - Clinical Experience in Secondary Physical Education**

**Credits:** 2

**Prerequisite(s):** PETE 1601, PETE 1680

**Corequisite(s):** PETE 3400

**Description:** This course is a companion course to and must be taken concurrently with PETE 3400. The course allows students an opportunity in a multicultural population dense school to convert content, theory, and conceptual aspects of academic and professional teacher education into standards-based instruction through assignments, assessments, standards-based lesson planning, and engagement in a reflection cycle. Students plan and teach lessons integrating Colorado Teacher Quality Standards, Colorado and National Physical Education Content Standards with a mentor teacher. Students engage in culturally responsive teaching while designing a variety of models of instruction and approaches to classroom management to support learner's growth. They are in a guided environment under a mentor teacher while actively engaging in teacher practices and applying their content knowledge and pedagogical skills. This is a 60 hour field experience.

## **PETE 3460 - Health and Physical Education Assessment**

**Credits:** 3

**Prerequisite(s):** "C-" or better in PETE 1601, MTH 1610

**Description:** This course is designed to help students possess knowledge of standards-based assessment in psychomotor, cognitive, and affective domains and have skills of designing, administering, and interpreting assessments utilized in K-12 grade levels. Students will learn how to develop assessments and gather information to monitor student progress, structure effective lessons, and make grading more accurate and systematic.

## **PETE 3500 - Methods of Teaching Elementary Physical Education**

**Credits:** 3

**Prerequisite(s):** "C-" or better in PETE 1601 and PETE 1670; Provisional or formal admission to the teacher licensure program.

**Corequisite(s):** PETE 3510

**Description:** This course is a companion course to and must be taken concurrently with PETE 3510: Clinical Experience in Elementary Physical Education. The course teaches students how to convert content, theory and conceptual aspects of academic and professional teacher education into standards based instruction through assignments, assessments, management plans, and teacher work samples. Students plan and micro-teach lessons integrating Colorado Teacher Quality Standards and collaborate to develop interdisciplinary lessons that link physical education to reading, technology and mathematics. Students design a variety of models for instruction and approaches to classroom management to support learner's growth toward Colorado Teacher Quality Standards.

## **PETE 3510 - Clinical Experience in Elementary Physical Education**

**Credits:** 2

**Prerequisite(s):** Grade of "C-" or better in PETE 1601, PETE 1670; Provisional or formal admission to the teacher licensure program.

**Corequisite(s):** PETE 3500

**Description:** This course is a companion course to and must be taken concurrently with PETE 3500: Methods of Teaching Elementary Physical Education. This course integrates the content, theory, and conceptual aspects of academic and professional teacher education in a 60-hour standards based field experience in elementary physical education. This field experience provides the pre-student teaching candidate opportunities in school settings to demonstrate their developing teaching competencies and extends opportunities to implement and assess integrated lessons that promote student achievement. Students apply principles of teaching and classroom management to make appropriate decisions for diverse groups of learners and to adjust approaches for elementary physical education students with special needs.

## **PETE 3800 - Risk Prevention, Assessment, and Intervention for Teacher Education**

**Credits:** 3

**Description:** This course is designed to provide K-12 physical education majors and P-12 education majors an overview of potential areas of risk faced by educators. Specifically, elements of risk prevention, first aid and CPR, assessment, and intervention are discussed as they apply within a school setting. Topics include: liability; decision making; supervision; protecting children; recognizing environmental risks; recognizing psychological disorders; recognizing general medical conditions; and, recognizing and evaluating common injuries related to physical education and activity.

## **PETE 4620 - Methods of Teaching Adapted Physical Education**

**Credits:** 3

**Prerequisite(s):** "C-" or better in PETE 1601, PETE 1665, PETE 1670 and PETE 1680. Provisional or formal admission to the teacher licensure program.

**Description:** This course is designed to give future teachers the skills and knowledge to effectively include children with disabilities in the general physical education setting or least restrictive environment. Course content includes characteristics of selected disabilities and how these disabilities impact a person's movement potential and performance, legislation, assessment, Individual Education Plans, strategies for inclusion and teaching methods in the physical education setting.

## **Leadership**

### **LDR 1010 - Leadership and Social Change**

**Credits:** 3

**Description:** In this course, students examine the place occupied by leadership at all levels of society and the responsibilities that accompany the leadership role. Students develop frameworks through which they explore their own potential for ethical and effective leadership. The course revolves, in multidisciplinary fashion, around the application of leadership theories, concepts, and skills to both everyday life and the broader challenges facing people, especially during times of transition and change.

*Note:* Credit will be granted for only one prefix.

**General Studies:** Social and Behavioral Sciences

**Cross Listed Course(s):** PSC 1011

## LDR 3010 - Perspectives on Leadership

**Credits:** 3

**Prerequisite(s):** LDR 1010; or permission of instructor

**Description:** This course focuses on select topics fundamental for a full understanding of leadership. Among these are: the role of judgment in the leadership process; the ethical pursuit of leadership; the place of followership in the leadership equation; multicultural and global perspectives on leadership; and the question of emotional intelligence in leadership.

## Letters, Arts and Sciences

### LAS 2810 - Integrated Arts and Humanities I

**Credits:** 3

**Prerequisite(s):** ENG 1020

**Description:** This interdisciplinary course, the first in a two-part sequence, is an integrated study of the visual arts, literature, music, drama, and philosophy of the ancient, medieval, and Renaissance world. It explores humankind's cultural legacy and focuses thematically on the concerns of origin, self-knowledge, identity, world-view and society that many cultures, both Western and Eastern, share in common and also takes note of the unique contributions of different artists, writers, and thinkers to that process. Learning approaches will include lecture, discussion, projects, and attendance at a minimum of three cultural events.

### LAS 2820 - Integrated Arts and Humanities II

**Credits:** 3

**Prerequisite(s):** LAS 2810

**Description:** As part of a two-semester sequence, this interdisciplinary course continues the integrated study of the arts and humanities in the world of the 17th through 20th centuries, from the baroque and the age of reason to Romanticism and the modern period. It considers the effects of scientific discovery, industrialization, social change, and technology on their development and the interaction of diverse cultures on an international and global basis, and also takes into account the unique contributions of different artists, writers, and thinkers. Learning approaches will include lecture, discussion, projects, and attendance at a minimum of three cultural events.

## Linguistics

### LING 2010 - Introduction to Linguistics

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021 or permission of instructor

**Description:** Students learn the basic analytic skills to view language from a variety of perspectives in this course. In addition to studying language structure (phonology, morphology, and syntax), students discover how languages around the world differ from one another, how children acquire language, how animal communication is distinct from human language, how people use language as a form of social identity, and how languages change over time. Students solve mini-language problems and discuss the relevance of language to their daily lives throughout the course.

### LING 2011 - Origins of English Words

**Credits:** 3

**Corequisite(s):** ENG 1020

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** In this course, students study the component parts of English words and the way that speakers and writers create and change words and word meaning. Students consider why and when words are borrowed from other languages, such as German, Latin, French, Spanish, Greek, and Arabic. This course provides students with tools they can use to improve their vocabulary and reading comprehension throughout their lives. It is particularly valuable for students who plan to pursue careers in medicine, law, education, psychology, philosophy, culinary arts, and the humanities, and for all students who want to improve their language skills.

**General Studies:** Arts and Humanities

### LING 3011 - Analyzing English

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021 or permission of instructor

**Description:** This course is a practical approach to English language structure (i.e. phonology, morphology, and syntax), particularly useful to prospective teachers of English. In this course students learn to analyze the form of English words and structure of English sentences with the goal of understanding how to use the language effectively. Students also gain a stronger understanding and appreciation of the linguistic diversity in today's society.

### LING 3020 - History of the English Language

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021 or permission of instructor

**Description:** Students in this course study the linguistic, cognitive, and social factors that have combined to make the English language, in its many varieties, what it is today. These include factors from the internal history of English, such as sounds, inflections, and syntax, and the external history of English, such as political, social, and cultural influences.



## LING 3030 - Semantics

**Credits:** 4

**Prerequisite(s):** ENG 1020 or permission of instructor

**Description:** This course is the study of meaning in natural language. Students examine the development of meaning, the significant linguistic units that carry meaning, and the ways people use language to convey meaning. The course deals with basic concepts, theories, and analytical techniques in contemporary linguistics.

## LING 3040 - Morphology and Syntax

**Credits:** 4

**Prerequisite(s):** LING 2010 or permission of instructor

**Description:** This is an intermediate study of syntax and morphology using basic principles of structural linguistics and generative-transformational syntactic theory. Although the course focuses on English, the structure of other languages is also covered. Both the analysis of language structures and the discussion of relevant theoretical approaches to those structures are involved.

## LING 3043 - Phonetics and Phonology

**Credits:** 3

**Prerequisite(s):** LING 2010 or permission of instructor

**Description:** This course is an introductory study of language sounds (phonetics) and language sound systems (phonology), focusing primarily on the articulation of sounds, but also including discussion of acoustics and sound perception. The students will learn and practice using the International Phonetic Alphabet. Looking at various languages of the world, including English, the students will analyze the phonemes and conduct phonological analyses, using distinctive features and rule formalism.

## LING 3044 - Phonetics

**Credits:** 4

**Prerequisite(s):** LING 2010, or permission of instructor

**Description:** This course, designed for Linguistics majors and minors, is an in-depth study of language sounds, how humans produce them, and how humans perceive them. Students learn about all three branches of the field: articulatory, acoustic, and auditory phonetics. Students also gain proficiency in using the International Phonetic Alphabet, collecting acoustic speech data, and interpreting waveforms and spectrograms.

## LING 3045 - Phonology

**Credits:** 4

**Prerequisite(s):** LING 2010 and LING 3044, or permission of instructor

**Description:** This course is designed for Linguistics majors and minors. In this course, students engage in an in-depth study of language sound systems and patterning of speech sounds. Using data from a broad sampling of the world's languages, as well as from

English, students learn to analyze phonemic structures and conduct phonological analysis using distinctive features and rule formalism.

## LING 3050 - Language and Society

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** This course examines the dynamic relationships between language and society. The students will investigate why people speak differently in different social contexts by identifying the social functions of language and the ways in which language is used to convey social meaning. The course focuses on language variation, including such topics as languages and dialects, pidgins and creoles, bilingualism and multilingualism, linguistic solidarity and politeness, language planning and language change. Field methods, including ethical research procedures, are an integral part of the course.

## LING 3055 - Language and Law

**Credits:** 4

**Prerequisite(s):** ENG 1020

**Description:** The use of language in the US legal system is analyzed from both theoretical and practical perspectives. On a theoretical level, issues related to the determination of meaning in legal language are studied, including ambiguity in interpreting laws (court decisions, statutes, and codes) and contracts, and the use of speech acts and legal fictions like metaphor to conceptualize meaning. On a practical level, the course introduces students to forensic linguistics, or the use of language as legal evidence. Forensic linguistics topics include both the use of written language as evidence of authorship (e.g., ransom notes, wills, etc.) and spoken language as evidence of identity (e.g., telephone threats, recorded conversations, etc.).

## LING 3070 - Old English

**Credits:** 4

**Prerequisite(s):** Any one of the following: LING 2010, LING 3011, LING 3020, or permission of instructor

**Description:** This course covers the basic vocabulary and grammar needed to read texts in Old English with the aid of reference materials. The grammatical structure of the language is studied in detail. The course also addresses the relevant cultural and historical contexts necessary for understanding Old English texts.

## LING 3073 - Old Norse

**Credits:** 3

**Prerequisite(s):** Any one of the following: LING 2010, LING 3011, LING 3020, or permission of instructor

**Description:** This course covers the basic vocabulary and grammar needed to read texts in Old Norse with the aid of a glossary. It also addresses the relevant cultural and historical context necessary for understanding the texts.

## LING 3075 - Latin

**Credits:** 4

**Prerequisite(s):** Any one of the following: LING 2010, LING 3011, LING 3020, or permission of instructor

**Description:** This course covers the basic vocabulary and grammar needed to read texts in Latin with the aid of reference materials. The grammatical structure of the language is studied in detail. The course also addresses the relevant cultural and historical contexts necessary for understanding Latin texts.

## LING 3080 - Perspectives in Linguistics: Variable Topics

**Credits:** 3

**Prerequisite(s):** LING 2010 or permission of instructor

**Description:** The different topics within linguistics, some theoretical and some applied, range from conversation analysis to applied linguistics to stylistics to advanced syntax. Individualized projects are required. Students may repeat the course under different subtitles, up to a limit of 9 credit hours.

## LING 3090 - Writing Systems and Scribal Traditions

**Credits:** 3

**Description:** From columns of Classic Mayan glyphs and Chinese characters to strings of Greek letters and Viking runes, the world's writing systems and scribal traditions are vast and diverse. In exploring this topic, the course examines how sounds, words, social meanings, and other properties of human languages are graphically adapted and culturally transformed into writing systems. Specific areas of focus include the historical development of writing systems, epigraphy and the decipherment of ancient languages, scribal artistry and craft, and the relationship between writing and sociopolitical power. Although surveying several writing systems and associated phenomena, the course also features an in-depth exploration of Classic Mayan writing (or another visually complex system).

**General Studies:** Arts and Humanities, Global Diversity

**Cross Listed Course(s):** ANT 3530

## LING 4010 - Studies in Linguistics: Variable Topics

**Credits:** 3

**Prerequisite(s):** LING 2010 and junior standing, or permission of instructor

**Description:** The different topics, some theoretical and some applied, are interdisciplinary and are designed to help the linguist bridge the gap between linguistics and various other disciplines. Individualized projects are required. Students may repeat the course under different subtitles, up to a limit of 9 credit hours. Any single variable topic may be used as an elective under either the linguistic or the interdisciplinary requirement, but not both.

## LING 4011 - Anthropological Linguistics

**Credits:** 4

**Prerequisite(s):** LING 2010 or ANT 2500; and junior standing; or permission of instructor

**Description:** This course analyzes the origins of language, its development, the similarities and the differences between natural languages in the context of various cultures and societies. The focus is on the goals, tasks, and methods of the anthropological linguist studying the language of a foreign culture. The class will examine data from a variety of languages in order to gain an awareness of the variation and similarities that exist in language structures around the world. Individualized projects are required. This course may be used as an elective to satisfy either the linguistic or the interdisciplinary requirement for the Linguistics major, but not both.

## LING 4012 - Historical Linguistics

**Credits:** 4

**Prerequisite(s):** LING 2010 and junior standing, or permission of instructor

**Description:** This course covers the various languages and language families of the world from an historical perspective. The student will study language change, methods of historical linguistics research, and language classification. Individualized projects are required. This course may be used as an elective to satisfy either the linguistic or the interdisciplinary requirement for the Linguistics major, but not both.

## LING 4013 - Psycholinguistics

**Credits:** 4

**Prerequisite(s):** LING 2010 and junior standing, or permission of instructor

**Description:** This course examines language development in monolinguals as well as bilingualism/multilingualism in children and adults. It covers all levels of language structure (phonology, morphology, syntax, and semantics) and language use (linguistic interactions between parents and children, among children themselves, and between speakers across dialects). Individualized projects are required. This course may be used as an elective to satisfy either the linguistic or the interdisciplinary requirement of the Linguistics major, but not both.

## LING 4015 - Dialects of North American English

**Credits:** 3

**Prerequisite(s):** LING 2010 or permission of instructor

**Description:** In this course, students analyze the phonological, morphological, syntactic, and lexical variation in English as spoken in diverse regional and social contexts across the United States and Canada. This course provides a thorough overview of the status of language variation in North America and a survey of the various methodological and theoretical approaches used in dialect research. This course offers students the opportunity to conduct original dialect field research and write a paper reporting their findings.

## LING 4016 - Introduction to Translation Studies

**Credits:** 4

**Prerequisite(s):** LING 2010, 6 credit hours of a foreign language or permission of instructor

**Description:** The course provides a comprehensive coverage of the major theories of translation. Both theoretical and practical aspects of translation are discussed in detail. Students analyze numerous case studies and perform translation considering the many cultural, ideological, ethical, and philosophical aspects of texts of various genres. Students are introduced to translation memory and software.

## LING 4060 - Modern Language Theory

**Credits:** 4

**Prerequisite(s):** LING 2010 and senior standing, or permission of instructor

**Description:** Students focus on at least two different theoretical approaches to language in this course. First, students approach language through the lens of language universals and the typological classification of languages, which allows them to examine all levels of linguistic structure from languages all around the world. Students also study other theoretical approaches, at least one in depth, and use the terminology and analytical methodologies that they have learned in previous courses to explain new linguistic situations. Finally, students prepare for post-graduation success by developing employment-related materials.

**University Requirement(s):** Senior Experience

## Management

### BUS 2010 - Introduction to High-Impact Nonprofit Organizations

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021 or permission of instructor

**Description:** This survey course introduces the elements necessary for nonprofit organizations to achieve meaningful and lasting impact in their communities. Students will choose a single nonprofit to investigate throughout the semester, culminating in a report on the organization that includes suggestions for improving its impact.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** HSP 2010

### MGT 1260 - Foundations of Human Resources

**Credits:** 3

**Description:** This course introduces students to the acumen that is requisite for entry into a career in Human Resources (HR). Participants in this course explore business fundamentals, functions and trends and their relationship to HR; and what a contemporary HR practice entails. Focus is placed on the acquisition of a foundational level of knowledge in the areas of employment law, human resource information systems, sourcing, recruiting and assessing candidates, onboarding and retaining employees, workplace safety, employer and employee rights; and what an HR professional needs to attend to when it comes to employee separation/ termination. Students further develop the soft skills, problem solving and performance that are requisite to fulfill the role of an entry-level HR professional. This

course also features an exploration of the various career paths that are available to those who choose a career in HR.

### MGT 1985 - Introduction to Business Careers Internship

**Credits:** 3

**Description:** Approved internships introduce the specific field of business as well as provide an opportunity to gain practical, hands-on professional work experience. Students will learn about the profession, explore related career paths, and increase professionalism. *Note:* Internship must be approved by the department using the C2 Hub process.

**Cross Listed Course(s):** ACC 1985, CIS 1985, ECO 1985, FIN 1985, MKT 1985

### MGT 2210 - Legal Environment of Business I

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021; and completion of General Studies requirements in Oral Communication.

**Prerequisite(s) or Corequisite(s):** Completion of Quantitative Literacy requirement or enrollment in a course that satisfies the Quantitative Literacy requirement.

**Description:** This course is designed to present the legal system as it applies to business. The course includes a discussion of fundamental concepts related to the nature and sources of law and to the resolution of disputes. The course requires analysis of statutes, cases, and regulations of related governmental agencies that address employment, securities, trade and workplace decisions. The law of agency, contracts, organizations and torts is analyzed. Ethical and international aspects of law are treated where appropriate.

### MGT 2500 - Creativity, Innovation, and Business Venturing

**Credits:** 3

**Description:** The Entrepreneurship BA program takes a student from idea discovery to business creation. In this course, students learn about entrepreneurship, the entrepreneurial mindset, and techniques to enhance creativity and innovative thinking. The course focuses on utilizing these tools and techniques to create venture solutions to address unmet needs, or identify opportunities, in stable and changing markets.

### MGT 3000 - Organizational Management

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021; Satisfaction of General Studies Requirements in Oral Communication and Quantitative Literacy, and Junior standing

**Description:** This course examines, analyzes, and assesses managerial functions and processes as related to business and other organizations. It is designed to prepare students to meet the challenges of a highly dynamic and ever-changing business environment by formulating individual competencies and skills,

translating theory into practice, creating critical thinkers, and reflecting on the integration of new concepts and environmental changes into managerial practices.

### **MGT 3020 - Entrepreneurship Feasibility and Analysis**

**Credits:** 3

**Prerequisite(s):** MGT 2500 or permission of instructor

**Description:** Students examine the work of various entrepreneurs to gain insights into how new concepts are discovered and developed with particular emphasis on researching and developing a business concept, investigating market factors, planning financial strategies, and starting a business. Students are prepared to work on a business plan and also to be more creative managers.

### **MGT 3220 - Legal Environment of Business II**

**Credits:** 3

**Prerequisite(s):** MGT 2210

**Description:** This course provides an overview of the contemporary legal environment in which businesses operate. It explores various forms of business organizations, such as corporations and limited liability companies, and business opportunities, such as franchises. Also covered are important areas of government regulation of business including securities law, antitrust law, environmental law, and bankruptcy law. The course also delves into the realm of employment law, with a focus on employment discrimination, affirmative action, and labor law.

### **MGT 3230 - International Business Law**

**Credits:** 3

**Prerequisite(s):** MGT 2210

**Description:** This course covers the legal context for international business decisions. Topics include selected elements of international law such as customary law and the law of treaties. Also covered are the international law of important/exporting, intellectual property, trade regulations, transportation, documentary transactions, contracts, agency/employment, and dispute resolution. Ethical aspects of the above areas are discussed.

### **MGT 3240 - Employment and Human Resource Law**

**Credits:** 3

**Prerequisite(s):** MGT 2210

**Description:** This course is an in-depth study of the legal and practical implications of employment and human resources law. Students interested in management, human resources or owning their own business will benefit from this course. Topics include statutory law, common law and constitutional law as it relates to the employment/human resources context, employer/ employee relationship, antidiscrimination laws, labor law, litigation prevention methods and privacy. The focus of the course is on the practical elements of law, with an emphasis on Colorado and federal law.

### **MGT 3250 - Colorado Water Law and Water Rights Administration**

**Credits:** 3

**Prerequisite(s):** Completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy, and Junior Standing

**Description:** This course provides students with an in-depth study of the unique nature of Colorado water law and Colorado water rights administration. The course will survey the key issues surrounding the legal framework governing the allocation of water resources, administrative processes affecting water distribution, and policy considerations that influence decisions about the use and management of water resources in the state of Colorado. An overview of Colorado climate, geology and hydrology, as well as a review of Colorado's early water use and development will provide the context for the study of the legal system with which the state and its citizens allocate water.

*Note:* Credit will be granted for only one prefix: ENV or MGT.

**Cross Listed Course(s):** ENV 3250

### **MGT 3260 - Managing Business Risk**

**Credits:** 3

**Prerequisite(s):** MGT 2210 Legal Environment of Business I

**Prerequisite(s) or Corequisite(s):** MGT 2210 Legal Environment of Business I

**Description:** This course addresses how business owners/managers deal with the various risks of running a business. Businesses can face unexpected and accidental losses from a variety of sources and, without a solid risk management plan for these contingencies, the resulting losses can result in bankruptcy. This course focuses on the processes used in identifying risk, evaluating the potential for losses to the organization, and creating a strategy to retain or transfer the risk. Major topics include risk to property, liability risk, legal considerations, risk financing strategies, and operational and strategic risks.

### **MGT 3510 - The People of Nonprofits: Staff, Board, Volunteers, Clients and You**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** HSP 2010

**Description:** In this course, students examine the human capital component of the nonprofit sphere. Roles, responsibilities, rules, and regulations are all explored as they relate to self, staff, board members, volunteers, clients and outside agency partners. Students explore their unique strengths and build respective strategies to employ throughout their careers.

### **MGT 3530 - Human Resources Management**

**Credits:** 3

**Prerequisite(s):** MGT 3000

**Description:** This course provides the student with a broad overview

of the contemporary issues, theories, and principles used to effectively manage human resources in organizations. The psychological, social, legal, and economic bases underlying the practices of human resource management are studied. Topics such as recruitment, selection, performance appraisal, and compensation are analyzed. Some sections of this course are taught with an actual business client. Students engage with the client in conjunction with classroom learning.

*Note:* Some sections of this course may be taught as Service Learning.

## **MGT 3550 - Operations Management**

**Credits:** 3

**Prerequisite(s):** MGT 3000 or MGT 2500 with Completion of General Studies Quantitative Literacy

**Description:** This course is an introduction to operations management decision-making and to the tools used to enhance the decision-making process. Attention is given to the design and operation of the production/service system and its interrelationship with other systems in the organization. The course places special emphasis on the use of quantitative techniques in decision making. Topics include productivity, strategic positioning and design of operations (e.g., capacity, layout, location, and work methods), project management, forecasting, quality control, supply-chain management, and inventory management.

## **MGT 3720 - The Conscious Business: Sustainable Business Strategies for the 21st Century**

**Credits:** 3

**Prerequisite(s):** Junior level

**Description:** Firms are recognizing the importance of sustainability and in response are adopting an expansive stakeholder view as a way to acquire a competitive advantage and increase financial returns. This course describes how a stakeholder perspective impacts all areas of a firm. The course also describes how a stakeholder view of strategy can create a "conscious company" that provides a positive impact to society and the environment while also increasing profitability.

## **MGT 3820 - International Business**

**Credits:** 3

**Prerequisite(s):** At least junior standing

**Description:** This course is designed to enhance understanding of the international environment faced by businesses. Trade barriers, cultural differences, entry strategies into foreign markets, foreign currency, political environments, and economic environments are among the many topics surveyed to assist students in becoming aware of international issues and events influencing management in today's global environment.

## **MGT 3850 - Global Entrepreneurship**

**Credits:** 3

**Prerequisite(s):** Junior Standing

**Description:** This course focuses on opportunities for starting and developing new ventures in parts of the world outside the U.S. Characteristics that influence entrepreneurship in select countries, whose cultures and income levels are vastly different from one another, are examined, requiring students to compare, contrast, and draw conclusions about new venture opportunities in those countries. Students will develop a feasibility plan for an international venture opportunity in a selected foreign market. Upon completing this course, students will have a better understanding of the unique elements associated with starting a new venture in a foreign country.

## **MGT 3860 - Social Entrepreneurship**

**Credits:** 3

**Prerequisite(s):** Junior standing

**Description:** This course provides an overview of social entrepreneurship, explains the skills required to identify unmet social needs and analyze their potential for solution with a viable social enterprise.

*Note:* Students may receive credit for only one prefix: HSP or MGT.

**Cross Listed Course(s):** HSP 3860

## **MGT 3980 - Internship in Management**

**Credits:** 1-15

**Prerequisite(s):** MGT 3000, plus two to three additional MGT courses; major in management; junior or senior status; and permission of instructor.

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## **MGT 4050 - Supply Chain Management**

**Credits:** 3

**Prerequisite(s):** Completion of general studies quantitative literacy. Minimum junior standing.

**Description:** This course covers contemporary supply chain issues, concepts, and techniques. Supply Chain Management (SCM) is a cross-functional discipline concerned with the movement of products, the use of business resources, the flow of information, and the deployment of services in the value chain. In this introductory course to SCM, students are provided with a comprehensive overview of business processes, value creating activities, and best practices for a supply chain - from forecasting and demand management, to sourcing and procurement, to sales and operations planning, and through logistics (i.e., warehousing, distribution, and transportation), out to

the customer. The course covers both the tactical and strategic perspectives of SCM and is based on supply chain operations in the real world. Quantitative models are introduced as needed. The course pinpoints the role of supply chain in the overall business strategy of the firm and its relationship to other functional areas of the firm.

### **MGT 4360 - Service Operations Management**

**Credits:** 3

**Prerequisite(s):** General studies quantitative literacy. Minimum junior standing.

**Description:** This course covers the concepts and analytical tools required for understanding and managing service operations. Specifically, the course addresses issues in planning, designing, analyzing and controlling a service production system in the area of development of service concept and operations strategy, design of service delivery system, capacity management, service scheduling/queueing analysis, yield management, productivity and quality evaluation and management, and the use of new information technologies.

### **MGT 4420 - Entrepreneurial Business Planning**

**Credits:** 3

**Prerequisite(s):** Senior Standing AND (ACC 3130 or FIN 2220 or FIN 3300 or FIN 3320) AND (MGT 3020) AND (MKT 3000 or MKT 3250 or MKT 4300 or MKT 4520)

**Description:** Students learn how to prepare a definitive, comprehensive business plan involving all aspects of a proposed new venture. To attract seed money and growth capital, the business plan must address probable start-up issues involving market analysis, competition, workforce and capacity planning. Emphasis is on financial viability and business plan packaging to secure financial seed money.

**University Requirement(s):** Senior Experience

### **MGT 4430 - Operationalizing a Small Business**

**Credits:** 3

**Prerequisite(s):** Senior standing AND (ACC 3130 or FIN 2220 or FIN 3300 or FIN 3320) AND (MGT 3020) AND (MKT 3000 or MKT 3250 or MKT 4300 or MKT 4520)

**Prerequisite(s) or Corequisite(s):** MGT 4420

**Description:** Students learn the issues related to starting a business. It addresses three major topics: (1) all the tasks necessary to begin a startup venture, (2) growing a venture after the startup stage, and (3) managing a venture for survival, growth, or exit. This is the capstone course for the BA in Entrepreneurship degree.

**University Requirement(s):** Senior Experience

### **MGT 4530 - Organizational Behavior**

**Credits:** 3

**Prerequisite(s):** MGT 3000

**Description:** This course examines the behavior of individuals and small groups in organizational settings. The emphasis is on how

organizations influence behavior in their quest for operating efficiency and effectiveness.

### **MGT 4550 - Project Management**

**Credits:** 3

**Prerequisite(s):** MGT 3000 or MGT 2500 with completion of general studies quantitative literacy requirement. Minimum junior standing

**Description:** This course investigates the concepts and applicability of matrix organizations and project management. The unique nature of the project-management structure is also examined, including its emphasis on integrative decision making throughout a product's life cycle.

### **MGT 4620 - Performance Management and Reward Systems**

**Credits:** 3

**Prerequisite(s):** MGT 3530

**Description:** This course examines the management and reward of employee performance including methods of: (1) identifying, measuring and evaluating performance; (2) using performance data as a basis for human resource management decisions; and, (3) designing compensation systems to attract, retain, and motivate employees; and (4) ensuring strategic alignment of employee performance and organizational goals.

### **MGT 4640 - Employee Training and Development**

**Credits:** 3

**Prerequisite(s):** MGT 3530

**Description:** This course focuses on the design, implementation, and uses of training and development as a necessary part of increasing the value of employee and manager skills. Rapid organizational change precipitated by global competition, multicultural and multinational workers, and technology implementation require organizations to develop the human potential and careers of their employees at all levels.

### **MGT 4660 - Employee Selection**

**Credits:** 3

**Prerequisite(s):** MGT 3530

**Description:** This course introduces students to issues related to the selection and placement of employees, including workforce planning issues, sourcing and recruiting talent, and the proper use of selection tools and procedures that will facilitate the effective selection of talent.

### **MGT 4700 - Global Management**

**Credits:** 3

**Prerequisite(s):** MGT 3820

**Prerequisite(s) or Corequisite(s):** ECO 3550, FIN 3100, and MKT

2010 or MKT 3710 or MKT 3750

**Description:** In this course, students learn about the broad variety of opportunities and challenges that managers face as they explore the global business environment - in particular, the political, economic, sociocultural, technological and legal aspects. They investigate the ways in which cultures vary and how to manage effectively in these diverse environments. Students examine topics such as the challenges of creating global strategies and the implications of cross-national differences in institutional environments.

**University Requirement(s):** Senior Experience

## MGT 4830 - Workforce Social Justice

**Credits:** 3

**Prerequisite(s):** Senior Standing

**Description:** This course provides students the tools to understand, contextualize and challenge workforce experiences and management practices that stand in the way of achieving social justice. The class focuses on the systemic disadvantages that face marginalized groups based on race, gender, sexual orientation, ethnicity, religion and other factors, as well as the intersectionality of those within several marginalized groups at the same time. Students will explore their place in the hierarchy of the workplace, interrogating and challenging how the positions of power and privilege created by a colonizing culture continue to oppress ethnically marginalized groups. Students will examine the lower wages, higher barriers to entry, internal biases and discrimination imposed on members of ethnic and other groups in the workplace (LGBTQ+, religion, sex) whose identities have been racialized. The course relies upon learning, and challenging, scholarly work and real-life experiences. Students will learn how to analyze traditional management practices and scholarly theories, critically asking how these practices result in further oppression in the workplace based upon ethnicity.

**University Requirement(s):** Senior Experience

## MGT 4850 - Organizational and Management Consulting

**Credits:** 3

**Prerequisite(s):** Senior standing, or Junior standing with permission of instructor

**Description:** This course introduces students to the consulting process and requires them to apply its steps to an actual organization or small business. Students develop skills in building rapport with clients, identifying major trends in a client's organizational environment, identifying the major problems or issues facing a client organization, developing viable alternatives, and formulating and recommending solutions to the problems or issues identified. There is a service learning component where students apply course concepts to an actual business setting and reflect on their service experiences.  
*Note:* Some sections of this course may be taught as Service Learning.

## MGT 4910 - Strategic Leadership

**Credits:** 3

**Prerequisite(s):** MGT 3000 and senior standing

**Description:** Leaders are expected to be visionary. This course provides participants with frameworks to visualize human systems and processes at multiple levels such as individual, relationship, group, organization and society. Such visualization is a prerequisite to discovery of leadership opportunities for the participants and to developing a vision of transformation of these human systems. A leader's job is to communicate the vision to garner people's energy and to facilitate the processes of transformation.

## MGT 4950 - Strategic Management

**Credits:** 3

**Prerequisite(s):** ACC 2010, ACC 2020, CIS 2010, CIS 2320, CIS 3320, ECO 2010, ECO 2020, FIN 3300, MGT 2210, MGT 3000, MKT 3000, and senior standing.

**Prerequisite(s) or Corequisite(s):** ACC 4440 or BUS 3040

**Description:** Students are introduced to concepts used by managers to develop companies that can prosper in a competitive, global environment. Students are provided the opportunity to apply the concepts and theories of strategic management along with knowledge gained from business courses, general studies, and work experience to the operating and strategic changes faced by domestic and global organizations (Senior Experience). Some sections include a service learning (SL) component where students apply course concepts involving an actual business client and are required to reflect on their service learning experience.

*Note:* There may be a service learning component where students apply course concepts to an actual business setting and reflect on their service experiences. Some sections of this course may be taught as Service Learning.

**University Requirement(s):** Senior Experience

## Marketing

### MKT 1260 - Customer Service

**Credits:** 3

**Description:** This course introduces the field of customer service as applied to both consumer and business buyers. Areas covered include: developing customer satisfaction, building customer loyalty, creating rapport, and managing customer expectations. Students will identify these areas through class lectures, guest speakers, cases, and homework assignments. Students will also learn about career opportunities.

### MKT 1985 - Introduction to Business Careers Internship

**Credits:** 3

**Description:** Approved internships introduce the specific field of business as well as provide an opportunity to gain practical, hands-on professional work experience. Students will learn about the profession, explore related career paths, and increase professionalism.  
*Note:* Internship must be approved by the department using the C2

Hub process.

**Cross Listed Course(s):** ACC 1985, CIS 1985, ECO 1985, FIN 1985, MGT 1985

## **MKT 2010 - Marketing Around the Globe**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** Students study the importance of globalization in the business world where global markets are more connected and marketers must respond to the expectations of global consumers. The course covers the essential concepts of global marketing with the aid of extensive, real-life examples. The course offers balanced coverage of developed and developing markets. Integrating cultural analysis throughout the course, students examine global and local competition and forms of global market entry, as well as basic principles of global marketing strategies, such as price, product, distribution, and promotion.

*Note:* This course meets SBS and Global Diversity requirements with the exception of Marketing major students.

**General Studies:** Social and Behavioral Sciences, Global Diversity

## **MKT 2250 - Introduction to Sales**

**Credits:** 3

**Description:** This course introduces the environment of professional selling and presents both consumers' and business buyers' perspectives. Areas covered include ethical considerations in professional selling and elements in the sales process. Students will meet industry representatives during classroom discussions to learn about potential career opportunities.

## **MKT 3000 - Principles of Marketing**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021, completion of General Studies requirements in Oral Communication and Quantitative Literacy, and at least junior standing.

**Description:** This course helps students understand marketing, the process through which organizations analyze, plan, implement, and control programs to develop and maintain beneficial exchanges with target buyers. Effective marketing is critical for the long-term success of any business organization because this function ensures that the firm attracts, retains, and grows customers by creating, delivering, and communicating superior customer value.

## **MKT 3010 - Marketing Research and Insights**

**Credits:** 3

**Prerequisite(s):** BUS 1950, MKT 3000, and at least junior standing

**Prerequisite(s) or Corequisite(s):** CIS 2320

**Description:** This course provides students with a systematic and objective approach to collecting, analyzing, and interpreting marketing data to generate actionable insights that support the identification of marketing problems and support informed decision-

making. Students develop skills in both qualitative and quantitative research methods.

## **MKT 3100 - Retail Marketing**

**Credits:** 3

**Prerequisite(s):** MKT 3000 and At least junior standing

**Description:** This course will familiarize the student with fundamental retailing concepts and practices. Emphasis will be given to a strategic-planning approach for developing and managing the retail marketing mix.

## **MKT 3110 - Advertising and Promotion Management**

**Credits:** 3

**Prerequisite(s):** MKT 3000 and at least junior standing

**Description:** This course provides an in-depth understanding and analysis of advertising and promotional strategies and tactics necessary in the management of all marketing communications. Students will engage in environmental scanning, develop a creative strategy, and plan for communicating a message across multiple promotional platforms.

## **MKT 3160 - Sales Leadership**

**Credits:** 3

**Prerequisite(s):** At least junior standing

**Description:** In this course, students analyze the opportunities and challenges associated with managing effective sales forces. Various leadership styles and their respective impact on individual and group performance are also examined. Additionally, students have the opportunity to adopt personal habits that have, historically, enabled marketplace success and led to managerial and leadership positions.

## **MKT 3190 - Marketing for Social Good**

**Credits:** 3

**Prerequisite(s):** Junior standing

**Description:** In this class, students will gain an in-depth understanding of how marketing principles can be applied to create short-term and lasting social change in both non-profit and for-profit organizations. Using case studies and projects, students will apply marketing concepts such as segmentation, positioning, branding, and the marketing mix in order to address behavior objectives. Along the way, students will explore global issues, including those relating to health, environment, that impact society, government entities, NGO's, and the community at large. Further topics include developing long-term relationships with donors, cause-related marketing, and the role of socially responsible and environmentally sustainable marketing strategies in for-profit organizations.

## **MKT 3200 - Digital Marketing Fundamentals**



**Credits:** 3

**Prerequisite(s):** Junior Standing

**Description:** This course introduces students to the basics of digital marketing, including the process, platforms, and technologies used to build long-term customer relationships. The integration of digital marketing into the organization's overall marketing strategy is explored. The course emphasizes the legal and ethical implications of the field as well as the importance of planning, measurement, and actionable insights.

## **MKT 3250 - Professional Selling**

**Credits:** 3

**Prerequisite(s):** At least junior standing

**Description:** Students will examine the environment of professional selling and the sales process. Areas covered include communicating with diverse customers, ethical and legal considerations in personal selling, and the elements of the sales process. This course has a case orientation.

## **MKT 3300 - Marketing of Services**

**Credits:** 3

**Prerequisite(s):** MKT 3000 and At least junior standing

**Description:** This course will introduce students to the problems and issues that are unique to marketing a service organization as well as marketing services. Topics include service strategy, listening to customers, complaint management, service guarantees, customer satisfaction, measuring return on quality, managing moment of truth, relationship marketing, and employee empowerment.

## **MKT 3310 - Consumer Behavior**

**Credits:** 3

**Prerequisite(s):** MKT 3000 and at least junior standing

**Description:** This course analyzes the underlying theories and complex variables influencing consumers and their purchase decision-making processes. The marketing strategy implications of consumer behavior concepts are studied.

## **MKT 3320 - Inside Sales**

**Credits:** 3

**Prerequisite(s):** At least junior standing

**Description:** Inside sales and remote sales are a growing proportion of bottom-line sales results. Such an expansion is motivated by an increased reliance on technology and automation, changing buyer attitudes towards salespeople, and the desire for a more streamlined process. This course focuses on the skills and competencies that are critical for today's demanding virtual selling environment.

## **MKT 3330 - Marketing and Sales Metrics**

**Credits:** 3

**Prerequisite(s):** MKT 3000 and junior standing

**Description:** Marketing and sales have become increasingly reliant

on data-driven techniques to solve business problems like segmentation, pricing, prospecting, customer valuation, campaign optimization, ROI, and more. This course focuses on tools and approaches to evaluate the impact of marketing and sales efforts.

## **MKT 3350 - Social Selling**

**Credits:** 3

**Prerequisite(s):** At least junior standing

**Description:** Social Selling is a key resource for sales and marketing professionals seeking a better way to connect with today's customer where they're conducting due diligence - online. This course will show students how to capture the mindshare of business leadership and turn relationships into sales. Students will learn the online techniques used to be seen as a helpful resource that can guide the buyer toward their ideal solution. This course will provide essential guidance on selling to the modern buyer.

## **MKT 3410 - Marketing Channels**

**Credits:** 3

**Prerequisite(s):** MKT 3000 and junior standing

**Description:** This course is a comprehensive examination of the theories and practice of marketing channels. The course covers the essential concepts, principles, and strategies of marketing distribution systems with the aid of extensive real-life examples. The various forms of intermediaries are studied. Students examine the basic decision areas of designing, selecting, and managing marketing channels. Attention is also given to logistics and international distribution.

## **MKT 3500 - Sports Marketing**

**Credits:** 3

**Prerequisite(s):** At least junior standing

**Description:** This course is a study of how the principles of marketing are applied in the sports industry. The course examines the marketing of sports, teams, athletes, etc., as well as the use of sports to market products (e.g., sponsorship and promotional licensing).

## **MKT 3610 - Business-to-Business Marketing**

**Credits:** 3

**Prerequisite(s):** MKT 3000 and At least junior standing

**Description:** In this course, students will investigate the activities involved in marketing goods and services to businesses, institutions, resellers, and government, with primary emphasis on business-to-business marketing.

## **MKT 3710 - International Marketing**

**Credits:** 3

**Prerequisite(s):** BUS 1950, MKT 3000 and At least junior standing

**Description:** The primary objective of this course is to introduce students to the complexities involved in the international marketing process. This course will sensitize students to the economic, political,

and cultural differences among nations as they affect marketing; introduce students to the framework of organizations, laws, and business practices as they affect marketing; and develop a student's ability to identify and evaluate marketing opportunities in the international marketplace.

## **MKT 3750 - Ethnic Representations in Marketing**

**Credits:** 3

**Prerequisite(s):** Junior or Senior Standing

**Description:** In this course, students examine key constructs and theories that allow them to critically explore how ethnically and racially marginalized groups in the U.S. have faced issues of racism and white supremacy, including inaccurate portrayal in marketing media in support of institutionalized systems of power, privilege, and oppression. Students learn to assess racial projects in consumer markets to determine when these offer meaningful changes to racial oppression. Lastly, students challenge existing power structures and stereotypes in the marketing industry by creating informed marketing plans that authentically, accurately, and positively reflect segments in their diversity.

**University Requirement(s):** Ethnic Studies & Social Justice

## **MKT 3820 - Fundraising Strategies for Nonprofit Organizations**

**Credits:** 3

**Description:** Students examine the various strategies used by nonprofit organizations to raise funds for operating, program, and capital needs. Topics include direct mail, planned giving, individual solicitation, workplace giving, special events, and major gift campaigns.

## **MKT 3910 - New Product Development**

**Credits:** 3

**Prerequisite(s):** MKT 3000 or MKT 8900

**Description:** This course introduces students to the issues related to developing new products. These issues include creativity and innovation, idea generation, product design, prototyping, market testing, financial analysis, and managing the process for productivity, efficiency, and success. Through classroom and experiential learning activities, students will learn the concepts and skills of new product development and complete a new product project.

## **MKT 3980 - Internship in Marketing**

**Credits:** 1-15

**Prerequisite(s):** Major or minor in Department of Marketing program; major in Global Business or International Business; junior standing; MKT 3000 or equivalent; 2.5 cumulative GPA; permission of instructor

**Description:** Internships provide practical, hands-on experience in a professional field related to marketing. The internship must be based on work that is new to the student and supervised by a marketing professional. Internship placements must be approved through the

internship credit approval process. Once enrolled, internship coursework is supervised by a faculty member. Students will complete academic work that encourages reflection regarding the approved learning objectives for the internship.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable credit based on hours of work; 50 hours of work = 1 credit. Up to 6 credits may be applied as electives for marketing programs. Credits earned above 6 and up to 15 will count as general electives.

## **MKT 3981 - Internship in Sales**

**Credits:** 1-15

**Prerequisite(s):** Major or minor in department of Marketing, major in Global Business, major in International Business; MKT 3000 or equivalent; junior status; 2.5 cumulative GPA; permission of instructor

**Description:** Internships provide practical, hands-on experience in a professional field related to professional selling. The internship must be based on work that is new to the student and supervised by a sales professional. Internship placements must be approved through the internship credit approval process. Once enrolled, internship coursework is supervised by a faculty member. Students will complete academic work that encourages reflection regarding the approved learning objectives for the internship.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit based on hours of work; 50 hours of work = 1 credit. Up to 6 credits may be applied as sales and/or marketing electives. Credits earned above 6 and up to 15 will count as general electives.

## **MKT 4020 - ProSales Team**

**Credits:** 3

**Prerequisite(s):** At least junior standing and approval of the faculty

**Description:** This course is designed for students interested in competing in sales events hosted by universities and organizations. Content will focus on sharpening selling skills and professionalism during business trips and events. Students are expected to compete in at least one event and prepare team members for other events. Events vary by semester and may require travel (costs such as flight/ground transportation and hotel accommodations are covered by the Center for Professional Selling).

## **MKT 4110 - Brand Management**

**Credits:** 3

**Prerequisite(s):** MKT 3000 and junior standing

**Description:** This course will cover brand management in-depth, demonstrate how marketing activities impact the power of an organization's brand, and examine the strategic importance of

effectively managing a brand. Students will develop an ability to assess brands and implement action plans based on a strategic marketing orientation.

*Note:* Some sections of this course may be taught as Service Learning.

## **MKT 4200 - Content Marketing**

**Credits:** 3

**Prerequisite(s):** MKT 3000 and junior standing

**Description:** Content marketing is a strategic approach to creating online content that furthers an organization's brand and ties into a broader integrated marketing communication strategy. It focuses on the creation of content that is useful for a clearly defined target audience throughout the customer life cycle and ultimately drives the organization's profitability. This course provides a framework for students to navigate the fast changing environment of the web and social media under the lens of content creation. Students will develop the skills needed to develop and execute a successful content marketing plan.

## **MKT 4250 - Advanced Selling**

**Credits:** 3

**Prerequisite(s):** MKT 3250 and senior standing

**Description:** Students sharpen the skills developed in sales classes to focus on relationship selling and integrate value-added selling, major account selling, team selling, negotiating, proposal writing, and business-to-business selling. Complex selling situations that involve multiple decision makers will be evaluated.

**University Requirement(s):** Senior Experience

## **MKT 4300 - Social Media Marketing**

**Credits:** 3

**Prerequisite(s):** MKT 3000 and junior standing

**Description:** This course covers advertising, marketing, and communication strategies in the new media landscape where traditional media (e.g. television, print) and the online social media (e.g. Web 2.0, online social networks, usergenerated content, blogs, forums) co-exist. The primary focus of this course will be on understanding social media, how to build social media marketing strategies, and how to track their effectiveness. Students taking Social Media Marketing will learn the applications of social media to the fulfillment of marketing objectives, particularly those related to the promotion function of the marketing mix. In particular, students will be able to analyze the social context in which a brand operates and audit a brand's social media positioning, as well as develop strategies for marketing using the zones of social media.

## **MKT 4520 - Student Marketing Agency**

**Credits:** 1-6

**Description:** This course is the credit-earning arm of a student-run marketing agency housed in the Department of Marketing. The agency provides students with real world, hands-on professional

marketing experience that enables students to work in teams more closely resembling those in agencies and marketing departments than they find in classrooms. Students have opportunities to apply business and marketing knowledge to a broad range of marketing-related projects by actually executing marketing deliverables within working teams. Through the projects as well as in-class training, students learn to manage projects and client relationships; improve professionalism; identify measures of success; effectively work with a team; and develop personal learning goals.

*Note:* Students selected through application. Students may repeat the course twice, for up to a total of 12 credits; a maximum of 6 credits may be applied to the marketing major.

## **MKT 4540 - Digital Marketing Science**

**Credits:** 3

**Prerequisite(s):** MKT 3000, MKT 3200, plus 3 additional upper-division MKT credits

**Description:** In this course, students apply advanced, hands-on digital marketing skills in the context of overall business and marketing strategy. The course includes customer analysis, content strategy, and digital marketing planning, implementation, measurement, and evaluation. The course qualifies students for certifications in current, relevant digital marketing platforms. Students gain experience by working with a team to develop and execute a digital marketing campaign for a real-world client.

## **MKT 4560 - Marketing Analysis and Strategy**

**Credits:** 3

**Prerequisite(s):** MKT 3010, MKT 3310, and Senior standing

**Description:** Students in this course engage in an in-depth examination of marketing analysis techniques and the development of strategic marketing plans. Students learn how to use quantitative and qualitative data to make informed marketing decisions and create effective strategies that align with business objectives. Key topics include analysis of trends, competitors, and customers; establishing branding and strategic positioning; and developing long-term customer relationships.

## **Mathematical Sciences**

### **MTH 1051 - Principles of Mathematics Laboratory for Chemistry 1100**

**Credits:** 1

**Corequisite(s):** CHE 1100

**Description:** This one-hour lab provides supplemental academic instruction with an emphasis on building algebraic and study skills for the Nursing majors enrolled in CHE 1100.

### **MTH 1080 - Mathematics for Liberal Arts**

**Credits:** 3

**Prerequisite(s):** An appropriate score on the mathematics

preassessment placement test.

**Description:** This course is an introduction to the spirit and methods of mathematics. It includes problem-solving strategies, introductory financial mathematics, probability, statistics, and other topics demonstrating the interdisciplinary applicability of mathematics.

**General Studies:** Quantitative Literacy

**Guaranteed Transfer:** GT-MA1

## MTH 1081 - Mathematics for Liberal Arts with Laboratory

**Credits:** 3

**Corequisite(s):** MTH 1082

**Description:** This course is equivalent to MTH 1080 - Mathematics for Liberal Arts, but with a co-requisite lab that provides supplemental academic instruction. The course is an introduction to the spirit and methods of mathematics. It includes problem-solving strategies, introductory financial mathematics, probability, statistics, and other topics demonstrating the interdisciplinary applicability of mathematics.

**General Studies:** Quantitative Literacy

**Guaranteed Transfer:** GT-MA1

## MTH 1082 - Mathematics for Liberal Arts Laboratory

**Credits:** 1

**Corequisite(s):** MTH 1081

**Description:** This one-hour lab provides supplemental academic instruction with an emphasis on building mathematical and study skills needed in Mathematics for Liberal Arts.

## MTH 1101 - College Algebra Laboratory

**Credits:** 1

**Corequisite(s):** MTH 1111

**Description:** This one-hour lab provides supplemental academic instruction with an emphasis on building algebraic and study skills needed in College Algebra for Calculus.

## MTH 1108 - College Algebra Stretch, Part I

**Credits:** 4

**Prerequisite(s):** An approved score on the mathematics pre-assessment placement test

**Description:** This course is the first half of a two-semester sequence (consisting of MTH 1108 followed by MTH 1109); the two-semester course is equivalent to MTH 1110 (College Algebra) and is a prerequisite for MTH 1120 and the calculus sequence. The topics covered in MTH 1108 include equations and inequalities, the function notation and a detailed study of linear and quadratic functions and their properties; in addition, students enrolled in MTH 1108 review basic algebraic skills, such as factoring methods, properties for rational and root expressions, and geometrical formulas.

*Note:* All sections will integrate the use of a graphing calculator into

the course. A specific calculator will be required. A student cannot receive credit for both MTH 1110 or MTH 1111 and MTH 1108.

## MTH 1109 - College Algebra Stretch, Part II

**Credits:** 4

**Prerequisite(s):** MTH 1108 with a grade of "C-" or better

**Description:** This course is the second half of a two-semester sequence (consisting of MTH 1108 followed by MTH 1109); the two-semester course is equivalent to MTH 1110 (College Algebra) and is a prerequisite for MTH 1120 and the calculus sequence. The topics covered in MTH 1109 include exponential and logarithmic functions, conic sections, systems of equations and the binomial theorem; in addition, students enrolled in MTH 1109 will review algebraic skills, such as solving linear and quadratic equations, graphing techniques and mathematical modeling.

*Note:* All sections will integrate the use of a graphing calculator into the course. A specific calculator will be required. A student cannot receive credit for both MTH 1110 and MTH 1109.

**General Studies:** Quantitative Literacy

**Guaranteed Transfer:** GT-MA1

## MTH 1110 - College Algebra for Calculus

**Credits:** 4

**Prerequisite(s):** An appropriate score on the mathematics preassessment placement test.

**Description:** The topics covered include equations and inequalities, functions and graphs, exponents and logarithms, conic sections, linear systems, and the binomial theorem. Basic algebraic skills are essential as a prerequisite to this course. All sections integrate the use of a graphing calculator into the course.

*Note:* Only one of MTH 1109, MTH 1110, MTH 1111 and MTH 1112 will count toward graduation.

**General Studies:** Quantitative Literacy

**Guaranteed Transfer:** GT-MA1

## MTH 1111 - College Algebra for Calculus with Laboratory

**Credits:** 4

**Prerequisite(s):** An appropriate score on the mathematics preassessment placement test.

**Corequisite(s):** MTH 1101

**Description:** This course is equivalent to MTH 1110 - College Algebra for Calculus, but with a co-requisite lab that provides supplemental academic instruction. The topics covered include equations and inequalities, functions and graphs, exponents and logarithms, conic sections, linear systems, and the binomial theorem. Basic algebraic skills are essential as a prerequisite to this course. All sections integrate the use of a graphing calculator into the course.

**General Studies:** Quantitative Literacy

**Guaranteed Transfer:** GT-MA1

## MTH 1112 - College Algebra Through Modeling

**Credits:** 4

**Prerequisite(s):** An appropriate score on the mathematics preassessment placement test.

**Description:** This course places a greater emphasis on applications and data analysis than MTH 1110, College Algebra. The topics covered include: deriving functions to model situations; linear, exponential and logarithmic, power, quadratic functions and their properties and graphs; exponents and logarithms; data analysis and regression; rates of change; and linear systems and equations. Basic algebraic skills are essential as a prerequisite to this course. All sections integrate the use of a graphing calculator into the course. A specific calculator is required.

*Note:* Only one of MTH 1109, MTH 1110, MTH 1111 and MTH 1112 will count toward graduation.

**General Studies:** Quantitative Literacy

**Guaranteed Transfer:** GT-MA1

## MTH 1115 - College Algebra through Modeling with Laboratory

**Credits:** 4

**Prerequisite(s):** An appropriate score on the mathematics preassessment placement test

**Corequisite(s):** MTH 1116

**Description:** This course is equivalent to MTH 1112 - College Algebra Through Modeling except that a 1 credit lab course must be taken at the same time. This course places a greater emphasis on applications and data analysis than MTH 1110 - College Algebra for Calculus. The topics covered include: deriving functions to model situations; linear, exponential and logarithmic, power, quadratic functions and their properties and graphs; exponents and logarithms; data analysis and regression; rates of change; and linear systems and equations. Basic algebraic skills are essential as a prerequisite to this course. All sections integrate the use of a graphing calculator into the course. A specific calculator is required.

*Note:* Note: Only one of MTH 1109, MTH 1110, MTH 1111, MTH 1112, and MTH 1115 will count toward graduation.

**General Studies:** Quantitative Literacy

**Guaranteed Transfer:** GT-MA1

## MTH 1116 - College Algebra through Modeling Laboratory

**Credits:** 1

**Corequisite(s):** MTH 1115

**Description:** This one-hour lab provides supplemental academic instruction with an emphasis on building algebraic and study skills needed in College Algebra through Modeling.

## MTH 1120 - College Trigonometry

**Credits:** 3

**Prerequisite(s):** MTH 1109 or MTH 1110 or MTH 1111 or MTH 1112, each with a grade of "C-" or better or an appropriate score on the mathematics preassessment placement test.

**Description:** The topics covered include trigonometric functions,

equations, and identities, solution of triangles, and complex numbers. A specific graphing calculator will be required.

**Guaranteed Transfer:** GT-MA1

## MTH 1210 - Introduction to Statistics

**Credits:** 4

**Prerequisite(s):** An appropriate score on the mathematics preassessment test, or one of MTH 1080 or MTH 1109 or MTH 1110 or MTH 1112 or MTH 1610 with a "C-" or better.

**Description:** This course is an introduction to the principles and techniques of descriptive statistics, probability, regression analysis, and statistical inference (estimation and tests of hypotheses). Students work with data on problems related to their own interest or field of study.

*Note:* Credit will not be given for both MTH 1210 and MTH 1230.

**General Studies:** Quantitative Literacy

**Guaranteed Transfer:** GT-MA1

## MTH 1310 - Finite Mathematics for the Management and Social Sciences

**Credits:** 4

**Prerequisite(s):** An appropriate score on the mathematics pre assessment placement test.

**Description:** Students in this course study applications of mathematics to business and the social sciences. The topics covered include evaluation and graphing of functions, the geometry of straight lines, inequalities and linear programming methods, operations on matrices, solving systems of equations, the mathematics of finance, and an introduction to set theory and probability theory. All sections integrate the use of a graphing calculator into the course.

*Note:* A specific calculator will be required. Students cannot earn credit for both MTH 1310 and MTH 1311.

**General Studies:** Quantitative Literacy

**Guaranteed Transfer:** GT-MA1

## MTH 1311 - Finite Mathematics for the Management and Social Sciences with Laboratory

**Credits:** 4

**Prerequisite(s):** An appropriate score on the mathematics pre assessment placement test.

**Corequisite(s):** MTH 1312

**Description:** This course is equivalent to MTH 1310 - Finite Mathematics for the Management and Social Sciences, but with a co-requisite lab that provides supplemental academic instruction. Students in this course study applications of mathematics to business and the social sciences. The topics covered include evaluation and graphing of functions, the geometry of straight lines, inequalities and linear programming methods, operations on matrices, solving systems of equations, the mathematics of finance, and an introduction to set theory and probability theory. All sections integrate the use of a graphing calculator into the course.

*Note:* A specific calculator will be required. Students cannot earn credit for both MTH 1310 and MTH 1311.

**General Studies:** Quantitative Literacy  
**Guaranteed Transfer:** GT-MA1

### MTH 1312 - Finite Mathematics Laboratory

**Credits:** 1

**Corequisite(s):** MTH 1311

**Description:** This one-hour lab provides supplemental academic instruction with an emphasis on building algebraic and study skills needed in Finite Mathematics for the Management and Social Sciences.

### MTH 1320 - Calculus for the Management and Social Sciences

**Credits:** 3

**Prerequisite(s):** MTH 1310 with a grade of "C-" or better (MTH 1109, MTH 1110, MTH 1112, or MTH 1400 with a grade of "C-" or better will be accepted, if necessary). Graphing calculator experience is expected.

**Description:** This course is an introduction to calculus emphasizing applications in business and social sciences. Topics include differentiation, partial differentiation, indefinite and definite integration. All sections will integrate the use of a graphing calculator into the course. A specific calculator will be required.

**Guaranteed Transfer:** GT-MA1

### MTH 1400 - Precalculus Mathematics

**Credits:** 4

**Prerequisite(s):** Completion of either MTH 1109 or MTH 1110 or MTH 1111 with grades of "C-" or better or other evidence showing knowledge of this material or an appropriate score on a department-approved placement test.

**Description:** This is a course covering the essentials of the algebraic and graphical properties of the polynomial, rational, exponential, logarithmic, and trigonometric functions. It is designed to prepare students for MTH 1410. All sections will integrate the use of a graphing calculator into the course.

*Note:* A specific calculator will be required.

**Guaranteed Transfer:** GT-MA1

### MTH 1410 - Calculus I

**Credits:** 4

**Prerequisite(s):** Either MTH 1109 or MTH 1110 or MTH 1111, and MTH 1120, with grades of "C-" or better, or MTH 1400 with a grade of "C-" or better

**Description:** This is a first course in calculus for science and engineering. The topics covered include derivatives of polynomials, trigonometric, exponential and logarithmic functions, applications of the derivative, the definite integral, and the fundamental theorem of calculus. All sections of the course will make integrated use of the software package Mathematica and/or a graphing calculator.

**Guaranteed Transfer:** GT-MA1

### MTH 1610 - Integrated Mathematics I

**Credits:** 3

**Prerequisite(s):** An appropriate score on the mathematics pre-assessment test, permission of instructor, or any college-level math course.

**Description:** This course integrates mathematical topics, including those from algebra, geometry, probability and statistics. Students take a concept-oriented approach to: exploring critical problems from an advanced standpoint; deriving and justifying multiple solutions; and analyzing and communicating the reasoning behind these solutions.

**General Studies:** Quantitative Literacy

**Guaranteed Transfer:** GT-MA1

### MTH 2140 - Computational Matrix Algebra

**Credits:** 2

**Prerequisite(s):** MTH 1120 or MTH 1400 or equivalent, with a grade of "C-" or better

**Description:** This course is an introduction to computational matrix algebra. The computations will be done by hand and by using an appropriate software package. The course will include the following topics: matrix operations, determinants, solutions of linear systems of equations, and eigenvalues and eigenvectors.

*Note:* Only one of the three courses MTH 2140, 3130, 3140 can be counted in the Mathematical Sciences major or minor.

### MTH 2410 - Calculus II

**Credits:** 4

**Prerequisite(s):** MTH 1410 with a grade of "C-" or better, or permission of instructor

**Description:** This is a second course in calculus. The topics covered include techniques of integration, applications of the integral and infinite series, including Taylor's series. All sections of the course will make integrated use of the software package Mathematica and/or a graphing calculator.

### MTH 2420 - Calculus III

**Credits:** 4

**Prerequisite(s):** MTH 2410 with a grade of "C-" or better, or Permission of instructor

**Description:** This course in the calculus of functions of more than one variable includes the following topics: partial derivatives, definite integrals over plane and solid regions, vectors and their applications, and Green's Theorem and its generalizations. All sections of the course will make integrated use of the software package Mathematica.

### MTH 2520 - R Programming

**Credits:** 4

**Prerequisite(s):** MTH 1110 with a grade of "C-" or better, or MTH 1112 with a grade of "C-" or better, or MTH 1310 with a grade of "C-" or better, or permission of instructor

**Description:** This is an introductory course in scientific programming with applications in statistics and mathematics, as well as the natural, physical and social sciences, using the R programming language. R is a free, open-source tool that is widely used for analyzing and processing data. Students will learn basic programming skills, including writing functions, managing data sets, and creating customized graphics.

## MTH 2540 - Scientific Computing with Python

**Credits:** 4

**Prerequisite(s):** MTH 1110 with a grade of "C-" or better, or permission of instructor.

**Description:** This course introduces students to Scientific Programming in Python with a hands-on approach. Students learn to solve problems from disciplines such as mathematics, engineering, biology, physics, chemistry and other natural sciences via execution of computational algorithms.

## MTH 2620 - Integrated Mathematics II

**Credits:** 3

**Prerequisite(s):** MTH 1610 with a grade of "C-" or better, or permission of instructor

**Description:** This course continues the concept-oriented, integrated study of mathematical topics including those from algebra, geometry, statistics, and combinatorics. Students further deepen their mathematical understanding and their ability to justify solutions and analyze and communicate their reasoning about complex problems.

## MTH 3100 - Introduction to Mathematical Proofs

**Credits:** 3

**Prerequisite(s):** MTH 2410 with a grade of "C-" or better, and Permission of the Department of Mathematics and Statistics

**Description:** This course is designed to introduce the student to mathematical proofs and abstract mathematics with topics in logic, induction, sets, relations, and functions.

*Note:* Credit will be granted for only one of the two courses MTH 3100 or MTH 3170.

## MTH 3110 - Abstract Algebra I

**Credits:** 4

**Prerequisite(s):** MTH 3100 with a grade of "C-" or better; or Permission of instructor

**Description:** This course is a survey of the principle structures of modern abstract algebra, including introductions to the theories of groups, rings, integral domains, and fields. Each structure is introduced by examples, then basic properties are derived, and the appropriate applications are introduced.

## MTH 3130 - Applied Methods in Linear Algebra

**Credits:** 4

**Prerequisite(s):** MTH 1410 with a grade of "C-" or better

**Description:** This is a course in the principles and application of matrix methods, primarily to problems in science and engineering fields. Topics include solving systems of linear equations, matrix algebra, the vector space  $\mathbb{R}^n$ , eigenvalues and eigenvectors, and orthogonality, with a focus on applications. A software package such as Mathematica is used in this course.

*Note:* Only one of the three courses MTH 2140, MTH 3130, MTH 3140 can be counted in the mathematics major or minor.

## MTH 3140 - Linear Algebra

**Credits:** 4

**Prerequisite(s):** MTH 3100 with a grade of "C-" or better, or MTH 3170 with a grade of "C-" or better, or permission of instructor

**Description:** This course is an introduction to the theory and application of vector spaces, linear transformations, matrix representations, eigenvalues, and eigenvectors. A software package will be used in this course.

*Note:* Only one of the three courses MTH 2140, MTH 3130, or MTH 3140 may be counted in the mathematics major or minor.

## MTH 3170 - Discrete Mathematics for Computer Science

**Credits:** 4

**Prerequisite(s):** MTH 2410 and CS 2050

**Description:** This course provides a foundation in mathematical proofs and abstract mathematics in the context of discrete mathematics. Mathematical topics in the course are chosen for their relevance to computer science, and include combinatorics, set theory, graph theory, and recurrence relations. Only one of MTH 3100 and MTH 3170 will count toward graduation.

## MTH 3210 - Probability and Statistics

**Credits:** 4

**Prerequisite(s):** MTH 1410 with grade of C- or better or permission of instructor

**Description:** This is a course in the application and theory of the principles of probability and statistics in the sciences and engineering. It includes descriptive statistics, linear regression, probability, random variables and their distributions, estimation, and tests of hypotheses.

## MTH 3220 - Statistical Methods

**Credits:** 4

**Prerequisite(s):** MTH 3210 with a grade of "C-" or better, or permission of instructor

**Description:** This is a course in the application and theory of statistical inference in science and engineering. It includes two sample inferences, experimental design, analysis of variance, nonparametric statistics, chi-squared tests, and regression analysis.

## MTH 3230 - Stochastic Processes

**Credits:** 4

**Prerequisite(s):** MTH 3210, and MTH 2140 or MTH 3130 or MTH 3140, all with a grade of C- or better, or permission of the instructor

**Description:** This course gives a general introduction to random processes and their applications. It includes Markov chains, Markov processes, random walks, branching processes, the Poisson process, queuing theory, and Brownian motion.

## **MTH 3240 - Environmental Statistics**

**Credits:** 4

**Prerequisite(s):** MTH 1210 and either MTH 1110 or MTH 1112 with grades of "C-" or better, or permission of instructor

**Description:** This is a course in inferential statistics, sampling techniques, and quality control as they relate to environmental issues. Students will work with data and problems related to the environmental science field of study. This course does not count towards a major or minor in mathematics.

## **MTH 3270 - Data Science**

**Credits:** 4

**Prerequisite(s):** MTH 2520 or CS 2050, and either MTH 1210 or MTH 3210, all with grades of C- or better, or permission of the instructor.

**Description:** Data science combines elements from statistics, data analysis, computer programming, and machine learning to form a new field concerned with gleaning information from various forms of data. Using real-world data and active learning, this course covers topics that include data visualization, data wrangling and tidying, statistical modeling, statistical learning, and database querying.

## **MTH 3400 - Chaos and Nonlinear Dynamics**

**Credits:** 4

**Prerequisite(s):** MTH 2410 with a grade of C- or better, or permission of instructor.

**Description:** This course is an introduction to dynamical systems from the extension of Newtonian physics to the modern development of chaos theory and nonlinear dynamics. The dynamics of linear and nonlinear systems are analyzed. Applications to numerous physical systems are studied. Algorithms for generating intricate fractal images and the mathematics behind the images are also developed.

## **MTH 3420 - Differential Equations**

**Credits:** 4

**Prerequisite(s):** MTH 2420 with a grade of "C-" or better, or Permission of instructor

**Description:** This course includes a study of first, second, and higher order differential equations and systems giving solutions in closed form, by numerical approximations, and through Laplace Transforms. These techniques are applied to problems in the physical sciences and engineering. All sections will integrate the use of the software package Mathematica into the course.

## **MTH 3430 - Mathematical Modeling**

**Credits:** 4

**Prerequisite(s):** MTH 3420 Differential Equations, with a "C-" or better, or permission of the instructor.

**Description:** In this course, students learn the advanced mathematical modeling process through derivations and analysis of standard mathematical models (deterministic, stochastic, and numerical). This modeling process expands on material from calculus and differential equations. Students also utilize software/programming to implement numerical models. Students translate real-world problems into mathematical models, use these to make predictions, and evaluate the effectiveness of their models. Students reflect on mathematical models and suggest ways to improve them. Upon successful completion of this course, students should be able to effectively communicate to the broader community the meaning and significance of the mathematical models studied as well as the importance of mathematical modeling in general.

## **MTH 3450 - Complex Variables**

**Credits:** 4

**Prerequisite(s):** MTH 2420 with a grade of C- or better, or permission of instructor

**Description:** This course provides an introduction to the theory of complex functions of a complex variable; and includes the algebra and geometry of complex numbers, differentiation and analytic functions, contour integrals, residues and poles, conformal mappings, power series representations and Laurent series.

## **MTH 3470 - Introduction to Discrete Mathematics and Modeling**

**Credits:** 4

**Prerequisite(s):** MTH 2410 with a grade of "C-" or better, or permission of instructor

**Description:** This is a problem-solving course, emphasizing (1) the use of cogent arguments to justify solutions to a wide variety of mathematical problems in combinatorics and graph theory and (2) the development of mathematical models to solve problems that arise in the digital world and in the physical, biological, or social sciences.

## **MTH 3510 - SAS Programming**

**Credits:** 4

**Prerequisite(s):** MTH 3210 with a grade of "C-" or better; or permission of instructor

**Description:** This course covers techniques of data management using SAS programming. It includes reading and manipulating various types of data, creating reports, applying statistical procedures, and the use of SAS Enterprise Miner for data mining. At the end of the course the students take the "SAS BASE PROGRAMMER" certification exam (administered by the SAS Corporation).

## **MTH 3640 - History of Mathematics**



**Credits:** 4

**Prerequisite(s):** MTH 3100 with a grade of "C-" or better or permission of instructor

**Description:** In this course, students will learn about the history of mathematics through the discussion of mathematical problems from ancient to modern times and the people who formulated or solved them.

## **MTH 3650 - Foundations of Geometry**

**Credits:** 4

**Prerequisite(s):** MTH 3100 with a grade of "C-" or better, or Permission of instructor

**Description:** In this course, students re-examine Euclidean geometry via Hilbert's axioms. This allows a coherent approach to projective, Euclidean, non-Euclidean, and other related geometries. The course is designed for prospective secondary teachers and others interested in modern geometric theories.

## **MTH 4110 - Abstract Algebra II**

**Credits:** 3

**Prerequisite(s):** MTH 3110 or permission of instructor

**Description:** This course is a continuation of MTH 3110 with emphasis on an in-depth study of the properties of the structures introduced in MTH 3110. Topics include ideals and their properties, factor groups and factor rings, principal ideal domains, and field extensions, and will also include selections from advanced group theory, Galois theory, and finite fields.

## **MTH 4150 - Elementary Number Theory**

**Credits:** 3

**Prerequisite(s):** MTH 3100 with a grade of C- or better, or permission of instructor

**Description:** This course introduces the basic concepts of number theory including the Euclidean algorithm, congruences, number-theoretic functions, and the Chinese remainder theorem.

## **MTH 4210 - Probability Theory**

**Credits:** 4

**Prerequisite(s):** MTH 3210 with a grade of C- or better and senior standing or permission of instructor

**Prerequisite(s) or Corequisite(s):** MTH 2420 with a grade of C- or better

**Description:** In this course, students prove results in probability theory and apply the theory to solve problems in science and engineering. Students analyze and apply sample spaces, combinatorial probability, conditional probability, discrete and continuous random variables, expectation and higher moments, and joint distributions.

**University Requirement(s):** Senior Experience

## **MTH 4230 - Regression and Computational Statistics**

**Credits:** 4

**Prerequisite(s):** MTH 3220 and either MTH 2140, MTH 3130 or MTH 3140, all with grades of "C-" or better, or permission of instructor

**Description:** This course will cover advanced methods in regression analysis. Topics will include regression with one predictor variable, diagnostics and remedial measures, multiple regression, time series analysis and logistic regression. The students will use a statistical computer package.

## **MTH 4250 - Statistical Theory**

**Credits:** 4

**Prerequisite(s):** MTH 4210 with a grade of "C-" or better; or permission of instructor

**Description:** This course covers the general mathematical theory that governs statistical inference. This includes a review of distribution theory and sampling distributions, theory of point estimation, theory of hypothesis testing, and theory of confidence intervals. In addition, it introduces decision theory and Bayesian analysis.

## **MTH 4290 - Senior Statistics Project**

**Credits:** 2

**Prerequisite(s):** MTH 3210, MTH 3220, MTH 4210, and permission of instructor

**Description:** In this course students apply statistical techniques covered in previous course work to a real-world situation. Students write and present a report that describes the problem and examines the statistical methods used for analysis. Any statistical or probabilistic method, including experimental designs, probability models, inference, and data science techniques may be used.

## **MTH 4410 - Real Analysis I**

**Credits:** 4

**Prerequisite(s):** MTH 2420 and MTH 3100, each with a grade of "C-" or better, and senior standing, or permission of instructor

**Description:** Students in this course study and rigorously develop the fundamental results of single variable Calculus. Topics include the structure of the real number system, sequences, continuous functions, differentiable functions, and the Riemann integral.

**University Requirement(s):** Senior Experience

## **MTH 4420 - Real Analysis II**

**Credits:** 3

**Prerequisite(s):** MTH 4410 with a grade of "C-" or better, or permission of instructor

**Description:** This course is a continuation of MTH 4410. It provides a rigorous development of infinite series, sequences & series of functions, and additional analysis topics chosen by the instructor.

## **MTH 4440 - Partial Differential Equations**

**Credits:** 4

**Prerequisite(s):** MTH 2420 and MTH 3420 with a grade of "C-" or better, or Permission of instructor

**Description:** This is a course in partial differential equations and their solutions. It includes separation of variables techniques, Fourier series, and applications to the heat equation, the wave equation, and the potential equation. All sections integrate the use of software into the course.

## MTH 4480 - Numerical Analysis I

**Credits:** 4

**Prerequisite(s):** MTH 2520 or MTH 2540 or CS 1050, and MTH 3140 or MTH 3130 or MTH 2140, and MTH 2410, all with grade of "C-" or better, and Senior standing, or permission of instructor

**Description:** Students in this course develop and implement techniques for numerical solutions of algebraic and transcendental equations, for numerical differentiation and integration, for numerical linear algebra, and for polynomial interpolation. The use of a computer is an essential part of this course.

**University Requirement(s):** Senior Experience

## MTH 4490 - Numerical Analysis II

**Credits:** 4

**Prerequisite(s):** MTH 3420 and MTH 4480 with grades of "C-" or better, or permission of instructor.

**Description:** This course includes approximation of functions, non-linear systems, numerical solutions of differential equations, and numerical techniques of integration.

## MTH 4600 - Seminar in Problem Solving

**Credits:** 1

**Prerequisite(s):** MTH 3100 or MTH 3420 or Permission of instructor

**Description:** This is a seminar in mathematical problem solving. Students will investigate factors of problem solving, such as belief systems, control mechanisms, heuristics, and mathematical resources. This investigation will be carried out in the context of working on a collection of problems designed to illustrate these factors. Problems from the William Lowell Putnam National Mathematics Examination are included in this collection.

## MTH 4660 - Introduction to Topology

**Credits:** 3

**Prerequisite(s):** MTH 3100 or permission of instructor

**Description:** This course includes topological spaces, functions, mappings and homeomorphisms, continuity, compactness, connectedness, some separation axioms, and metric spaces.

## Mathematics Teaching and Learning

## MTL 3600 - Mathematics of the Elementary Curriculum

**Credits:** 3

**Prerequisite(s):** MTH 1610

**Description:** This course approaches mathematical concepts outlined in *Colorado Model Content Standard for Mathematics* (grades K-6) from an advanced perspective. By examining video and written cases of children doing mathematics, students in this course will (1) connect their developing understanding of mathematics to the important mathematical concepts they will be required to teach; (2) turn their attention from understanding their own mathematical thinking, and the thinking of their classmates, to understanding the mathematical thinking of children; (3) lay the foundation for being able to learn mathematics from teaching.

## MTL 3620 - Mathematics of the Secondary Curriculum

**Credits:** 4

**Prerequisite(s):** MTH 3100 and at least 12 additional hours of upper-division mathematics, all with grades of "C-" or better, or Permission of instructor

**Description:** This course, to be taken in the semester immediately prior to MTL 3630, approaches the mathematical concepts outlined in the Colorado Model Content Standards for Mathematics from an advanced perspective. The course uses standards-based curriculum materials as the focus for: (1) exploration of the central ideas of the mathematics curriculum in grades 7 through 12 and the connections among them, and (2) making explicit the connections between content covered in the mathematics courses required for the major and content taught in the school mathematics classrooms.

## MTL 3638 - Secondary Mathematics Field Experience

**Credits:** 2

**Prerequisite(s):** MTL 3620 or Permission of instructor

**Corequisite(s):** MTL 3630 or permission of instructor

**Description:** Prospective teachers enrolled in this course will spend at least 80 hours with a mentor teacher in a secondary mathematics classroom. During this time, prospective teachers will apply the mathematical knowledge base developed in the mathematics major and in MTL 3620, and the framework for teaching developed in MTL 3630, to the problems of practice that arise in public-school classrooms of diverse learners. Prospective teachers in this course will direct a Secondary Mathematics Lesson Study, a mini teacher work sample.

## MTL 3710 - Number and Operations for Elementary Mathematics

**Credits:** 3

**Prerequisite(s):** MTL 3600 with a grade of "C-" or better, or permission of instructor

**Description:** This course is an in-depth exploration of number and operations concepts that are relevant to elementary education. Topics will include pre-number concepts, place-value notation, decimals, scientific notation, basic number systems, interpretations and representations of numerical operations, and multiplicative reasoning.

### **MTL 3720 - Algebra Connections for Elementary Mathematics**

**Credits:** 3

**Prerequisite(s):** MTL 3600 with a grade of "C-" or better, or permission of instructor

**Description:** This course is an in-depth exploration of algebra concepts that are relevant to elementary education. Topics will include algebraic axioms as generalizable properties of elementary arithmetic, algebraic notation, equations and inequalities, functions, and algebraic modeling.

### **MTL 3730 - Geometry and Measurement for Elementary Mathematics**

**Credits:** 3

**Prerequisite(s):** MTL 3600 with a grade of "C-" or better, or permission of instructor

**Description:** This course is an in-depth exploration of geometry and measurement concepts that are relevant to elementary education. Topics will include representation of 3-dimensional objects in two dimensions, composition and decomposition of geometric figures, congruence and similarity, standard and non-standard measurement, basic geometric figures and their properties, plane coordinates, transformations, and an introduction to axiomatic reasoning and proof.

### **MTL 3740 - Statistics and Probability for Elementary Mathematics**

**Credits:** 3

**Prerequisite(s):** MTL 3600 with a grade of "C-" or better, or permission of instructor

**Description:** This course is an exploration of basic concepts of statistics and probability that are relevant to elementary education, including the application of these concepts to the interpretation of educational research and the assessment of student learning. Topics will include the nature and use of data, types of data, representations of data, basic concepts of probability, conclusions and inference with a focus on educational research, an introduction to qualitative research, and assessment of student learning.

### **MTL 3750 - Number and Algebra in the K-8 Curriculum**

**Credits:** 3

**Prerequisite(s):** MTL 3600 with a grade of "C-" or better, or permission of instructor

**Description:** This course is an in-depth exploration of number and

algebra concepts relevant to K-8 education. Topics related to number include place value, basic number systems, interpretations and representations of numerical operations, and multiplicative reasoning. Algebra topics include algebraic axioms as generalizable properties of elementary arithmetic, algebraic notation, equations and inequalities, functions, and algebraic modeling.

### **MTL 3760 - Geometry and Statistics in the K-8 Curriculum**

**Credits:** 3

**Prerequisite(s):** MTH 2620 with a grade of "C-" or better, or permission of instructor

**Description:** This course is focused on "Mathematical Knowledge for Teaching" (Hill, Rowan, & Ball, 2005) in the context of geometry and statistics. This course is an in-depth exploration of geometry and statistics concepts that are relevant to K-8 education. Geometry topics include congruence and similarity, measurement, basic geometric figures and their properties, plane coordinates, transformations, and an introduction to axiomatic reasoning and proof. Statistics topics include the nature and use of data, types of data, representations of data, basic concepts of probability, conclusions and inference with a focus on educational research, and assessment of student learning.

### **MTL 3850 - STEM Teaching and Learning**

**Credits:** 2

**Prerequisite(s):** MTH 1110 or Permission of the instructor

**Description:** This course serves as a STEM pedagogy seminar with a focus on conceptual development, conceptual change, collaborative learning, students' conceptions of various topics in mathematics and science, practical issues encountered in facilitating learning, managing the classroom, formative and summative assessment, and differentiating instruction in a collaborative environment.

### **MTL 3858 - STEM Teaching and Learning Practicum**

**Credits:** 1

**Prerequisite(s):** MTH 1110 or permission of instructor

**Corequisite(s):** MTL 3850

**Description:** This course is the attached practicum experience for the STEM Teaching and Learning pedagogy seminar that is required for the Mathematics Major with Education concentration. Students will use the practicum to enhance practical experience and understanding of key concepts from the co-requisite STEM seminar by working with faculty mentors for a focused classroom experience.

### **MTL 4630 - Teaching Secondary Mathematics**

**Credits:** 4

**Prerequisite(s):** MTL 3620 and Senior Standing; or Permission of Instructor

**Corequisite(s):** MTL 3638 or permission of instructor

**Description:** In this senior experience course, students examine

teaching practice that supports conceptual understanding of mathematical ideas for all students in diverse classrooms. Prospective teachers enrolled in this course analyze teaching with particular attention to: planning for instruction; selecting and adapting curriculum materials; establishing classroom norms and expectations; fostering mathematical discourse; and assessing students' developing mathematical understanding.

This course must be taken along with MTL 3638 - Secondary Mathematics Field Experience in the semester immediately prior to MTL 4690 - Student Teaching and Seminar: Secondary 7-12.

**University Requirement(s):** Senior Experience

## **MTL 4690 - Student Teaching and Seminar: Secondary 7-12**

**Credits:** 12

**Prerequisite(s):** completion of all mathematics course work and all teacher education course work required for licensure; department approval of all GPA requirements; completion of Application for Student Teaching

**Description:** This course is a 16-week, full-time field experience with a skilled mathematics mentor teacher, supervised by an "MTL mentor," the official college supervisor, in an accredited secondary school. Prospective teachers who enroll in this course will, with the close and continual support of the mentor-teacher, take on increasing responsibility for, and learn from, all aspects of the work of a full-time mathematics teacher. Prospective teachers and their mentors will participate in two Secondary Mathematics Lesson Studies (which, together, constitute the teacher work sample), and in regular seminars conducted by the MTL mentor and other members of the Department of Mathematics and Statistics.

## **MTL 4710 - Issues in Elementary Mathematics Education**

**Credits:** 3

**Prerequisite(s):** MTL 3600 and at least two of MTL 3710, MTL 3720, MTL 3730, or MTL 3740, all with a grade of "C-" or better, or permission of instructor

**Description:** This course covers a variety of topics relevant to the role of an elementary mathematics specialist, including issues related to teaching such as equity and diversity, classroom environment, and basic ideas from cognitive psychology and learning theory. It will also cover issues related to mathematics education leadership, such as mathematics coaching, professional development, history of mathematics education, and the interpretation of data from national and international mathematics assessments.

## **Mechanical Engineering Technology**

### **MET 1000 - Introduction to Mechanical Engineering Technology**

**Credits:** 3

**Description:** This is an introductory course in mechanical

engineering technology. Emphasis is placed on the design and creative process with examples from different areas within engineering technology. Students will learn how to develop the tools necessary to be successful in school and in industry by using theory, computer software, and working realworld problems. The engineering profession and its relation to current national, social, industrial, ethical, and international issues and problems will be discussed.

### **MET 1010 - Manufacturing Processes**

**Credits:** 3

**Description:** Students learn the fundamentals of machine tools including conventional and non-conventional manufacturing methods. Students explore technologies of the Fourth Industrial Revolution. Students perform hands-on operations on machine tools including lathe, milling machines, vertical drills, and grinders.

### **MET 1040 - Introduction to Engineering**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard score on math placement test

**Description:** This course is an introductory engineering course exposing students to a cross section of topics in contemporary civil, electrical and mechanical engineering disciplines to assist them with their education career choices. Students are taught to work in teams, introduced to the design process, utilize math and computer programs to analyze raw data and properly display their results in a presentation to their peers. The history of the engineering profession and its relation to current national, social, industrial, ethical, and international issues and problems will be discussed.

*Note:* Credit will be granted for only one prefix: CET, EET, or MET.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC2

**Cross Listed Course(s):** CET 1040, EET 1040

### **MET 1200 - Technical Drawing I**

**Credits:** 3

**Description:** This is an introductory course in technical drawing. It covers the use of manual drawing instruments, lettering, various geometric constructions, and multi-view orthographic engineering drawings. It introduces 2-D technical drawing using computer-aided design software.

### **MET 1210 - 3D Modeling**

**Credits:** 3

**Prerequisite(s):** MET 1200 or IND 1450 or CET 1215 with a grade of "C" or better; or permission of instructor

**Description:** This is a basic design course, which is designed to familiarize students with functional 3-D modeling using an appropriate software package. The course covers the basic functions needed to create part models, assemblies, and drawings. Emphasis is on the design philosophy, used in creating parts and assemblies.

## **MET 1310 - Principles of Quality Assurance**

**Credits:** 3

**Prerequisite(s):** MTH 1310 or Intermediate algebra with a grade of "C" or better

**Description:** The course introduces the scope and function of quality assurance, including basic definitions, statistics, quality policy and objectives, manuals and procedures, concept of variation, inspection and sampling techniques, meteorology process control, methods and the elements of reliability. Current TQM and ISO 9000 standards are reviewed.

## **MET 2010 - CNC Machining and Inspection**

**Credits:** 3

**Prerequisite(s):** MET 1010 or IND 2830, MET 1200 or IND 1450 or CET 1215, MTH 1120 with grades of "C-" or better

**Description:** This course introduces computer numerical control machine tools. Topics include CNC programming for machine setup, operation, and basic applications along with machined part inspection. Upon completion, students should be able to explain a CNC program, data input, and machine tool operation. Student will be able to compare dimension of physical components against technical drawings for quality control.

## **MET 2200 - Materials of Engineering**

**Credits:** 3

**Prerequisite(s):** MTH 1110 or MTH 1400 with grades of "C" or better

**Prerequisite(s) or Corequisite(s):** CHE 1100 or CHE 1800 with grade of "C" or better

**Description:** This lecture/laboratory course deals with basic properties of metals and non-metals, including the properties and behavior that govern their selection and design. Materials covered include ferrous and nonferrous metals, composites, plastics, ceramics, glass, wood, rubber and adhesives.

## **MET 3000 - Manufacturing Analysis**

**Credits:** 4

**Prerequisite(s):** MET 1010 or IND 2830, MET 1310, and MTH 1110 or MTH 1400, all with a grade of "C" or better

**Description:** This course introduces the organizational and functional requirements for effective production. Tolerance charts and work piece control are used to plan the manufacturing sequence, select the preferred manufacturing equipment and the operational sequence.

## **MET 3070 - Machine Design**

**Credits:** 3

**Prerequisite(s):** MET 2200, CET 3135, and MET 3160 with grades of "C" or better

**Description:** The art of designing machines to accomplish specific purposes is studied. The student is introduced to the fundamental

principles required to design the separate machine elements. The economics of design are stressed along with strength and safety considerations. The lab work uses selected software, e.g., ALGOR and AutoCAD, to produce the preferred design.

## **MET 3110 - Thermodynamics**

**Credits:** 3

**Prerequisite(s):** MTH 1410 and PHY 2311 with grades of C or better, or permission of instructor

**Description:** The fundamental laws of thermodynamics are studied. Basic concepts of energy, the thermodynamic system, dimensions and units, and the ideal-gas equation of state are studied. The course also covers closed and open systems, heat engines as well as reversible and irreversible processes.

## **MET 3125 - Heat Transfer with Laboratory**

**Credits:** 3

**Prerequisite(s):** PHY 2311 with a grade of "C" or better

**Description:** The three basic mechanisms of heat transmission are studied. Conduction, convection (free and forced), and radiant transmission are treated for both steady-state and transient conditions. The transient study is aided by computer solutions. The laboratory component provides experimental results for various conduction and convection tests. The student selects and installs thermocouples, calibrates equipment, records transient and steady-state data, analyzes results, compares data to theoretical predictions, and reports findings.

## **MET 3160 - Mechanics II-Dynamics**

**Credits:** 3

**Prerequisite(s):** CET 2150 and MTH 2410 with grades of "C" or better; or permission of instructor

**Description:** This course covers the principles of dynamics: Students learn about kinematics which is the study of the geometry of motion of a body without reference to the forces that cause the resulting motion. The course also covers kinetics which is the study of the relation existing between the forces acting on the body, the mass of the body, and the motion of the body.

## **MET 3185 - Fluid Mechanics**

**Credits:** 3

**Prerequisite(s):** MET 3160 with a grade of "C" or better or permission of instructor

**Description:** In this course, the following topics will be covered: physical properties of fluids, hydrostatics, kinematics, energy considerations, momentum, incompressible flow in pipes, compressible internal flow, pneumatic systems, flowloss calculations and flow measurement methods. Laboratory work will include calibration and use of equipment to measure hydrostatic forces on objects, verification of Bernoulli Equation, losses in piping system, flow profiles, and other fluid systems.

## MET 3215 - Composites Manufacturing

**Credits:** 3

**Prerequisite(s):** MET 1010 or IND 2830, and MET 2200, or permission of instructor

**Description:** This course is designed to provide students with working knowledge in design, manufacturing and selection of fiber-reinforced composite materials for engineering applications. The course introduces the various manufacturing methods utilized in modern industries, such as aerospace, automotive, and renewable energy. Topics include inspection, damage control and repair techniques, as well as material handling, safety and environmental requirements. The course contains laboratory modules designed to provide hands-on experience to emphasize practical aspects of the topics covered.

## MET 3250 - Tool Design and Production Tooling

**Credits:** 3

**Prerequisite(s):** MET 2200 and MTH 1120 with grades of "C" or better

**Description:** The course deals with production tooling requirements and tooling cost estimates. Design of tooling for turret lathes, automatic screw machines, multiple spindle lathes, and production milling machines is treated.

## MET 3260 - Direct Digital Manufacturing

**Credits:** 3

**Prerequisite(s):** MET 1210 or IND 3660 with a grade of "C" or better

**Description:** In this combination lab lecture course, students explore the latest applications of digital 3D scanning and direct digital manufacturing. Through this course, students are introduced to current developments and the critical challenges of digital 3D technologies. Emphasis is placed on practical experience in utilizing departmental equipment to produce digital 3D tiles and output them to appropriate direct digital manufacturing equipment. Students will apply knowledge of 3D scanners for reverse engineering and direct digital manufacturing purposes.

*Note:* Credit will be granted for only one prefix: IND or MET.

**Cross Listed Course(s):** IND 3260

## MET 3300 - Statistical Process Control

**Credits:** 3

**Prerequisite(s):** MET 1310 and MET 3000 with grades of "C" or better

**Description:** This course focuses on statistical process control with emphasis on process capability, troubleshooting, analysis of variance and hypothesis testing.

## MET 3310 - Thermodynamics II

**Credits:** 3

**Prerequisite(s):** MET 3110 and MTH 2410 with grades of "C" or

better

**Description:** This, the second course in thermodynamics, deals with the consequence of the Second Law. The TDS equations are studied, as are entropy and efficiencies of some heat power engines. Standard gas and vapor cycles are investigated. The laboratory work includes various calorimetry, gravimetric and volumetric analyses, nozzles and internal combustion engine tests.

## MET 3320 - Instrumentation Laboratory

**Credits:** 3

**Prerequisite(s):** MET 3180 with a grade of "C" or better

**Description:** The student is introduced to standard mechanical tests and measurement techniques, e.g., installing thermocouples, strain gages, positioning static and total probes. ASME and ASTM test codes are studied, as are OSHA standards. Various physical property and system performance tests are set up, conducted and analyzed.

## MET 3330 - Robotics for Manufacturing

**Credits:** 3

**Prerequisite(s):** MET 2010 and EET 2000 with grades of "C" or better

**Description:** The course examines robotic components utilized in robots and automated systems. Manufacturing automation is analyzed as the robot is integrated with other flexible automation equipment. The focus is how to apply and design robotic, integrated, manufacturing systems. The laboratory work supplements the lectures using industrial robots for different applications.

## MET 3410 - Geometric Dimensioning and Tolerancing

**Credits:** 3

**Prerequisite(s):** MET 1210 and MET 1310 with grades of "C" or better

**Description:** Dimensioning practices as defined by ASME National Standards (Y14.5M-1994) are studied. Tolerance of form, tolerances of position, datums, concentricity, symmetry, and functional gaging concepts are also treated to produce low-cost and high-quality products.

## MET 3610 - 3D Modeling

**Credits:** 3

**Prerequisite(s):** MET 1200 with a grade of "C" or better

**Description:** This is a Pro/Engineer basic design course, which is designed to familiarize students with the basic functionality of Pro/Engineer software package. The course covers the basic functions needed to use Pro/E to create part models, assemblies, and drawings. Emphasis is on the Pro/E design philosophy, used in creating parts and assemblies.

## MET 3630 - Lean Manufacturing Systems Engineering

**Credits:** 3

**Prerequisite(s):** MET 3000 with a grade of "C" or better

**Description:** This course introduces the student to production principles, planning, evaluation, deployment, and integration of Lean manufacturing theory and methods. The course covers the concepts of Lean and Six Sigma for both manufacturing and service businesses. Students are provided an overview of Lean, Six Sigma, and the Kaizen problem-solving methodologies.

## **MET 3735 - Computer Integrated Manufacturing**

**Credits:** 3

**Prerequisite(s):** MET 3630 with a grade of "C" or better

**Description:** This lecture-based course emphasizes the integration of manufacturing enterprise using computer integrated manufacturing (CIM) technologies. It employs CAD/CAM interface and other CIM subsystems, database management, facility layout, product documentation, process planning, production planning and control, Group technology, teamwork, and manufacturing operations and management to bring about a student-designed CIM-oriented enterprise. Results of using CIM on all major elements of product design, and manufacturing production and operational control systems.

## **MET 3980 - Internship in Mechanical Engineering Technology**

**Credits:** 1-15

**Prerequisite(s):** Major in Mechanical Engineering Technology; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## **MET 4000 - Project Engineering**

**Credits:** 3

**Prerequisite(s):** Senior standing

**Description:** The student is introduced to the project or team effort. The need for planning, control, and communication is stressed. Critical path methods are used to develop schedules. Figure-of merit methods are used to select preferred approaches/designs. Technical writing is stressed with an introduction to competitive proposal writing.

## **MET 4010 - Advanced Manufacturing Technology**

**Credits:** 3

**Prerequisite(s):** Grades of "C" or better in MET 3000, MET 3330 and EET 2000; completion of General Studies requirements; and senior standing.

**Description:** The course includes micromonitor process control analysis, fiber optics technology, CMOS technology, ultra precision controlled devices with artificial intelligence systems, industrial robots, fiber optics, and imagining future applications.

## **MET 4070 - Computer Aided Design**

**Credits:** 3

**Prerequisite(s):** MET 3070 and MET 3210 with grades of "C" or better; completion of General Studies requirements; and senior standing.

**Description:** The student studies combined stresses, gearing, brakes, curved beams, etc., and undertakes the design of a complete machine. This is the second in the two-course machine design series. The analysis includes computer solutions.

## **MET 4080 - Computer Aided Manufacturing**

**Credits:** 3

**Prerequisite(s):** MET 2010, MET 3000, and either MET 3210 or EET 2340 with grades of "C" or better

**Description:** This is an advanced, computer-aided manufacturing course. Computer applications in configuration control, purchasing, vendor ratings, production control, inventory control and final product acceptance documentation are treated. Appropriate computer and machining software will be used.

## **MET 4100 - Senior Project I**

**Credits:** 1

**Prerequisite(s):** CET 3135 and JMP 2610 with grades of "C" or better; Senior Standing

**Prerequisite(s) or Corequisite(s):** MET 3070 or MET 3000, and EET 2000 with grades of "C" or better

**Description:** In this course, students are required to work on the planning and designing of a team project in consultation with faculty advisors and industry contacts.

**University Requirement(s):** Senior Experience

## **MET 4110 - Senior Project II**

**Credits:** 2

**Prerequisite(s):** MET 4100 with a grade of "C" or better; Senior Standing

**Prerequisite(s) or Corequisite(s):** MET 4000

**Description:** In this course, the students complete the project they started in MET 4100. The project is built, tested, and demonstrated. Written technical reports and oral presentations on the project are required. Part of this course involves the student working with a faculty member who acts as a consultant.

**University Requirement(s):** Senior Experience

## MET 4280 - Advanced Energy Technology

**Credits:** 3

**Prerequisite(s):** MET 3125, PHY 2311, and PHY 2321 with grades of "C" or better

**Description:** This course focuses on the study of global energy flows, as well as the sources and uses of energy. Biological energy and ecosystems are introduced from the viewpoint of the engineering technologist. Energy-related environmental problems, including air and thermal pollution and radioactivity, are examined.

## MET 4370 - Advanced Composite Structures: Design, Damage, Repair and Testing

**Credits:** 3

**Prerequisite(s):** MET 3215 with a grade of "C" or better

**Description:** This lecture/laboratory course is the introduction of the student to the characterization methods for the anisotropic properties of advanced composite materials consisting of high-performance fibers suspended in polymeric matrices. This course includes study and practical application of design, damage control, composite repair, processes and tooling. Also overviews the concepts, principles, and methods employed for nondestructive evaluation (NDE) of composite structures and materials.

## MET 4480 - Air Conditioning/Refrigeration

**Credits:** 3

**Prerequisite(s):** MET 3110 and MET 3125 with grades of "C" or better

**Description:** In this course, thermodynamics and heat transfer principles to the analysis and design of refrigeration systems and comfort conditioning systems for buildings are introduced. Refrigeration cycles are studied. Operation and rating of system components are evaluated with specific emphasis on heat flow in condensers, evaporators, and cooling towers. Temperature and humidity control, along with air handling equipment and ducting, are studied.

## Meteorology

### MTR 1400 - Weather and Climate

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading, writing, and mathematics pre-assessment placement tests

**Description:** This course introduces the fundamental physical processes in the atmosphere-heat and energy, temperature, pressure, wind, clouds, precipitation, and stability. These concepts provide the basis for understanding weather systems, such as thunderstorms, tornadoes, and hurricanes. These processes are also applied to climatic patterns and the impacts of human activity on weather and climate, such as air pollution and climate change. An optional 1-credit lab course, MTR 2020 Weather and Climate Lab for Scientists, is available for students interested in additional experience in the

measurement and analysis of atmospheric data, and is required for some science programs.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC2

### MTR 1600 - Global Climate Change

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading, writing, and mathematics preassessment placement tests.

**Description:** This course presents the science behind global climate change from an Earth systems and atmospheric science perspective. These concepts then provide the basis to explore the effect of global warming on regions throughout the world. This leads to the analysis of the observed and predicted impacts of climate change on these regions; the effect of these changes on each region's society, culture, and economy; and the efforts of these regions to mitigate or adapt to climate change. The interdependence of all nations will be discussed in regards to fossil fuel-rich regions, regions responsible for greenhouse gas emissions, and regions most vulnerable to the impacts of climate change.

**General Studies:** Natural and Physical Sciences, Global Diversity

**Guaranteed Transfer:** GT-SC2

### MTR 2020 - Weather and Climate Lab for Scientists

**Credits:** 1

**Prerequisite(s):** Algebra (MTH 1109, MTH 1110, or MTH 1112) or higher (MTH 1120, MTH 1400, or MTH 1410)

**Prerequisite(s) or Corequisite(s):** MTR 1400

**Description:** Students are introduced to the basic measurements, calculations and analysis made in the study of atmospheric science. Meteorological lab work in the course includes surface and upper-air charts, thermodynamic diagrams, weather codes, and weather imagery. Students analyze and display weather data in multiple formats, using both traditional hand analysis and using computer analysis and display software.

### MTR 2050 - Community Climate Initiatives

**Credits:** 2

**Prerequisite(s):** Completion of Quantitative Literacy (QL12) Requirement

**Description:** Students interact with local communities to develop climate action plans. To prepare for this, students examine neighborhood carbon and water usage, including statistical and qualitative analysis of different reduction strategies and technologies. This course is service learning based and participation in neighborhood meetings is required.

*Note:* Some sections of this course may be taught as Service Learning.

### MTR 2410 - Weather Observing Systems

**Credits:** 3

**Prerequisite(s):** MTR 2020 or MTR 2400



**Description:** This course provides a survey of the instruments and instrument systems used in operational and research meteorology. The theory of instrument measurement and error, operating principles, and method of operation of surface- and upper-air sensors, as well as radar and satellites, will be presented. The lab component of the course will involve the theory, use, calibration, and maintenance of instruments and the analysis and interpretation of the observations.

## MTR 3000 - Weather Discussion

**Credits:** 1

**Prerequisite(s):** MTR 1400 OR AES 1400

**Description:** In this interactive weather discussion course, students will participate in weekly weather discussions on recent, present, and future weather. Students will become familiar with weather patterns and learn to create weather forecasts through the discussion and interpretation of radar data, satellite animations, weather observations, and forecasting models.

*Note:* This course is repeatable for a maximum of 4 credits.

## MTR 3040 - Computer Programming for Meteorologists

**Credits:** 3

**Prerequisite(s):** MTR 1400 and MTR 2020 are required. MTH 2520 R Programming, MTH 2540 Scientific Computing with Python, or CS 1050 are recommended prerequisites.

**Description:** Students are introduced to the computer programming language Python, the modern language used in the atmospheric sciences. The course content focuses on specific applications to meteorology, including basic universal programming concepts. Students learn to load, manipulate, and analyze meteorological data of various formats, and visualize it through graphs and maps. Students become familiar with a variety of python tools for these tasks while practicing these concepts in a lab setting.

*Note:* Students cannot receive credit for an older class, MTR 2040 Computer Applications for Meteorology, and this course, MTR 3040.

## MTR 3100 - Air Pollution

**Credits:** 3

**Prerequisite(s):** ENV 1200 or MTR 2020 or MTR 2400

**Description:** This course examines the causes and control of air pollution. Topics include pollutant sources and sinks, regional and global-scale pollution problems, monitoring and sampling techniques, regulatory control, meteorological influences, and indoor air quality.

**Cross Listed Course(s):** ENV 3100

## MTR 3330 - Climatology

**Credits:** 3

**Prerequisite(s):** MTR 1400 or GEG 1100, and completion of quantitative literacy

**Description:** Climatology examines the characteristics, distribution,

and causes of global and regional climate. Physical and dynamic mechanisms of climate are emphasized. The course also explores the spatial and temporal distributions of the main climate elements. Climate change topics include paleoclimatology, observed shifts in climate, climate model projections, and potential impacts of global warming.

*Note:* Credit will be granted for only one prefix

**Cross Listed Course(s):** GEG 3330

## MTR 3340 - Climate Change Science

**Credits:** 3

**Prerequisite(s):** MTR 1600 or GEG 1100 or ENV 1200 or GEL 1010 or GEL 1150 or MTR 1400

**Description:** This course examines the physical mechanisms of climate change through an integrative earth systems science lens. These processes explain many of the observed changes within the atmosphere, hydrosphere, cryosphere, biosphere, and lithosphere of the planet. Aspects of dynamic climate change include movement of energy through the Earth system, atmospheric and oceanic circulation, and hydrologic and carbon cycles. This understanding is applied to interpreting climate model projections, with keen attention to climate sensitivity, time scales of changes, and sources of uncertainty in climate prediction. An understanding of the physical processes driving climate models facilitates an examination of climate change impacts on natural and societal systems.

**Cross Listed Course(s):** ENV 3340

## MTR 3400 - Synoptic Meteorology

**Credits:** 3

**Prerequisite(s):** MTR 2020

**Description:** This course presents a descriptive approach to the structure and behavior of mid-latitude, synoptic-scale weather systems. Primary topics include the physics of synoptic-scale air motion, the role of synoptic weather systems in the general circulation, jet streams, airmasses, fronts, and the application of these to cyclones and anticyclones. Elementary quasi-geostrophic theory and weather forecasting are introduced.

## MTR 3410 - Weather Analysis Techniques

**Credits:** 3

**Prerequisite(s):** MTR 3400

**Description:** This is a course in interpretation, understanding, and analysis of weather data, focusing on conventional surface and upper-air data and use of these data in current weather diagnostics. Topics include traditional hand analysis of surface and upper-air weather maps, spatial and temporal cross-sections, thermodynamic diagrams, meso-analyses, and prognostic charts. These topics form the foundation for correct and efficient use of modern computer analysis. This is an essential course for operational and applied research meteorologists.

## MTR 3420 - Radar and Satellite Meteorology

**Credits:** 3

**Prerequisite(s):** MTR 2020 or MTR 2400 and MTH 1110

**Description:** This course provides a physics-based study of the uses of radar and satellites and their application to various meteorological problems. Basic theories of radar and satellites will be applied to the interpretation and analysis of various radar and satellite products. The lab component focuses on the interpretation of radar and satellite imagery using computer display software.

### **MTR 3430 - Atmospheric Thermodynamics**

**Credits:** 3

**Prerequisite(s):** MTH 1410, PHY 2010 or PHY 2311, MTR 2020

**Description:** This course covers classical thermodynamics and its application to atmospheric processes. Main topics include the equation of state, first and second laws of thermodynamics, adiabatic processes of dry and moist air, stability, thermodynamic diagrams, thermodynamic variables, and convection.

### **MTR 3440 - Physical Meteorology**

**Credits:** 3

**Prerequisite(s):** MTH 2410, PHY 2311, PHY 2321, and MTR 2020 or MTR 2400

**Description:** This course is an application of classical physics to common processes in the atmosphere. Main topics include cloud and precipitation physics, atmospheric radiation, radiative transfer, lightning, optical phenomena and weather modification.

### **MTR 3450 - Dynamic Meteorology**

**Credits:** 3

**Prerequisite(s):** PHY 2311, MTH 2410, MTR 2020

**Description:** This course covers the fundamentals of fluid dynamics necessary for understanding large-scale atmospheric motions. The focus of the course is the development, derivation, and analysis of the laws of conservation of mass, momentum, and energy, as they apply to middle latitude, synoptic scale weather systems.

### **MTR 3500 - Hazardous Weather**

**Credits:** 3

**Prerequisite(s):** MTR 1400 or MTR 2400 or AES 1400; and completion of General Studies requirements in Written Communication

**Description:** This course considers the nature and causes of hazardous weather, the predictability of hazardous weather events, and the economic and societal impacts of these events. The strategies for the protection of life and property from hazardous weather are also considered.

### **MTR 3710 - Meteorology Internship**

**Credits:** 1-6

**Prerequisite(s):** Registration with the C2Hub Internship Program.

**Description:** This course provides an on-the-job internship

experience with a meteorology-related company or agency. The experience must be done under qualified supervision and the auspices of an Earth and Atmospheric Sciences faculty member.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note: This course may be repeated for up to 12 credits; the first enrollment must be a minimum of 3 credits.*

### **MTR 3777 - Field Observations of Severe Weather**

**Credits:** 3

**Prerequisite(s):** MTR 2410 and MTR 3410

**Description:** This field-based course is intended to combine classroom theories with actual field observations. Students are required to meet for an one-hour course on safety and expectations before the start of the class. The course will concentrate severe weather field observations across Central and High-Plains. Overnight stay will be necessary due to the ever-changing nature of weather patterns. Additional course fee is required. Students are responsible to pay for the outside incidentals, such as food and drinks.

### **MTR 3920 - Directed Study in Meteorology**

**Credits:** 1-5

**Prerequisite(s):** Permission of Instructor

**Description:** This course provides an opportunity for upper-division students with a strong background in meteorology to pursue study in a specific topic of interest and value. The course requires permission of the instructor and chair of the Earth and Atmospheric Sciences Department and frequent meetings between student and instructor.

### **MTR 4210 - Forecasting Laboratory**

**Credits:** 1

**Prerequisite(s):** MTR 3410

**Description:** This is a laboratory course in which the principles of synoptic meteorology and weather computer technology are used in developing a weather forecast. Students are introduced to computerized weather data access, display, and analysis using meteorological software applications. Students learn to use surface and upper-air data, satellite and radar imagery, numerical model output, and other weather data in the preparation of weather forecasts. Principles of weather briefing and forecast decision making are also introduced.

### **MTR 4400 - Advanced Synoptic Meteorology**

**Credits:** 4

**Prerequisite(s):** MTR 2410, MTR 3410, MTR 3450

**Description:** This course is a calculus-based examination of the three-dimensional structure of mid-latitude, synoptic scale weather systems. Main topics include quasi-geostrophic theory, extratropical cyclone structure and evolution, diagnosis of vertical motions, jet

streams, and frontogenesis. The lab component involves the hand analysis and computer-based analysis of live, forecasted, and archived weather data.

## **MTR 4410 - Numerical Weather Prediction**

**Credits:** 3

**Prerequisite(s):** MTR 3450, MTH 3420, and MTH 1510 or an equivalent course in an approved programming Language

**Description:** This course presents the theoretical background to numerically modeling the atmosphere using the primitive equations. Current numerical models will be analyzed and finite-difference techniques will be applied to a simple computer model of the atmosphere developed during the course.

## **MTR 4500 - Mesometeorology**

**Credits:** 3

**Prerequisite(s):** MTR 3410 and MTH 1410

**Description:** This is an advanced course in recognizing, understanding, and forecasting mesoscale weather events (severe thunderstorms, hailstorms, tornadoes, downslope windstorms, flash floods, snowstorms, etc.) with emphasis on theory, analysis of weather data, and forecast decision making.

## **MTR 4600 - Meteorology Research Seminar**

**Credits:** 3

**Prerequisite(s):** Senior Standing and 12 credits in upper division meteorology completed

**Description:** This is a capstone course required of all meteorology majors. Students engage in a research project that involves the application of scientific methodology to meteorological or climatological data and problem solving. Students learn to do literature searches, create a problem statement, handle data, perform statistical analysis, and present data and results. Technical writing and oral presentation skills are emphasized.

**University Requirement(s):** Senior Experience

## **Military Science (Army ROTC)**

### **MILR 0100 - Military Leadership Lab**

**Credits:** 0

**Prerequisite(s) or Corequisite(s):** MILR 1011 or MILR 1021 or MILR 2031 or MILR 2041 or MILR 3052 or MILR 3062 or MILR 4072 or MILR 4082

**Description:** These 120-minute periods provide Cadets/students with practical leadership experience and performance-oriented, hands-on instruction outside the classroom. Diagnostic evaluations of Cadets in leadership roles are frequently administered. Leadership labs are compulsory for enrolled Cadets.

### **MILR 1011 - Adventures in Leadership I**

**Credits:** 2

**Description:** MILR 1011 introduces students to the personal challenges and competencies that are critical for effective leadership and communication. Students will learn how the personal development of life skills such as cultural understanding, goal setting, time management, stress management, and comprehensive fitness relate to leadership, officership, and the Army profession. Students will be introduced to the structure of the ROTC Basic Course program. The focus is on developing basic knowledge and comprehension of Army leadership dimensions, attributes and core leader competencies while gaining an understanding of the ROTC program, its purpose in the Army, and its advantages for the student.

### **MILR 1021 - Adventures in Leadership II**

**Credits:** 2

**Prerequisite(s):** MILR 1011 or permission of instructor

**Description:** MILR 1021 teaches leadership fundamentals such as setting direction, problem-solving, listening, presenting briefs, providing feedback, and using effective writing skills. Students will explore dimensions of leadership attributes and core leader competencies in the context of practical, hands-on, and interactive exercises. As students become further acquainted with MILR 1021, they will learn the structure of the ROTC Basic Course program. The key objective this semester is to explore (in more detail) the Army's leadership philosophy and learn fundamental military concepts. Emphasis on Army leadership will provide the learner a better understanding of the ROTC program, its purpose in the Army, and its advantages for the student.

### **MILR 2031 - Methods of Leadership and Management I**

**Credits:** 3

**Prerequisite(s):** MILR 1021 or permission of instructor

**Description:** MILR 2031 explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework. Aspects of personal motivation and team building are practiced planning, executing and assessing team exercises. While participation in the leadership labs is not mandatory during the MSL II year, significant experience can be gained in a multitude of areas and participation in the labs is highly encouraged. The focus continues to build on developing knowledge of the leadership attributes and core leader competencies through the understanding of Army rank, structure, and duties as well as broadening knowledge of land navigation and squad tactics. Case studies will provide a tangible context for learning the Soldier's Creed and Warrior Ethos.

### **MILR 2041 - Methods of Leadership and Management II**

**Credits:** 3

**Prerequisite(s):** MILR 2031 or permission of instructor

**Description:** MILR 2041 examines the challenges of leading teams

in the complex operational environment. The course highlights dimensions of terrain analysis, patrolling, and operation orders. Further study of the theoretical basis of the Army Leadership Requirements Model explores the dynamics of adaptive leadership in the context of military operations. MILR 2041 prepares Cadets for MILR 3051. Cadets develop greater self-awareness as they assess their own leadership styles and practice communication and team-building skills. Case studies give insight into the importance and practice of teamwork and tactics in real-world scenarios.

## **MILR 3052 - Military Operations and Training I**

**Credits:** 3

**Prerequisite(s):** MILR 2041 or permission of instructor. Students must be contracted cadets in the Army ROTC to be enrolled in MILR 3052.

**Description:** In MILR 3052 the student will study, practice, and apply the fundamentals of Army leadership, Officership, Army values and ethics, personal development, and small unit tactics at the team and squad level. At the conclusion of this course, the student will be capable of planning, coordinating, navigating, motivating and leading a team or squad in the execution of a tactical mission during a classroom PE, a Leadership Lab, or during a Situational Training Exercise (STX) in a field environment. Successful completion of this course will help prepare the student for success at the ROTC Leader Development and Assessment Course (LDAC) which the student will attend during the summer. The student will receive systematic and specific feedback on their leader attributes values and core leader competencies from their instructor, other ROTC cadre and MSL IV Cadets who will evaluate skills using the ROTC Leader Development Program (LDP) model.

## **MILR 3062 - Military Operations and Training II**

**Credits:** 3

**Prerequisite(s):** MILR 3052, or permission of instructor. Students must be contracted in the Army ROTC to be enrolled in MILR 3062.

**Description:** In MILR 3062, the student will study theoretical and practical applications of small unit leadership principles. The student will focus on managing personnel and resources, conducting the military decision making process, the operations order, and oral communications. The student will be exposed to tactical unit leadership in a variety of environments with a focus on preparation for the summer leader development and assessment course experience.

## **MILR 3090 - Military Theory and Tactical Leadership**

**Credits:** 1

**Prerequisite(s):** MILR 1021 and permission of instructor

**Description:** Students in this course will apply military domain knowledge, engage in small unit leadership skills, and receive instruction on various subjects germane to military operations. Students will examine military tactics, techniques and procedures to

better understand how to successfully accomplish multiple military requirements.

## **MILR 4072 - Adaptive Leadership**

**Credits:** 3

**Prerequisite(s):** MILR 3062 or permission of instructor. Students must be contracted in the Army ROTC to be enrolled in MILR 4072.

**Description:** MILR 4072 transitions the focus of student learning from being trained, mentored and evaluated as an MSL III Cadet to learning how to train, mentor and evaluate underclassmen Cadets. MSL IV Cadets learn the duties and responsibilities of an Army staff officer and apply the Military Decision Making Process, Army Writing Style, and the Army's Training Management and METL Development processes during weekly Training Meetings to plan, execute and assess battalion training events. Cadets examine management and leadership concepts and techniques associated with planning and executing military training and operations at Company and higher echelons. Cadets learn to safely conduct training by understanding and employing the Composite Risk Management Process. Cadets learn how to use the Comprehensive Soldier Fitness (CSF) program to reduce and manage stress.

## **MILR 4082 - Leadership in a Complex World**

**Credits:** 3

**Prerequisite(s):** MILR 4072 or permission of instructor. Students must be contracted cadets in the Army ROTC to be enrolled in MILR 4082.

**Description:** In MILR 4082, Cadets explore the dynamics of leading in the complex situations of current military operations in full spectrum operations (FSO). Cadets will examine differences in customs and courtesies, military law, principles of war, and rules of engagement in the face of international terrorism. Cadets will also explore aspects of interacting with non-government organizations, civilians on the battlefield, and host nation support. The course places significant emphasis on preparing cadets for BOLC B, and officers' first unit of assignment. It uses case studies, scenarios, and exercises to prepare cadets to face the complex ethical and practical demands of leading as a commissioned officer in the United States Army.

## **Music**

### **MUS 0020 - Recital Attendance**

**Credits:** 0

**Description:** Students must attend a total of ten performances, including up to six Convocation Recitals and four or more performances, selected from a list of approved performances. Both the Convocation Recital and the list of other approved performances are provided at the beginning of each semester. Students must enroll during each semester of individual instruction, and must receive a "Satisfactory" grade in as many semesters as are required for their degree in order to graduate.

### **MUS 161A - Class Voice I**

**Credits:** 1

**Prerequisite(s):** MUS 1010 or MUS 1020 or a passing score on the Music Theory I Placement Exam (see department) or Permission of instructor

**Description:** This course offers class instruction in voice to students with little or no previous training.

### **MUS 161B - Class Piano I**

**Credits:** 1

**Prerequisite(s):** MUS 1010, or a passing score on the Music Theory I placement exam (see department), or permission of instructor

**Description:** This course offers class instruction in piano to students of any major with little or no previous experience.

### **MUS 161K - Class Guitar I**

**Credits:** 1

**Prerequisite(s):** MUS 1010 or MUS 1020 or a passing score on the Music Theory I Placement Exam (see department) or Permission of instructor

**Description:** This course offers class instruction in guitar to students with little or no previous training.

### **MUS 162A - Class Voice II**

**Credits:** 1

**Prerequisite(s):** MUS 161A or MUS 1140 or permission of instructor

**Description:** This course is a continuation of MUS 161A: Class Voice I. This class offers instruction in vocal technique and coaching of various vocal styles to students with little or no previous training.

### **MUS 162B - Class Piano II**

**Credits:** 1

**Prerequisite(s):** MUS 161B or permission of instructor upon the class piano placement exam assessment

**Description:** This course offers class instruction in piano to students of any major with no or little previous training. This course is a continuation of MUS 161B.

### **MUS 162K - Class Guitar II**

**Credits:** 1

**Prerequisite(s):** MUS 161K or Permission of instructor

**Description:** This course is a continuation of MUS 161K.

### **MUS 171A - Private Voice I**

**Credits:** 2

### **MUS 172A - Private Voice II**

**Credits:** 2

### **MUS 261B - Class Piano III**

**Credits:** 1

**Prerequisite(s):** MUS 162B or permission of instructor upon the class piano placement exam assessment

**Description:** This course is a continuation of MUS 162B and designed to help students develop further keyboard skills.

### **MUS 261C - Advanced Keyboard Skills I**

**Credits:** 1

**Prerequisite(s):** MUS 1130 and MUS 1140

**Prerequisite(s) or Corequisite(s):** MUS 271B or MUS 273B or permission of instructor

**Description:** This course explores necessary keyboard skills including technical exercises, harmonization, sight reading, score reading, and improvisation. This core course replaces Class Piano I for students whose primary instrument is piano or organ.

### **MUS 262B - Class Piano IV**

**Credits:** 1

**Prerequisite(s):** MUS 261B or permission of instructor

**Description:** This course is a continuation of 261B and designed to help students develop further keyboard skills and pass keyboard proficiency exam.

### **MUS 262C - Advanced Keyboard Skills II**

**Credits:** 1

**Prerequisite(s):** MUS 261C

**Description:** This course builds on the skills attained in MUS 261C, more deeply exploring advanced keyboard skills for piano majors, including technical exercises, harmonization, sight reading, score reading, and improvisation. This core course replaces Class Piano II for students whose primary instrument is piano or organ.

### **MUS 0820 - Zero-Credit Chorale**

**Credits:** 0

**Description:** This course designed to explore and study performance techniques in choral music through the rehearsal and performance of standard ensemble literature. The ensemble is open to all students regardless of major and an audition is required to participate.

*Note:* The one credit option MUS 3820 will still be offered to students who want or need credit for an ensemble experience.

### **MUS 0821 - Zero-Credit University Treble Choir**

**Credits:** 0

**Description:** This course designed to explore and study performance vocal music techniques through the rehearsal and performance of standard ensemble literature. The ensemble is non-auditioned and is

open to students of any major or degree program. This course may be repeated for credit. The ensemble is designed to acquaint the student with as much literature as possible, including a variety of styles, languages, and musical eras, and also instill the discipline necessary to achieve performance standards.

*Note:* The one credit option MUS 3821 will still be offered to students who want or need credit for an ensemble experience.

## **MUS 0822 - Zero Credit University Basso Choir**

**Credits:** 0

**Description:** This course is designed to explore and study performance vocal music techniques through the rehearsal and performance of standard ensemble literature. The ensemble is non-auditioned and is open to students of any major or degree program. This course may be repeated for credit. The ensemble is designed to acquaint the student with as much literature as possible, including a variety of styles, languages, and musical eras, and also instill the discipline necessary to achieve performance standards.

*Note:* The one credit option MUS 3822 will still be offered to students who want or need credit for an ensemble experience.

## **MUS 0824 - Zero-Credit Symphonic Band**

**Credits:** 0

**Description:** This course is designed to explore, study, and perform the wind and percussion, full ensemble, standard works for the developing band. The course builds individual instrumental technique in a full ensemble setting. It is a non-auditioned ensemble and open to all students regardless of their major.

*Note:* The one credit option MUS 3824 will still be offered to students who want or need credit for an ensemble experience.

## **MUS 0827 - Zero Credit Symphony Orchestra**

**Credits:** 0

**Description:** Symphony Orchestra provides students with the opportunity to rehearse and perform orchestral literature at the university level. Students are required to audition in order to participate; however the ensemble is open to students of any major or degree program.

*Note:* The one credit option MUS 3827 will still be offered to students who want or need credit for an ensemble experience.

## **MUS 0828 - Zero Credit Jazz Ensemble**

**Credits:** 0

**Description:** This course is designed to study and explore large ensemble music including traditional Big Band repertoire (e.g. Ellington and Basie, and Ray Charles), Latin music (e.g. Willie Colon, Angel Canales, and Celia Cruz), and Jazz-influenced American popular music (e.g. The Meters, Blood Sweat & Tears, and Earth Wind and Fire) as well as small chamber works within the Jazz Tradition. It is an auditioned ensemble.

*Note:* The one credit option MUS 3828 will still be offered to students who want or need credit for an ensemble experience.

## **MUS 1000 - Introduction to Music**

**Credits:** 3

**Description:** In this course, students investigate the function, structure, style and genre classifications, and aesthetic interpretations of a diverse variety of musical traditions. The students develop and employ a vocabulary for musical description and listen to many different traditions of musical expression. This course is intended for non-music majors.

*Note:* Credit will be granted for only one prefix: HON or MUS.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH1

**Cross Listed Course(s):** HON 1000

## **MUS 1010 - Essential Music Theory Skills**

**Credits:** 2

**Description:** This course covers the techniques of music reading, analysis, and hearing skills by teaching the fundamental principles of meter, rhythm, pitch scales, key signatures, intervals, triads, seventh chords and the keyboard. The application of traditional sight-reading and ear-training techniques are emphasized. This course is designed to prepare music majors, musical theatre majors, and music minors for MUS 1110.

## **MUS 1011 - Fundamentals of Music Theory Lab I**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** MUS 1010 or permission of instructor

**Description:** This course develops music reading, writing, and hearing skills through the application of traditional sight-reading and ear-training techniques. This course is designed for music majors who lack the necessary experience for placement into MUS 1120.

*Note:* No previous training or experience in music is required.

## **MUS 1030 - Composing and Understanding Music for Non-Majors**

**Credits:** 3

**Description:** This course covers the techniques of reading, writing, and composing music by teaching the fundamental principles of music notation and musical logic as they pertain to meter, rhythm, pitch, scales, key signatures, intervals, triads, and the keyboard. Students use basic music software to write and compose musical ideas. No previous training or experience in music is required.

## **MUS 1040 - Music, Race, and Power**

**Credits:** 3

**Description:** Students in this course will come away with a broad foundation for discussing music, race, and power structures. Building on ethnomusicological framing of music in or as culture, students are asked to consider how music can empower individuals and groups in the fight for justice. As a class, we investigate case studies drawn

from around the world, with a variable focus on the intersections of European imperialism, the transatlantic African diaspora, Indigeneity, Asian Americans, and Chicana/o Identities.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH1

**University Requirement(s):** Ethnic Studies & Social Justice

## MUS 1050 - History of Rock and Roll

**Credits:** 3

**Description:** In this course, students survey the origins and history of Rock and Roll. In addition to examining the songs and influence of significant artists, students explore how the issues of race, politics, gender, and the forces of capitalism have shaped this tradition and subsequently popular culture in America.

**General Studies:** Art and Humanities

**Guaranteed Transfer:** GT-AH1

## MUS 1060 - Basic Music Production

**Credits:** 2

**Description:** This course provides students with a survey of modern music production techniques, devices, platforms, artists and repertoire. Students work, create, and collaborate in the world of digital music and incorporate digital video technology into audio productions. The course involves hands on practice using Digital Audio Workstations (DAWs) and video editing software.

## MUS 1071 - Non-major Private Instruction

**Credits:** 1

**Prerequisite(s):** Permission of Instructor

**Description:** This course covers individual private instruction for students of any major with previous music experience to continue to learn performance skills and techniques.

*Note:* This course may be repeated for credit.

## MUS 1110 - Music Theory I

**Credits:** 3

**Prerequisite(s):** MUS 1010 or a passing score on the Music Theory Placement Exam (see department)

**Corequisite(s):** MUS 1120 and MUS 161B

**Description:** This course is the study of the melodic, harmonic, rhythmic, textural, and formal elements of music through analysis and composition, and the development of reading and hearing skills as they relate to these elements. It covers the elements of diatonic music commonly found in classical, jazz, and popular music styles, including Roman numeral and lead sheet analysis, and phrase structure and grouping. Aural and visual recognition of materials is emphasized.

## MUS 1120 - Music Theory Lab I

**Credits:** 1

**Prerequisite(s):** MUS 1010 or a passing score on the Music Theory

Placement Exam (see department)

**Corequisite(s):** MUS 1110 and MUS 161B

**Description:** Students apply reading and hearing skills to the melodic, harmonic, rhythmic, textural, and formal elements of music through singing, counting, and the use of the piano keyboard. This course covers diatonic music based on the triad.

## MUS 1130 - Music Theory II

**Credits:** 3

**Prerequisite(s):** MUS 1110, MUS 1120, MUS 161B

**Corequisite(s):** MUS 1140, MUS 162B

**Description:** This course is a continuation of MUS 1110. This course is the study of the melodic, harmonic, rhythmic, textural, and formal elements of music through analysis and composition, and the development of reading and hearing skills as they relate to these elements. It covers the elements of diatonic music commonly found in classical, jazz, and popular music styles, including Roman numeral and lead sheet analysis, seventh chords, non-chord tones, voice-leading, and an introduction to tonicization. Aural and visual recognition, as well as practical application of materials, is emphasized.

## MUS 1140 - Music Theory Lab II

**Credits:** 1

**Prerequisite(s):** MUS 1110, MUS 1120, MUS 161B

**Corequisite(s):** MUS 1130, MUS 162B

**Description:** This course is a continuation of MUS 1120, and covers diatonic material based on triads and seventh chords, and introduces chromaticism.

## MUS 1210 - Introduction to Musical Styles and Research

**Credits:** 2

**Prerequisite(s):** MUS 1010 or MUS 1110 or a passing grade on the Music Theory I Placement Exam (see department)

**Description:** This course provides students with the introduction to the broad distinctions that define style and genre across a wide variety of musical traditions, including Western classical, Jazz, global and popular traditions. In addition, students become acquainted with to research methods and documentation techniques appropriate to music study, utilizing a wide variety of music databases and traditional library resources. This course prepares students for more advanced music major courses.

## MUS 1310 - Acting in Opera

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** MUS 171A (Applied Voice - any Level)

**Description:** This course offers a technical foundation in acting for the emerging opera singer. The singing actor is presented with unique challenges to expressive performance such as taking inspiration for the energy and tempo of stage movement from what one hears in the

musical score, and learning to master facial and body gesture in a way which is powerfully communicative and at the same time not prohibitive to the process of healthy singing. In addition to acquiring tools to meet these challenges, students learn how to effectively research and develop operatic characters.

*Note:* This course may be repeated for credit.

## **MUS 1650 - Basic Music Technology**

**Credits:** 1

**Prerequisite(s):** MUS 1010 or permission of instructor

**Description:** This course provides music majors with technology skills necessary for contemporary musical practice. The course introduces students to music notation software, digital audio workstations, MIDI synthesizers, basic audio recording and production, basic video recording and production, and website design.

## **MUS 1710 - Private Instruction I**

**Credits:** 2

**Prerequisite(s):** Performance of a successful private instruction audition; and successful completion of MUS 1010 or the Music Theory I Placement Exam (see department)

**Corequisite(s):** MUS 0020; at least one other music course; and the major ensemble in the private instruction area being studied

**Description:** This course covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes required weekly attendance at a one-hour performance class in the area of study in which students perform for one another. At the end of the semester, the student must successfully perform before a faculty jury committee in order to pass the course. This course may be repeated for credit in a different area of study.

*Note:* Students must also enroll in MUS 0020 (Recital Attendance).

## **MUS 1720 - Private Instruction II**

**Credits:** 2

**Prerequisite(s):** MUS 1710

**Corequisite(s):** At least one other music course and the major ensemble in the private instruction area being studied

**Description:** This course is a continuation of MUS 1710, and covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes attendance at departmental recitals/performance and a performance class in the area of study. At the end of the semester, the student must successfully perform before a faculty jury committee in order to pass the course.

*Note:* This course may be repeated for credit in a different area of study.

## **MUS 1892 - Artist Discovery and Development**

**Credits:** 3

**Description:** This course provides a further exploration of artist and

repertoire practice as students learn to find new acts, assess their commercial potential, and develop their talents into viable business plans. While surveying the history and development of artist and repertoire, students learn how to approach unsigned acts and identify workable marketing angles for them; the course will also cover how to develop artists, build their fan base, and present them to a label for acquisition. Students develop skills in targeted research, quality control, leadership, presentation/communication, and management.

## **MUS 1920 - Techniques and Improvisation II**

**Credits:** 3

**Description:** This course builds directly on the previous semester's iteration of this course, providing students an opportunity to further develop a solid foundation of facility on their chosen instrument through a logical progression of exercises and application. Students continue to experiment with basic techniques to further develop a creative approach to improvisation. The class situates technical vocabulary and improvisational skills within a variety of musical contexts across numerous genres. Along the way, students continue to develop a comprehensive method for practicing productively, keeping track of their own progress as they critically reflect on it. Group lectures will be enhanced with masterclasses and opportunities for one-on-one tutorial sessions.

*Note:* This course may be taken one semester per instrument area.

## **MUS 2030 - Jazz and American Improvised Music Musicianship**

**Credits:** 1

**Description:** This course directly applies jazz musicianship skills (including but not limited to: ear-training, rhythmic exercises, sight-reading, transposing, transcribing, scales, chords, and improvisation) to their instrument, voice, and/or piano.

## **MUS 2040 - An Integrated Approach to Art and Music**

**Credits:** 3

**Prerequisite(s):** 24 undergraduate credit hours, including ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021, or Permission of instructor

**Description:** This course enables students to develop awareness and knowledge of the major periods, styles, and landmark works in worldwide visual arts and music. Philosophical and aesthetic foundations of art, music, and the creative process will be explored to enhance this study. Basic elements of music and art will be identified and applied to the study of masterworks. The concepts presented in this integrated approach will be applied to develop artistic sensibility.

*Note:* Credit will be granted for only one prefix: MUS or ARTH.

**Cross Listed Course(s):** ARTH 2100

## **MUS 2110 - Music Theory III**

**Credits:** 3

**Prerequisite(s):** MUS 1130, MUS 1140, MUS 162B



**Corequisite(s):** MUS 2120

**Description:** This course is the study of the melodic, harmonic, rhythmic, textural, and formal elements of music through analysis and composition, and the development of reading and hearing skills as they relate to these elements. It covers the elements of music commonly found in classical, jazz, and popular music styles, modulation, chromatic harmony, extended chords, and an exploration of form. Aural and visual recognition, and practical application of materials is emphasized. This course is the continuation of MUS 1130.

### **MUS 2120 - Music Theory Lab III**

**Credits:** 1

**Prerequisite(s):** MUS 1130, MUS 1140, MUS 162B

**Corequisite(s):** MUS 2110

**Description:** In this course, students receive training in sight-singing, rhythmic coordination, and aural recognition of melodic and harmonic elements, as well as practical theoretical skills applied to the keyboard, including figured bass and lead-sheet realization. Both diatonic and chromatic elements are explored. This course is a continuation of MUS 1140.

### **MUS 2130 - Music Theory IV**

**Credits:** 3

**Prerequisite(s):** MUS 2110, MUS 2120

**Corequisite(s):** MUS 2140

**Description:** This course includes the study of the melodic, harmonic, rhythmic, textural, and formal elements of music through analysis and composition and the development of reading and aural skills as they relate to these elements. It covers music from the post-Romantic era to the present, and the elements of music commonly found in classical, jazz, and popular music styles during this time period. Emphasis is on the techniques used in Impressionism, jazz, and the modern schools of 20th and 21st century composition. This course is a continuation of MUS 2110.

### **MUS 2140 - Music Theory Lab IV**

**Credits:** 1

**Prerequisite(s):** MUS 2110, MUS 2120

**Corequisite(s):** MUS 2130

**Description:** In this course, students receive training in sight-singing, rhythmic coordination, and aural recognition of melodic and harmonic elements, as well as practical theoretical skills applied to the keyboard, including figured bass and lead-sheet realization. Both diatonic and chromatic elements are explored with increased emphasis on highly chromatic melodic and harmonic elements, and increased rhythmic and metric complexity. This course is a continuation of MUS 2120.

### **MUS 2150 - Jazz Theory**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** MUS 2130 and MUS 2140

**Description:** Jazz theory explores music theory through the jazz idiom. Concepts learned in previous theory classes are reinterpreted with jazz-specific vocabulary. In addition, the course investigates theory concepts unique to jazz, such as recognition and comprehension of chord symbols, harmonic and melodic analysis, re-harmonization techniques, harmonic considerations in transcribed improvisations, and jazz arranging. This course presents ideas in chronological order and relates concepts with historic development of harmony, melody, and rhythm through the different jazz styles and eras.

### **MUS 2340 - Foundations of Music Education**

**Credits:** 2

**Prerequisite(s) or Corequisite(s):** MUS 2110

**Description:** This course is designed to acquaint the student with social and intellectual foundations of music education in historical and contemporary frameworks. Students become familiar with philosophical and psychological principles of aesthetic education, curriculum design and implementation, teaching music in diverse contexts, legal and financial structures which affect teaching, and professional development resources. Students examine the role of education and music education in society and develop a personal philosophy for teaching music.

### **MUS 2400 - Vocal Diction I**

**Credits:** 2

**Prerequisite(s):** MUS 172A

**Description:** This course is in an in-depth study of accurate articulation and pronunciation for singing in English, Italian, Spanish, and Latin.

### **MUS 2410 - Basic Vocal Diction**

**Credits:** 1

**Description:** This course covers the use of the International Phonetic Alphabet and the pronunciation for singing in English and other commonly sung languages.

### **MUS 2450 - Jazz Improvisation I**

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** MUS 1130 and MUS 1140

**Description:** This course introduces students to basic skills to spontaneously create melodies in time within a harmonic context. The class focuses on developing a timbral, melodic, and rhythmic vocabulary that enhances the principles of successful group improvisation interaction.

### **MUS 2451 - Jazz Improvisation II**

**Credits:** 1

**Prerequisite(s):** MUS 2450

**Description:** This course presents students with the more advanced skills needed to improvise in a jazz context. With the timbral,

melodic, and rhythmic vocabulary learned and used in the previous course, students continue to build on the skills that allow for the performance of spontaneously created melodies.

## **MUS 2630 - Jazz Piano**

**Credits:** 1

**Prerequisite(s):** MUS 162B

**Description:** This course, a continuation of MUS 162B, Class Piano II, is an introduction to piano proficiency for jazz majors. This class explores various aspects of jazz piano performance and musicianship, including swing feel and syncopation, piano technique, performance of chord progressions, interpretation of chord symbols, voicings, accompaniment patterns, and improvisation.

## **MUS 2650 - Music Technology for Educators**

**Credits:** 1

**Prerequisite(s):** MUS 1110 or Permission of instructor

**Description:** This course is intended for music education majors. The focus is on learning skills necessary for a career in music education: music notation software for the creation of musical scores and parts, sequencing software for composing and transcribing, and the use of databases and spreadsheets to manage the varied activities of a music teacher.

## **MUS 2660 - Electronic Music Composition**

**Credits:** 1

**Prerequisite(s):** MUS 1110; MUS 1650; or permission of instructor

**Description:** This course is a survey of the concepts, technology, and skills required for creating and realizing electronic music in a variety of compositional formats and media environments. In addition, notation software will be thoroughly explored, particularly as it relates to the notation of complex modern composition.

## **MUS 2710 - Private Instruction III**

**Credits:** 2

**Prerequisite(s):** MUS 1720

**Corequisite(s):** MUS 0020, at least one other music course, and the major ensemble in the private instruction area being studied

**Description:** This course is a continuation of MUS 1720, and covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes required weekly attendance at a one-hour performance class in the area of study in which students perform for one another. At the end of the semester, the student must successfully perform before a faculty jury committee in order to pass the course. This course may be repeated for credit in a different area of study.

*Note:* Students must also enroll in MUS 0020 (Recital Attendance).

## **MUS 2720 - Private Instruction IV**

**Credits:** 2

**Prerequisite(s):** MUS 2710

**Corequisite(s):** MUS 0020, at least one other music course, and the major ensemble in the private instruction area being studied

**Description:** This course is a continuation of MUS 2710, and covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes required weekly attendance at a one-hour performance class in the area of study in which students perform for one another. At the end of the semester, the student must successfully perform before a faculty jury committee in order to pass the course.

*Note:* This course may be repeated for credit in a different area of study. Students must also enroll in MUS 0020 (Recital Attendance).

## **MUS 2730 - Performance III**

**Credits:** 3

**Prerequisite(s):** MUS 1720, MUS 1110, MUS 1120 and a successful performance concentration audition

**Corequisite(s):** MUS 0020, at least one other music course, and the major ensemble in the private instruction area being studied

**Description:** This course is a continuation of MUS 1720 and is only for students majoring in music performance. It covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes required weekly attendance at a one-hour performance class in the area of study in which students perform for one another. At the end of the semester, the student must successfully perform before a faculty jury committee in order to pass the course.

*Note:* This course may be repeated for credit in a different area of study. Students must also enroll in MUS 0020 (Recital Attendance).

## **MUS 2740 - Performance IV**

**Credits:** 3

**Prerequisite(s):** MUS 2730 and a successful performance concentration audition

**Corequisite(s):** MUS 0020, at least one other music course, and the major ensemble in the private instruction area being studied

**Description:** This course is a continuation of MUS 2730 and is only for students majoring in music performance. It covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes required weekly attendance at a one-hour performance class in the area of study in which students perform with one another. At the end of the semester, the student must successfully perform before a faculty jury committee in order to pass the course.

*Note:* This course may be repeated for credit in a different area of study. Students must also enroll in MUS 0020 (Recital Attendance).

## **MUS 2840 - Session Styles I**

**Credits:** 2

**Prerequisite(s):** MUS 1010, MUS 1110, MUS 1120

**Corequisite(s):** MUS 2850

**Description:** This course requires students to perform a diverse range

of contemporary and iconic musical styles in the popular idiom to high standards. Students are required to listen to and analyze a range of recordings to assess their stylistic sonic qualities and nuances. Instructors provide historical and cultural context for each style as well as performance training and guidance in critical listening skills. Students are required to read and interpret song charts as well as play by ear while performing in various styles/genres. Group sessions are discipline-specific, and are supported by one-on-one tutorials and master classes.

## MUS 2842 - Session Styles II

**Credits:** 2

**Prerequisite(s):** MUS 1010, MUS 1110, MUS 1120, MUS 2840

**Description:** Building on the skills and knowledge gained in MUS 2840: Sessions Styles I, this course focuses on the more advanced skills necessary to be a successful working musician in studio and live sessions. Particular emphasis will be placed on reading and interpreting song charts in a diverse range of contemporary and iconic musical styles in the popular idiom. Students listen to and analyze a more complex range of recordings to assess their stylistic sonic qualities. Instructors provide historical and cultural context for each style as well as further performance training and guidance in developing more nuanced critical listening skills. Group sessions are discipline-specific, and are supported by one-on-one tutorials and master classes.

## MUS 2850 - Artist Inquiry I

**Credits:** 3

**Prerequisite(s):** MUS 1010

**Description:** In this course, students study and learn to perform the particular techniques, styles, repertoire, and sounds of artists within the proper historical, cultural, and social contexts. This course outlines a basic chronological history of American popular music with an emphasis on rock 'n' roll (broadly conceived).

*Note:* This course may be taken once per instrument area.

## MUS 2852 - Artist Inquiry II

**Credits:** 3

**Prerequisite(s):** MUS 2850

**Description:** This course is the second course in a sequence. This course allows students to continue to study and perform the particular techniques, styles, repertoire, and sounds of artists within their proper historical, cultural, and social contexts. This course continues to outline a basic chronological history of American popular music with an emphasis on rock 'n' roll (broadly conceived).

## MUS 2860 - Notation and Chart Writing

**Credits:** 3

**Prerequisite(s):** MUS 1130, MUS 1140

**Description:** In this course, students gain experience with the ability to communicate their ideas more effectively through written notation, using a variety of methods and techniques for producing scores, lead

sheets, and charts. The course examines a range of pre-existing charts and scores from studio sessions and live tours for students to become more familiar with standard industry practices, and determining the ways that work best for their own compositions. Enhancing their musical literacy and aural skills, students transcribe songs from multiple genres, notating their various instrumental parts and vocals in a number of formats, including conventional Western notation, drum charts, rhythm and slash notation, and the Nashville Number System.

## MUS 2862 - Song Arrangement I

**Credits:** 2

**Prerequisite(s):** MUS1130, MUS1140, MUS1864, MUS 2860

**Description:** This course focuses on transforming original raw song material into fully formed ensemble arrangements. Students are introduced to basic concepts in orchestration for the modern pop and rock ensemble: learning the fundamental attributes, functions, and ranges of the guitar, bass, drums, vocals, and piano in order to understand how to create viable arrangements for these instruments that work in multiple idioms. Students deconstruct the rhythm sections and vocals of existing songs to understand how and why they work as a unit. Students create re-arrangements and remixes of existing songs, but also work on ensemble arrangements of original material.

## MUS 2864 - Song Arrangement II

**Credits:** 2

**Prerequisite(s):** MUS 2862

**Description:** Building on the first semester in this sequence (MUS 2862), this course continues to focus on transforming original raw song material into fully formed arrangements for contemporary ensembles. Students learn more advanced concepts in orchestration, including extended techniques and exploiting the sonic possibilities for guitar, bass, drums, vocals, and piano to create innovative arrangements of existing and original material. Students continue to deconstruct the rhythm sections and vocals of existing songs to understand how and why they work as a unit. Students explore the inclusion of strings, brass, and woodwinds into popular music, as well as other instruments common to pop arrangements, such as mandolin, organ, and synthesizer.

## MUS 2865 - Advanced Lyric Writing

**Credits:** 2

**Description:** Building on the previous course in this sequence, this course explores advanced techniques, methods, and practices for creating subject matter and lyrics. While refining previously learned methods, students are introduced to more advanced ways of conceptualizing lyric writing. Students critically examine and deconstruct a range of pre-existing lyrics from songwriters across a wide spectrum of genres and styles. Students refine their own artistic practices to create original lyrical content as well as reflect on their own creative process.

## MUS 2866 - Writing for Artists

**Credits:** 3

**Prerequisite(s):** MUS 2860

**Description:** This course explores writing original material for existing established artists in numerous contemporary genres, including solo and group arrangements. Students develop a familiarity with the contemporary trends in multiple idioms to write for artists across a range of styles to specific prompts. Students also explore ways for young songwriters to promote and disseminate their own compositions to get noticed by industry-established acts. Students directly apply notation skills learned in Notation and Chart Writing.

## MUS 2880 - Self-Employment Skills in Music

**Credits:** 3

**Description:** This course focuses on how to assess and exploit a variety self-employment opportunities available within the contemporary music industry. Students learn the fundamentals of starting and managing their own music-related business as well as how to manage their personal finances as they relate to self-employment. Recognizing the volatility of the music industry, students learn how to navigate times of abundance and scarcity.

## MUS 2882 - Establishing an Artist

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** MUS1880, MUS1882, MUS1890, MUS1892

**Description:** Building on the artist and repertoire skills developed previously, in this course students focus on how to break (i.e., establish) new artists into the mainstream music industry. By examining a range of case studies, students learn to expose an artist to multiple audiences and broaden their reach to various markets. This class explores marketing strategies, networking, short and long term planning, problem solving, leadership, and other skills necessary to establish an artist in the contemporary music market.

## MUS 2886 - Music Industry Income Streams

**Credits:** 2

**Prerequisite(s):** MUS 1892

**Description:** This course focuses on understanding the various ways in which artists earn income from the perspective of an artist manager. This includes a survey of a multitude of income streams to create a diverse approach to creating, and advising on, revenue opportunities for artists. Students learn about long-term and short-term financial planning, cost-benefit analysis, budget forecasting, and cash flow management. Students develop a basic financial literacy as it relates to the music business, honing their ability to communicate with accountants, agents, banks, and third-party investors.

## MUS 2888 - International Music Market

**Credits:** 3

**Description:** This course offers an overview of how principles learned in that class apply overseas. Students learn how to break and establish artists outside of the US market, including an introduction to, and analysis of, the primary stakeholders in the global music industry. This class explores the key similarities and differences between the US and non-US markets, including cultural dynamics, legal structures, distribution channels, performance opportunities, and marketing strategies. Students also examine historical and current trends in various overseas markets and discuss how artists stay relevant over time.

## MUS 2890 - Home Recording

**Credits:** 3

**Prerequisite(s):** MUS 1000; MUS 1120; ENG 1020

**Description:** This course covers the fundamentals of multi-track recording techniques, mixing, and mastering, enabling students to produce their own home recordings to a professional standard. Students learn to record a range of instruments and ensembles using numerous types of hardware and software.

## MUS 2910 - Intermediate Techniques and Improvisation I

**Credits:** 3

**Prerequisite(s):** MUS 1920

**Description:** Building upon Techniques and Improv I and II, this course provides students the opportunity to further develop technical facility on their chosen instrument along with a deeper understanding of improvisatory skills. This involves a logical progression of intermediate level exercises and application. Students are challenged to experiment with intermediate level techniques to further develop a creative approach to improvisation. The course situates intermediate technical vocabulary and improvisational skills within a variety of musical contexts across numerous genres.

*Note:* This course may be taken once per instrument area.

## MUS 2920 - Intermediate Techniques and Improvisation II

**Credits:** 3

**Prerequisite(s):** MUS 2910

**Description:** This course builds directly on MUS 2910: Intermediate Techniques and Improv I, providing students an opportunity to further develop technical facility on their chosen instrument while advancing their improvisational abilities. This involves a logical progression of advanced-intermediate exercises and applications. Students experiment with an advanced-intermediate level of techniques to further develop a creative approach to improvisation. The class situates technical vocabulary and improvisational skills within a variety of challenging musical contexts across numerous genres at an advanced-intermediate level.

## MUS 2940 - Group Performance Instruction I

**Credits:** 2

**Prerequisite(s):** MUS 1110, MUS 1120

**Description:** This class offers group instruction on an instrument to students with little or no previous training.

*Note:* This course may be taken once per instrument area.

## **MUS 2950 - Group Performance Instruction II**

**Credits:** 2

**Prerequisite(s):** MUS 2940

**Description:** This is a continuation of MUS 2940: Group Performance I offering group instruction on a specific instrument.

*Note:* This course may be taken once per instrument area.

## **MUS 3000 - Musics of America**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** This course explores American music and its unique blend of African, Indigenous, Hispanic, Asian, and European colonial musical styles and genres. Students develop an understanding of the musical style, aesthetic viewpoints, and function of the folk, religious, classical, popular, and commercial musics of these groups. The course materials also consider the interaction of these musical styles and genres within the context of sociocultural dynamics of the United States. The students encounter a broad variety of musical expressions and study those expressions within the context of culture.

**General Studies:** Arts and Humanities

**University Requirement(s):** Ethnic Studies & Social Justice

## **MUS 3015 - Global Pop**

**Credits:** 3

**Prerequisite(s):** ENG 1020

**Description:** This survey of global pop explores musical thought and processes through an examination of the development of "world music" and "world beat" in the 20th and 21st century, including its meaning and importance to contemporary culture as well as its history and impact. The class addresses the complex relationships of music and mass media while addressing themes of nationalism, popular resistance and subversion, censorship, transnational identity, gender representation, and cultural hegemony in popular music.

**General Studies:** Arts and Humanities, Global Diversity

## **MUS 3020 - History of Jazz**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** In this class, students explore the many facets of American jazz as a history of African American musical expression. Through a survey of important events and major figures, including their effect on music through their actions and those of their followers, students learn the tools of active listening by gaining a greater understanding of the musical elements through listening, reading, and performing. The course covers minstrelsy, ragtime, blues, New Orleans and classic jazz, bebop and related movements,

as well as current trends of the genre. This course centralizes the perspective that jazz is inexorably tied to the experience of African American musicians, who simultaneously were influenced by and responded to the dominant culture of popular music in the creation of something new.

**General Studies:** Arts and Humanities

**University Requirement(s):** Ethnic Studies & Social Justice

## **MUS 3030 - Traditional American Improvised Styles**

**Credits:** 3

**Prerequisite(s):** ENG 1010, MUS 1000 or permission of instructor

**Description:** This course examines the music and musicians that contribute to the development of improvisation in American folk music outside of the tradition of Jazz. This course surveys the phenomenon of "Americana," music which is derived from the various forms of American roots music, comprised of the wide variety of cultural practices found in the United States. The blues, bluegrass, Appalachian music, and other culturally varied forms of American improvised music are covered.

## **MUS 3050 - Musics of the World**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021

**Description:** This course explores the diverse forms of musical expression found within cultures from around the world. In addition to surveying a variety of musical practices, aesthetic systems, and functions of music, the fundamental theoretical approaches of ethnomusicology are introduced and employed. Through an exploration of case studies selected from diverse music cultures, the course focuses on topics such as identity, race, ethnicity, gender, class, religion, memory, migration, globalization, tourism, social, and political movements.

**General Studies:** Arts and Humanities, Global Diversity

## **MUS 3060 - Art and Music for Elementary Teachers**

**Credits:** 3

**Prerequisite(s):** ENG 1020 and at least junior standing; or permission of instructor

**Description:** This course enables students to develop awareness and knowledge of philosophical and aesthetic foundations of the arts with a specific focus on art and music. Appropriate methods of teaching art and music in the elementary curriculum, including the integration of literacy and mathematics, will be explored. Students will use creative and critical thinking skills to develop artistic sensibility.

*Note:* Credit will be granted for only one prefix: ARTH or MUS.

**Cross Listed Course(s):** ARTH 3060

## **MUS 3070 - Songwriting**

**Credits:** 2

**Prerequisite(s):** MUS 1110 and MUS 1120

**Description:** This course provides students with the introduction of the basic aesthetic and communicative concepts of songwriting

with regard to tradition and to contemporary trends, enabling students to articulate a conscious method appropriate to their own aesthetic approaches to songwriting. Students compose original songs with various features (lyrics, melody, harmony, etc.) and document them for communication and performance in various genres, styles, and situations.

### **MUS 3099 - The Beatles: Music and Culture**

**Credits:** 3

**Prerequisite(s):** ENG 1020

**Description:** This course explores the music and cultural phenomenon of the Beatles. Their music is contextualized within the history of popular music and the social and political climate of post-WW II Britain and the United States.

**General Studies:** Arts and Humanities

### **MUS 3100 - Counterpoint**

**Credits:** 3

**Prerequisite(s):** MUS 2110 and MUS 2120

**Description:** This course introduces students to the contrapuntal styles of the 16th, 18th, and 20th centuries. Topics include species counterpoint of the 16th century, the fugal process of the 18th century, and the contrapuntal techniques and devices of the 20th century. Representative composers include Palestrina and Gesualdo (16th), J. S. Bach (18th), and Shostakovich and Hindemith (20th). The course includes both analysis of and composition in the styles of each of the three eras.

### **MUS 3150 - Arranging and Orchestration**

**Credits:** 2

**Prerequisite(s):** MUS 2110; MUS 2120; MUS 3460; and MUS 3410 or MUS 3430 or MUS 3450

**Description:** Students will study the technical capabilities and notation of all the instruments and voices, individually and in ensembles, and score written music for small instrumental and/or vocal ensembles and for orchestra.

### **MUS 3160 - Jazz Composition and Arranging**

**Credits:** 1

**Prerequisite(s):** MUS 2150, MUS 3020

**Description:** This course gives students the skills needed to arrange for jazz combo and big band. Techniques studied include those employed by composer/arrangers such as Charlie Parker, Dizzy Gillespie, Miles Davis, Fletcher Henderson, Duke Ellington, Count Basie, Billy Strayhorn, Bill Evans, Charles Mingus, Sun Ra, Toshiko Akiyoshi, Thad Jones, and Maria Schneider. The students create their own arrangement for jazz combo and big band that is played in class.

### **MUS 3170 - Arranging for Educators**

**Credits:** 1

**Prerequisite(s):** MUS 2110 and MUS 2120

**Description:** This course provides the prospective music educator with the skills needed to create functional performance material for the instrumentation at their disposal, as well as introducing rudimentary orchestration and arranging skills.

### **MUS 3200 - Topics in Music History and Literature: Variable Topics**

**Credits:** 3

**Prerequisite(s):** MUS 3220 or Permission of instructor

**Description:** This course is designed to study the history and literature of a single musical style, era, medium, or composer.

*Note:* This course may be repeated for credit under different topics.

### **MUS 3210 - Western Music History I**

**Credits:** 3

**Prerequisite(s):** MUS 2110 and at least junior standing

**Description:** This course is intended for music majors. It comprises a comprehensive survey of Western music history and musical style through the examination of recordings and musical scores. This course traces the origins of Western music in Ancient Greek civilization, and explores the development of polyphony and rhythmic notation in the Middle Ages. An exploration of musical developments and ideas in the fifteenth and sixteenth centuries of the Renaissance follows, and the course concludes with study of the musical Baroque era, spanning roughly 1600 to 1750.

### **MUS 3220 - Western Music History II**

**Credits:** 3

**Prerequisite(s):** MUS 3210 and MUS 2130

**Description:** This course is intended for music majors. It comprises a comprehensive survey of Western music history and musical style through the examination of musical scores and primary and secondary source readings. This course traces the musical developments of the Classical era in the late eighteenth century, followed by a study of the development of musical style and aesthetics in the Romantic era of the nineteenth century. The course finishes with an overview of the radical musical developments of the twentieth century and considers new musical trends at the beginning of the twenty-first century.

### **MUS 3240 - Elements of Songwriting**

**Credits:** 3

**Description:** This course provides students with the basic aesthetic and communicative concepts of songwriting with regard to tradition and to contemporary trends and enables students to articulate a conscious method appropriate to their own aesthetic approaches to songwriting in the context of traditional songwriting. The course includes composing original songs with various features (lyrics, melody, harmony, etc.) and document them so that each song may be communicated and performed in various different genres, styles, and situations.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** ENG 3570

## **MUS 3250 - Basic Vocal Pedagogy and Diction**

**Credits:** 2

**Description:** This course covers use of the International Phonetic Alphabet and associated sounds for singing in English and other commonly sung languages as well as physiology of the human vocal instrument and practical instruction for vocal production.

*Note:* Students cannot earn credit for both MUS 3250 and MUS 2410 or MUS 3490.

## **MUS 3260 - Professional and Career Development for the 21st Century Musician**

**Credits:** 3

**Prerequisite(s):** MUS 1720

**Description:** This course offers a foundation upon which students can develop the musical careers they seek and provides firsthand experience with a few of the basic tools all modern musicians need to succeed, including: resume and cover letter writing, interviewing, networking, personal finance management, negotiating contracts, establishing a strong work ethic, developing marketing strategies, and identifying market niches they can fill. Students practice and apply skills through course activities, both in-classroom and online, providing a bridge to their professional career.

## **MUS 3350 - Teaching General Music**

**Credits:** 2

**Prerequisite(s):** MUS 2340

**Corequisite(s):** MUS 3351, CLD 3510

**Description:** Students develop competencies for teaching general music in both elementary and secondary school music settings. Course content includes experience with traditional elementary methodologies, application of technology to music, and non-ensemble based musical opportunities. Additional instruction includes classroom management, assessment strategies, and the role of general music in education.

## **MUS 3351 - Supervised Field Experience in General Music**

**Credits:** 1

**Prerequisite(s):** MUS 2340 and formal admission to the music education program

**Corequisite(s):** MUS 3350, CLD 3510

**Description:** The student works with elementary general music teachers in area schools in a 55-hour supervised field experience. The course is designed to integrate concepts developed in MUS 3350 with practice in classroom environments.

*Note:* This course must be taken concurrently with MUS 3350 and CLD 3510. At the end of the semester, the student must successfully pass the final course assessment with the music education faculty in order to pass the course and continue in the music education program.

Further information about the process may be found in the Department of Music Student Handbook.

## **MUS 3360 - Instruments in General Music**

**Credits:** 1

**Description:** Students develop practical skills in playing instruments typically used in the P-12 general music class. These instruments include, but are not limited to barred percussion instruments, non-pitched percussion, drums, recorder, guitar, and ukulele.

## **MUS 3390 - The Inclusive Music Classroom**

**Credits:** 2

**Prerequisite(s):** MUS 2340 or permission of instructor

**Description:** This course provides a survey of various exceptionalities of K-12 students, ranging from mild to severe, with a focus on meeting the needs of these students in the music classroom. Information about child abuse and medical conditions, and their possible effects on student learning and behavior, is addressed. Teacher-candidates are introduced to special education processes with music content that facilitates the learning process of students with special needs, including strategies and curriculum adaptations for inclusion in music and art classrooms.

## **MUS 3400 - Vocal Diction II**

**Credits:** 2

**Prerequisite(s):** MUS 2400

**Description:** This course is an advanced study of proper diction in classical vocal performance. Students will study the characteristic nuances of German and French vowel and consonant pronunciation in speech and singing, and demonstrate these skills in class performances and presentations.

## **MUS 3410 - String Techniques and Pedagogy**

**Credits:** 1

**Description:** The course offers practical instruction in the technique of playing and teaching string instruments as well as the organization of string programs in the public schools.

## **MUS 3420 - Guitar Techniques and Pedagogy**

**Credits:** 1

**Description:** This course covers practical instruction in playing guitar with an emphasis on acquainting students with techniques and materials necessary for teaching guitar.

## **MUS 3430 - Woodwind Techniques and Pedagogy**

**Credits:** 1

**Description:** This course covers practical instruction in playing woodwind instruments with an emphasis on acquainting students with techniques and materials necessary in teaching woodwinds.

## **MUS 3450 - Brass Techniques and Pedagogy**

**Credits:** 1

**Description:** This course covers practical beginning instruction in playing brass instruments with an emphasis on acquainting students with techniques and materials necessary for teaching brass instruments.

## **MUS 3460 - Percussion Techniques and Pedagogy**

**Credits:** 1

**Description:** This course covers practical beginning instruction in playing percussion instruments with an emphasis on acquainting students with techniques and materials necessary for teaching percussion instruments.

## **MUS 3470 - Wind and Percussion Pedagogy for Choral Educators**

**Credits:** 1

**Prerequisite(s):** Course restricted to students pursuing a BME degree in the Vocal Concentration only

**Description:** This course cannot substitute for any techniques courses required for other degrees. This course covers practical instruction in playing of woodwind, brass, and percussion instruments, with an emphasis on acquainting students with techniques and materials necessary for teaching these instruments.

## **MUS 3490 - Elements of Vocal Pedagogy**

**Credits:** 1

**Prerequisite(s):** MUS 162A

**Description:** This course covers practical instruction in vocal production, including the physiology of the human voice (anatomy of the larynx, respiration, resonance, and articulation), young voices and how to teach them, and methods and philosophy of teaching voice.

## **MUS 3510 - Basic Conducting**

**Credits:** 2

**Prerequisite(s):** MUS 2130 and MUS 2140

**Description:** This is a basic course in the fundamentals of conducting. The fundamental skills of conducting will be presented and practiced.

## **MUS 3520 - Choral Conducting**

**Credits:** 2

**Prerequisite(s):** MUS 3510 and MUS 262B

**Description:** This course is designed to provide an advanced study of choral conducting, including physical gesture, score study, rehearsal techniques, and conducting in performance. Emphasis will be placed on the craft of conducting, though students will be exposed to core instrumental literature through practical engagement.

## **MUS 3530 - Instrumental Conducting**

**Credits:** 2

**Prerequisite(s):** MUS 3510 and MUS 262B

**Description:** This course is designed to provide an advanced study of instrumental conducting, including physical gesture, score study, rehearsal techniques, and conducting in performance. Emphasis will be placed on the craft of conducting, though students will be exposed to core instrumental literature through practical engagement.

## **MUS 3540 - Advanced Conducting**

**Credits:** 2

**Prerequisite(s):** MUS 3510 and MUS 262B

**Description:** This course is designed to provide an advanced study of conducting, including the physical gesture, score study, rehearsal techniques, and conducting in performances. Emphasis will be placed on the craft of conducting, though students will be exposed to core instrumental and choral literature through practical engagement.

## **MUS 3640 - Improvisation**

**Credits:** 1

**Prerequisite(s):** MUS 2130; and MUS 2720 or MUS 2740

**Description:** This course examines and practices the art of improvisation in music. Melodic, rhythmic, and harmonic aspects as well as components of individual style and the nature of expression in music are studied through solo and group improvisation. Additionally, students study the aesthetic value of improvising, and how improvising can be used to enrich the performance of all styles of music.

## **MUS 3650 - Basic Techniques of Composition**

**Credits:** 2

**Prerequisite(s) or Corequisite(s):** MUS 2110, MUS 2120

**Description:** This course involves the study of the craft of musical composition, from practical, theoretical, and aesthetic points of view, through the discussion and performance of individual writing projects.

*Note:* This course may be repeated for credit.

## **MUS 3660 - Scoring for Film and Television**

**Credits:** 3

**Prerequisite(s):** MUS 1130 or MUS 1140

**Description:** Students in this course develop an understanding of the art, history, business, and technique of composing for film, television, and digital media (i.e., video games). Students encounter examples of established, genre-specific styles, and compose (and record) genre-specific music queues that are frame accurate and synchronized to provided film and video segments.

## **MUS 3710 - Private Instruction V**



**Credits:** 2

**Prerequisite(s):** MUS 1130, MUS 1140, MUS 2720

**Corequisite(s):** MUS 0020, at least one other music course, and the major ensemble in the private instruction area being studied

**Description:** This course is a continuation of MUS 2720 and covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes required weekly attendance at a one-hour performance class in the area of study in which students perform for one another. At the end of the semester, the student must successfully perform before a faculty jury committee in order to pass the course. This course may be repeated for credit in a different area of study.

*Note:* Students must also enroll in MUS 0020 (Recital Attendance).

### **MUS 3711 - Private Instruction V (Composition)**

**Credits:** 3

**Prerequisite(s):** MUS 3650

**Description:** This course provides individual instruction in composition. It includes required weekly attendance at a one-hour performance class. At the end of the semester, the student must successfully pass a review by a faculty jury committee in order to pass the course. Students must also enroll in MUS 0020 (Recital Attendance).

### **MUS 3720 - Private Instruction VI**

**Credits:** 2

**Prerequisite(s):** MUS 3710

**Corequisite(s):** MUS 0020, at least one other music course, and the major ensemble in the private instruction area being studied

**Description:** This course is a continuation of MUS 3710 and covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes required weekly attendance at a one-hour performance class in the area of study in which students perform for one another. At the end of the semester, the student must successfully perform before a faculty jury committee in order to pass the course. A thirty minute junior recital may be substituted for the jury requirement for MUS 3720.

*Note:* This course may be repeated for credit in a different area of study. Students must also enroll in MUS 0020 (Recital Attendance).

### **MUS 3730 - Performance V**

**Credits:** 3

**Prerequisite(s):** MUS 2110, MUS 2120, MUS 2740 and a successful performance concentration audition

**Corequisite(s):** MUS 0020, at least one other music course, and the major ensemble in the private instruction area being studied

**Description:** This course is a continuation of MUS 2740 and is only for students majoring in music performance. It covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes required weekly attendance at a one-hour performance class in the area of study in which students perform for

one another. At the end of the semester, the student must successfully perform before a faculty jury committee in order to pass the course.

*Note:* This course may be repeated for credit in a different area of study. Students must also enroll in MUS 0020 (Recital Attendance).

### **MUS 3740 - Performance VI**

**Credits:** 3

**Prerequisite(s):** MUS 3730 and a successful performance concentration audition

**Corequisite(s):** MUS 0020, at least one other music course, and the major ensemble in the private instruction area being studied

**Description:** This course is a continuation of MUS 3730 and is only for students majoring in music performance. It covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes required weekly attendance at a one-hour performance class in the area of study in which students perform for one another. At the end of the semester, the student must successfully perform before a faculty jury committee in order to pass the course. A thirty-minute junior recital may be substituted for the jury requirement for MUS 3740.

*Note:* This course may be repeated for credit in a different area of study. Students must also enroll in MUS 0020 (Recital Attendance).

### **MUS 3741 - Private Instruction VI (Composition)**

**Credits:** 3

**Prerequisite(s):** MUS 3711

**Description:** This course provides individual instruction in composition. It is a continuation of work begun in MUS 3711. It includes required weekly attendance at a one-hour performance class. At the end of the semester, the student must successfully pass a review by a faculty jury committee in order to pass the course. Students must also enroll in MUS 0020 (Recital Attendance).

### **MUS 3810 - Ensemble**

**Credits:** 1

**Description:** This course is designed to explore and study performance techniques through the rehearsal and performance of standard ensemble literature. Course can be repeated for credit.

*Note:* This course may be repeated for credit.

### **MUS 3816 - Early Music Ensemble**

**Credits:** 1

**Description:** This ensemble engages musical traditions from the Middle Ages through the Baroque eras. The ensemble utilizes period instruments, and employs historically informed practices. Historical sources are used, including original notation and interpretative and improvisational practices. It is a non-auditioned ensemble and open to all students regardless of their major. All instruments and voices are welcome, though some musical experience is preferred.

*Note:* This course may be repeated for credit.

## MUS 3817 - String Sinfonietta

**Credits:** 1

**Description:** String Sinfonietta teaches students how to rehearse and perform in a large string ensemble setting. Students may have limited prior experience performing on a string instrument. It is a non-auditioned ensemble and open to all students regardless of their major.

*Note:* This course may be repeated for credit.

## MUS 3818 - Mariachi Ensemble

**Credits:** 1

**Description:** This ensemble explores the rich musical tradition of Mariachi and other Mexican and Southwestern American music traditions through participation and performance. Students learn a repertoire of songs for performance at the end of the semester. Some musical experience is preferred. Instruments include the guitar, vihuela, violin, trumpet, guitarrón, and voice. This course may be repeated for credit, and it is open to all students and all majors.

*Note:* This course may be repeated for credit.

## MUS 3819 - Chamber Music

**Credits:** 1

**Description:** Chamber music provides students with the opportunity to rehearse and perform in varied chamber ensembles. Students are required to audition in order to participate, however the various chamber ensembles are open to students of any major or degree program.

*Note:* This course may be repeated for credit.

## MUS 3820 - Chorale

**Credits:** 1

**Description:** This is a choral music ensemble course designed to explore and study performance techniques through the rehearsal and performance of standard ensemble literature. The ensemble is open to all students regardless of major and an audition is required to participate.

*Note:* This course may be repeated for credit.

## MUS 3821 - University Treble Choir

**Credits:** 1

**Description:** This is a vocal music ensemble course designed to explore and study performance techniques through the rehearsal and performance of standard ensemble literature. The ensemble is non-auditioned and is open to students of any major or degree program. This course may be repeated for credit. The ensemble is designed to acquaint the student with as much literature as possible, including a variety of styles, languages, and musical eras, and also instill the discipline necessary to achieve performance standards.

*Note:* This course may be repeated for credit.

## MUS 3822 - University Basso Choir

**Credits:** 1

**Description:** This is a vocal music ensemble course designed to explore and study performance techniques through the rehearsal and performance of standard ensemble literature. The ensemble is non-auditioned and is open to students of any major or degree program. This course may be repeated for credit. The ensemble is designed to acquaint the student with as much literature as possible, including a variety of styles, languages, and musical eras, and also instill the discipline necessary to achieve performance standards.

*Note:* This course may be repeated for credit.

## MUS 3823 - Auraria Choir

**Credits:** 1

**Description:** This is a vocal music ensemble course designed to explore and study performance techniques through the rehearsal and performance of standard ensemble literature. The ensemble is non-auditioned and is open to students of any major or degree program. This course may be repeated for credit. The ensemble is designed to acquaint the student with as much literature as possible, including a variety of styles, languages, and musical eras, and also instill the discipline necessary to achieve performance standards.

*Note:* This course may be repeated for credit.

## MUS 3824 - Symphonic Band

**Credits:** 1

**Description:** This course is designed to explore, study, and perform the wind and percussion, full ensemble, standard works for the developing band. The course builds individual instrumental technique in a full ensemble setting. It is a non-auditioned ensemble and open to all students regardless of their major.

*Note:* This course may be repeated for credit.

## MUS 3825 - Wind Ensemble

**Credits:** 1

**Description:** This course is designed to explore, study, and perform the wind and percussion, chamber ensemble, standard works, and new works for the medium. This course is part of a community partnership with the Colorado Wind Ensemble (CWE). As such, full professionalism is expected from participants. It is an auditioned ensemble and open to all students regardless of their major.

*Note:* This course may be repeated for credit.

## MUS 3826 - Secondary Instrument Band

**Credits:** 1

**Description:** Students in this course practice performance techniques through the exploration, improvisation, composition, rehearsal, and performance on a band instrument of which the student has only beginning experience or no previous experience.

*Note:* This course may be repeated for credit.

## MUS 3827 - Symphony Orchestra

**Credits:** 1

**Description:** Symphony Orchestra provides students with the opportunity to rehearse and perform orchestral literature at the university level. Students are required to audition in order to participate; however the ensemble is open to students of any major or degree program.

*Note:* This course may be repeated for credit.

## MUS 3828 - Jazz Ensemble

**Credits:** 1

**Description:** This course is a study of large ensemble music including traditional Big Band repertoire (e.g. Ellington and Basie, and Ray Charles), Latin music (e.g. Willie Colon, Angel Canales, and Celia Cruz), and Jazz-influenced American popular music (e.g. The Meters, Blood Sweat & Tears, and Earth Wind and Fire) as well as small chamber works within the Jazz Tradition. It is an auditioned ensemble.

*Note:* This course may be repeated for credit.

## MUS 3829 - Jazz Combo

**Credits:** 1

**Description:** This course is a study of jazz music including the music of Charlie Parker, Art Blakey, Connonball Adderley and others based on transcriptions of the original small group arrangements with focus on individual improvisation. It is an auditioned ensemble. Course can be repeated for credit.

*Note:* This course may be repeated for credit.

## MUS 3830 - Guitar Ensemble

**Credits:** 1

**Description:** In preparation for a performance of guitar chamber music, students receive coaching and direction on all assigned material. Students develop essential ensemble playing skills such as following a conductor, giving and receiving cues, sight-reading, listening and responding musically to others, the ability to adapt to various musical situations as an ensemble player, and confidence and poise on stage. This ensemble is open to all students in any major or degree program.

*Note:* This course may be repeated for credit.

## MUS 3831 - Percussion Chamber Ensemble

**Credits:** 1

**Description:** This course is designed to explore and study percussion performance techniques through rehearsal and performance of standard ensemble literature. It is a non-auditioned ensemble and open to all students regardless of their major.

*Note:* This course may be repeated for credit.

## MUS 3832 - Collaborative Piano

**Credits:** 1

**Description:** This course is a study of collaborative piano, exploring various piano repertoires of collaborative piano in different sizes and genres over the course of Western music history. Upon voice/instrumental applied instructors' and ensemble directors' recommendations of repertoires, collaborative pieces are assigned to piano students in the beginning of the semester to allow enough time for students to learn. Students are coached during the class period on their collaborative pieces, while also required to collaborate during ensemble rehearsals/lessons. Piano performing experience is required. The final concert takes place at the end of the semester.

*Note:* This course may be repeated for credit.

## MUS 3833 - Opera

**Credits:** 1

**Prerequisite(s):** MUS 172A or approval of instructor

**Description:** This course is designed to prepare students for a performance of a full-length opera or opera scenes. Students receive coaching and direction on all assigned material. In addition, students may take part in exercises which may increase their abilities to develop natural stage movements appropriate to their operatic characters. Students fill out a character profile form for each of their assigned roles. This ensemble is open to all students who successfully pass the audition.

*Note:* This course may be repeated for credit.

## MUS 3834 - Gamelan Ensemble

**Credits:** 1

**Description:** The Gamelan Ensemble provides students with the opportunity to experience traditional Balinese gamelan music through participation and performance. Students are introduced to basic techniques and repertoire on a Balinese gamelan angklung. The semester culminates in an evening performance. No prior musical experience is necessary, and instruments will be provided in class. It is a non-auditioned ensemble and open to all students regardless of their major.

*Note:* This course may be repeated for credit.

## MUS 3835 - African Drum and Dance Ensemble

**Credits:** 1

**Description:** This ensemble introduces the varied and rich musical traditions of Africa and the African diasporas through participation and performance. The course focuses on the development of a variety of drumming and dance techniques, while cultivating a program of pieces for performance at the end of the semester. No previous musical experience is required, and it is a non-auditioned ensemble and open to all students regardless of their major.

*Note:* This course may be repeated for credit.

**Cross Listed Course(s):** ESS 3835, DANC 3835

## MUS 3836 - Pop and Soul Choir

**Credits:** 1

**Description:** This ensemble class focuses on singing in a group setting, teaching students primarily about vocal technique, vocal health, vocal blend, harmony singing, dynamics, phrasing, and group dynamics. This class includes repertoire ranging from contemporary popular music to classic soul.

*Note:* This course may be repeated for credit.

## **MUS 3840 - Live Performance Workshop**

**Credits:** 1

**Description:** This course prepares students to play live, on-stage with professional equipment to the highest musical standards. Students perform in various live group sessions in which musical communication, performance ability, stage presence, and sound design are modeled by instructors who will provide feedback. This course can be repeated for credit.

## **MUS 3850 - Commercial Composition and Arranging**

**Credits:** 3

**Prerequisite(s):** MUS 1130, MUS 1140

**Description:** This course requires that students study and apply techniques, methodologies, and concepts for composing and arranging original music. Students analyze classic and contemporary songs and arrangements, including score analysis and critical listening assessments.

## **MUS 3860 - Live Songwriting Workshop**

**Credits:** 2

**Description:** Within this course, students develop original songs to a professional standard. Students work in small groups, writing several songs to specific briefs; thus, students put into practice various songwriting methodologies and lyric writing techniques. Students also analyze the work of various professional songwriters to gain a better understanding of their creative processes. Emphasis is placed on understanding the qualities of specific genres and writing to those specifications.

## **MUS 3862 - Advanced Songwriting**

**Credits:** 3

**Prerequisite(s):** MUS 2865

**Description:** Building on Foundations of Songwriting, this course examines more advanced methods, techniques, and practices of the songwriting craft. Students deconstruct a more challenging set of songs to analyze their melodic, harmonic, rhythmic, formal, and lyrical qualities. Students continue to build their theoretical knowledge of music as well as their music literacy and aural skills. Using the knowledge gained through this analysis, students are asked to produce original material that expresses their uniqueness as songwriters as they work within a number of prompts that encourage them to write in a plethora of styles and genres, as well as transcending traditional genre boundaries. Students also reflect on their songwriting practices and style.

## **MUS 3870 - Commercial Electronic Music**

**Credits:** 3

**Prerequisite(s):** MUS 1110, MUS 1120, MUS 161B

**Description:** This course introduces students to the basic components and processes involved in creating original music by using contemporary electronic software and hardware. Students examine and learn to use programming, loops, samples, synthesis, MIDI, various DAWs (Digital Audio Workstations) as well as various contemporary and classic hardware tools used regularly to compose electronic music. Students are required to create multiple compositions by integrating a range of electronic music tools, techniques, and methodologies.

## **MUS 3878 - Group Recital**

**Credits:** 2

**Prerequisite(s):** MUS 1110, MUS 1120, MUS 3840

**Description:** Building on Live Performance Workshop (MUS 3840), this class takes a more advanced approach to live performance. While continuing to develop technical and improvisational skills on their chosen instrument, students develop their skills as Musical Directors as they form and manage their own ensembles. Students choose repertoire as they cultivate a group sound and personality. Faculty offer feedback and constructive guidance to help mold a band into a cohesive professional unit. Various faculty members are assigned to each group as mentors. Each ensemble is responsible for constructing and performing a set for an audience of their peers and instructors, receiving feedback from both.

## **MUS 3880 - The Politics of Artists and Repertoire**

**Credits:** 3

**Prerequisite(s):** MUS1892

**Description:** Building directly on MUS 1892: Artist Discovery and Development, the students in the course examine more advanced concepts and practices in artists and repertoire. While digging deeper into the history of artists and repertoire and record labels, students focus more acutely on the backroom negotiations and deal making that has contributed to success or failure by examining various case studies of iconic figures in this field. Students examine and compare both old and new models of artists and repertoire practice. Ultimately, students gain an understanding of how industry professionals have navigated the complex politics between the various stakeholders in the music industry. Students construct their own personal approach to artists and repertoire by synthesizing various historical methods and techniques in this field.

## **MUS 3882 - Music Industry Contract Negotiation**

**Credits:** 3

**Prerequisite(s):** ENG 1020; COMM 1010

**Description:** This course focuses on developing the skills necessary to initiate and broker various types of contracts and/or deals related to the contemporary music industry. While integrating theory and psychology into the class, students spend a large portion of the

semester practicing their negotiation skills in live role-playing exercises. Through such activities, students gain the ability to draft deals/contracts with authority and complete mark-ups and final versions that balance artists' aspirations, personal goals, and legal obligations.

## **MUS 3884 - Managing an Established Act**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** MUS1880, MUS1890, MUS1892, MUS 2882, MUS 2886, MUS 3880

**Description:** This course focuses on how to sustain an artist's career over the long term. Students learn to navigate through changes in market trends to ensure that their artists remain relevant in a dynamic environment. The course covers maintaining existing audiences while attracting new ones through numerous marketing strategies. Students learn to re-brand and re-launch existing acts for new times, markets, and audiences. The course examines a range of case studies, regarding how to manage and elevate an existing act as well as re-imagine the career of an iconic artist who has fallen out of favor.

## **MUS 3885 - Artist Deal Suite**

**Credits:** 3

**Prerequisite(s):** MUS 1000; MUS 1120; MUS 2888; ENG 1020; COMM 1010

**Description:** This course introduces students to a variety of contemporary music industry deals and contract types. Students identify and analyze the conventional terms and conditions within these various documents. A range of legal terms and procedures are discussed with the goal of improving students' ability to communicate with lawyers, record executives, and other major stakeholders in the music industry.

## **MUS 3886 - Live Tour Management**

**Credits:** 3

**Description:** This course examines the details of designing and managing a live tour at a local, national, and international scale. In the current music industry, live touring is often times the most important and lucrative component of an artist's career. Students learn how to logistically plan and budget for various sizes of venues and lengths of outings. Students hone their skills particularly in logistics organization, time management, and financial forecasting.

## **MUS 3888 - Fundamentals of Record Production**

**Credits:** 3

**Prerequisite(s):** MUS 1000; ENG 1020; MUS 1110

**Description:** This class focuses on the processes of moving from a finished arrangement in the rehearsal room to a master recording. Students learn about selecting the appropriate songs, quality control, pre-production, choosing and working with a producer and engineer, goal setting, mixing, mastering, and the politics of the recording studio. Throughout the semester, students analyze and discuss the

production of iconic songs and albums, exploring its effects on the entire songwriting and creative process. Partnering with local studios, students have an opportunity to gain hands-on experience in a recording studio, working with industry producers and engineers to perform, conduct, mix, and master their own compositions.

## **MUS 3890 - Pop Music and Politics**

**Credits:** 3

**Prerequisite(s):** ENG 1020; MUS 1000; COMM 1010

**Description:** Taking an interdisciplinary approach, this course examines how popular music has voiced the concerns of the masses and the marginalized to bring about social awareness and change. This seminar-style course challenges students to critically think about, and listen to, a variety of politically driven music from the U.S. and abroad. Discussions of theoretical frameworks for analyzing politics and popular music, exploring definitions and basic concepts are deployed throughout the semester. Students explore music's role in the major socio-political movements in American history as well as several cases outside of the US context. Students gain a greater appreciation for the ability of popular music to shape the social and political world.

## **MUS 3891 - Detroit Music Heritage**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021; MUS 1000

**Description:** In this course, students explore the crucial role that music has played in Detroit's development, and, conversely, how the city's unique identity encouraged its particular sonic trajectory. From Motown to techno, Detroit is widely known as an important site of American musical development. Countering narratives of Detroit as a "dying" bankrupt city in perpetual decline, this course shows its vitality and tenacity through a social history of the city's rich musical heritage. Incorporating an interdisciplinary approach, this course explores a diversity of readings, listening, and films from a range of academic fields including: history, sociology, ethnomusicology, anthropology, and journalism.

## **MUS 3892 - Live Sound**

**Credits:** 3

**Prerequisite(s):** MUS 1000, MUS 1130, MUS 1140

**Description:** This course covers the fundamentals of running live sound in various stage contexts for a range of instrumentations and musical styles. Students learn how to produce front of house ("FOH") sound mixes and onstage monitor mixes. Working with professional PA systems, mixers, microphones, and other musical equipment, students have ample opportunity to gain practical hands-on experience in this subject.

## **MUS 3895 - Hip-Hop Culture and Rap Music**

**Credits:** 3

**Prerequisite(s):** AAS 1010 or ENG 1020

**Description:** This course seeks to examine the long-standing cultural warfare that exists among core elements of Hip-Hop culture and the impact such challenges have on gender and social identities. Students will think critically about Hip-Hop music beyond the scope of entertainment through the examination of literature, films, and music that provide interdisciplinary discourse on Hip-Hop in our society.

**Cross Listed Course(s):** AAS 3920, HIS 3920, SOC 3250

## **MUS 3910 - Advanced Techniques and Improvisation I**

**Credits:** 3

**Prerequisite(s):** MUS 2920

**Description:** Building on Intermediate Techniques and Improv I and II, this course provides students the opportunity to develop advanced technical facility and improvisational abilities on their chosen instrument. This involves a logical progression of advanced-level exercises and applications. Students are challenged to experiment with advanced level techniques to further develop a creative approach to improvisation. The class situates technical vocabulary and improvisational skills within a variety of challenging musical contexts across numerous genres.

*Note:* This course may be taken once per instrument area.

## **MUS 3920 - Advanced Techniques and Improvisation II**

**Credits:** 3

**Prerequisite(s):** MUS 3910, Advanced Techniques & Improvisation I in the same instrument area.

**Description:** This course builds directly on the previous semester's iteration, providing students an opportunity to further develop a deeper facility on their chosen instrument. This development involves a logical progression of exercises and application. Students continue to experiment with advanced level techniques to further develop a creative approach to improvisation. The course situates technical vocabulary and improvisational skills within a variety of musical contexts across numerous genres.

*Note:* This course may be taken once per instrument area.

## **MUS 3940 - Group Performance Instruction III**

**Credits:** 2

**Prerequisite(s):** MUS 1110, MUS 1120, MUS 2950

**Description:** This is a continuation of MUS 2950: Group Performance II, offering group instruction on a specific instrument.

*Note:* This course may be taken once per instrument area.

## **MUS 3950 - Group Performance Instruction IV**

**Credits:** 2

**Prerequisite(s):** MUS 1010, 1110, 1120, 3940

**Description:** This is a continuation of MUS 3940L Group Performance III, offering group instruction on a specific instrument.

*Note:* This course may be taken once per instrument area.

## **MUS 3980 - Internship in Music**

**Credits:** 1-3

**Prerequisite(s):** Major in Music; permission of the instructor

**Description:** Supervised by a faculty member in the Department of Music, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* This course may be taken for 1-3 credit hours. It may be taken for a maximum of 6 credit hours.

## **MUS 4000 - Musics of Latin America**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard score(s) on one or more of the reading, writing, and math placement tests as appropriate.

**Description:** This course explores the diverse, vibrant musical traditions of Latin America. Particular attention will be given to the many ways in which cultural, historical and political developments throughout the Western hemisphere both inform and are informed by musical practices. Students will become familiar with some of the most influential and popular Latin musics and musicians, as well as the larger cultural context from which they emerge and continue to operate. Histories and theories of colonialism, race, urbanization/modernization, and diaspora will be applied as a means of understanding various functions and meanings the music has come to articulate. Genres to be studied range from traditional, folkloric, and religious music to contemporary popular, electronic, and film music.

**General Studies:** Arts and Humanities, Global Diversity

## **MUS 4010 - From Blues to Hip Hop: African American Musical Heritage**

**Credits:** 3

**Prerequisite(s):** ENG 1020

**Description:** Students in this class explore African American musical heritage, from the Transatlantic slave trade through to music and the Black Lives Matter movement. We engage with the blues not only as a genre but also as a set of techniques and approaches that have shaped American music and culture. From the 19th century to today, we look at how the blues has influenced genres such as jazz, gospel, rock, soul, funk, country, and hip hop.

Through a study of iconic figures like Bessie Smith, Robert Johnson, and B.B. King, we examine the mainstream blues tradition, while also uncovering its deeper roots and impact on various other musical styles. As we trace the evolution of the music, students gain insight into how the blues has served as a metaphor for African American experiences and cultural expression, and how it has shaped American identity as a whole.

Additionally, we explore the ways in which Black cultural expressions, including the blues, have been co-opted for mainstream profit, while the musicians who created them often faced marginalization, exploitation, and erasure. Course content encourages you to think critically about the intersection of music, history, and culture, and how African American musical legacies continue to resonate in today's world.

**University Requirement(s):** Ethnic Studies & Social Justice

## **MUS 4020 - Senior Seminar in Music**

**Credits:** 1

**Prerequisite(s):** Must complete General Studies Written Communication requirement and General Studies Oral Communication requirement and General Studies Qualitative Literacy requirements and MUS 2130 AND MUS 2140

**Description:** This course provides senior music majors with tools to navigate the next step. The work of the course is largely contained to class time, during which students provide peer review feedback, discuss relevant questions and materials, and meet with specialists in their areas.

The course focuses on three questions:

1. What does it mean to be an educated musician in the 21<sup>st</sup> century?
2. What are the various sub-disciplines within the study and practice of music, and how do they overlap and interact in your own experience?
3. What is next? (Post-graduation plans and ideas)

## **MUS 4100 - Recital Preparation with the Collaborative Pianist**

**Credits:** 1

**Description:** This course enables performers to develop rehearsal and performance practices under the guidance of a skilled professional collaborative pianist. The duo between pianist and orchestral instrumentalist or vocalist is the most common instrumentation in Western art music and represents a cornerstone of a performer's learning experience. The course culminates with formal presentations of the music prepared by the student and faculty pianist. The student and collaborative pianist will work in conjunction with applied studio teacher.

## **MUS 4110 - Analysis of Music**

**Credits:** 2

**Prerequisite(s):** MUS 2130 and MUS 2140

**Description:** This course involves advanced analytical techniques applied to various music forms and styles. Traditional and modern methods of analysis are discussed.

## **MUS 4350 - Jazz Pedagogy**

**Credits:** 2

**Prerequisite(s):** MUS 2450, MUS 3030

**Description:** This course expands and transfers jazz music performance skills into applied teaching knowledge by exploring educational philosophies, objectives, and methods.

## **MUS 4360 - Teaching Secondary Music I**

**Credits:** 2

**Prerequisite(s):** MUS 2340 and formal admission into the music education program

**Corequisite(s):** MUS 4361

**Description:** Students develop introductory competencies for teaching instrumental music and technology at the elementary and secondary school levels. Course content includes experience with traditional vocal and instrumental teaching methodologies and their application to music teaching. Additional instruction includes conceptual teaching, instructional strategies, classroom management, assessment strategies, and the role of secondary music in education.

## **MUS 4361 - Supervised Field Experience in Secondary Music I**

**Credits:** 1

**Prerequisite(s):** MUS 2340

**Corequisite(s):** MUS 4360

**Description:** This course is designed to integrate concepts developed in MUS 4360 with practice in the classroom environment and must be taken concurrently with MUS 4360. Students work with secondary music teachers in area secondary schools in a fifty-five (55) hour supervised field experience.

## **MUS 4370 - Teaching Secondary Music II**

**Credits:** 2

**Prerequisite(s):** MUS 2340; MUS 4360

**Corequisite(s):** MUS 4371

**Description:** Students develop advanced competencies for teaching secondary music at the secondary school levels. Course content expands on experiences with traditional music teaching methodologies, incorporating the use of technology as a means to facilitate musical content and concepts. Additional instruction includes classroom management, assessment strategies, and the role of secondary music in education.

## **MUS 4371 - Supervised Field Experience in Secondary Music II**

**Credits:** 1

**Prerequisite(s):** MUS 2340; MUS 4361

**Corequisite(s):** MUS 4370

**Description:** This course is designed to integrate concepts developed in MUS 4370 with practice in the classroom environment and must be taken concurrently with MUS 4370. Students work with secondary music teachers in area secondary schools in a fifty-five (55) hour supervised field experience.

## MUS 4410 - Piano Pedagogy

**Credits:** 3

**Prerequisite(s):** MUS 271B (Private Piano III) or MUS 273B (Performance III in Piano) or Permission of Instructor

**Description:** This course is a study of the methods, literature, editions, and techniques used in teaching piano privately and in groups.

## MUS 4420 - Vocal Pedagogy

**Credits:** 2

**Prerequisite(s):** MUS 271A (Private Voice III) or MUS 273A (Performance III in Voice) or Permission of Instructor

**Description:** This course consists of a series of lectures, demonstrations, and discussions about physiology of the human voice (anatomy of the larynx, respiration, resonance, and articulation), young voices and how to teach them, and methods and philosophy of teaching voice.

## MUS 4430 - Guitar Pedagogy and Literature

**Credits:** 3

**Prerequisite(s):** MUS 271K (Private Guitar III) or MUS 273K (Performance III in Guitar) or Permission of Instructor

**Description:** This course will survey a broad variety of pedagogical methods and techniques for the classical guitar, including both recent and historical approaches. In addition, the canonical repertoire for the classical guitar will be examined.

## MUS 4440 - Contemporary Music Education Practices

**Credits:** 1

**Prerequisite(s):** MUS 2130

**Description:** This course enables students to develop performance skills and strategies for teaching instrumental and choral music in the areas of popular and jazz styles, as well as other electronic music practices.

## MUS 4450 - Organ Pedagogy

**Credits:** 3

**Prerequisite(s):** MUS 271E (Private Organ III) or MUS 273E (Organ Performance III) or permission of instructor

**Description:** This course consists of a study of pedagogical methods, techniques, repertoire and editions for teaching the organ, including current, as well as historical, techniques and literature.

## MUS 4520 - Vocal Pedagogy and Literature

**Credits:** 3

**Prerequisite(s):** MUS 172A (Private Voice II) or Permission of Instructor

**Description:** This course utilizes lectures, demonstrations, and

discussion to provide an overview of the anatomy and function, acoustic properties and resonance, hygiene and health, instruction, and performance literature of the individual singing voice.

## MUS 4710 - Private Instruction VII

**Credits:** 2

**Prerequisite(s):** MUS 3720

**Corequisite(s):** MUS 0020, at least one other music course, and the major ensemble in the private instruction area being studied

**Description:** This course is a continuation of MUS 3720 and covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes required weekly attendance at a one-hour performance class in the area of study in which students perform for one another. At the end of the semester, the student must successfully perform before a faculty jury committee in order to pass the course.

*Note:* This course may be repeated for credit in a different area of study. Students must also enroll in MUS 0020 (Recital Attendance).

## MUS 4720 - Private Instruction VIII

**Credits:** 2

**Prerequisite(s):** MUS 4710

**Corequisite(s):** MUS 0020, at least one other music course, and the major ensemble in the private instruction area being studied

**Description:** This course is a continuation of MUS 4710 and covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes required weekly attendance at a one-hour performance class in the area of study in which students perform for one another. At the end of the semester, the student must successfully perform before a faculty jury committee in order to pass the course.

*Note:* This course may be repeated for credit in a different area of study. Students must also enroll in MUS 0020 (Recital Attendance).

## MUS 4730 - Performance VII (Primary Performance Area)

**Credits:** 3

**Prerequisite(s):** MUS 3740 or MUS 4720; and a successful performance concentration audition

**Corequisite(s):** MUS 0020; MUS 4790; and the major ensemble in the private instruction

**Description:** This course is a continuation of MUS 3740 and is only for students majoring in music performance. It covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes required weekly attendance at a one-hour performance class in the area of study in which students perform for one another. At the end of the semester, the student must successfully perform before a faculty jury committee in order to pass the course. The repertoire for the completion of MUS 4740, Senior Recital Performance, must be determined in this course.



*Note:* This course may be repeated for credit in a different area of study. Students must also enroll in MUS 0020 (Recital Attendance ).

### **MUS 4731 - Private Instruction VII (Composition)**

**Credits:** 3

**Prerequisite(s):** MUS 3741

**Description:** This course provides individual instruction in composition. It is a continuation of work begun in MUS 3741. It includes required weekly attendance at a one-hour performance class. At the end of the semester, the student must successfully pass a review by a faculty jury committee in order to pass the course. Students must also enroll in MUS 0020 (Recital Attendance).

### **MUS 4740 - Senior Recital Performance**

**Credits:** 3

**Prerequisite(s):** MUS 4730, completion of General Studies requirements, and senior standing. For senior experience credit, the student must also complete MUS 4800.

**Corequisite(s):** MUS 0020, at least one other music course, and the major ensemble in the private instruction area being studied

**Description:** This course is a continuation of MUS 4730 and is only for students majoring in music performance. It covers individual instruction in voice, piano, organ, guitar, electric bass, electric guitar, the standard band and orchestral instruments, composition, or conducting. It includes required weekly attendance at a one-hour performance class in the area of study in which students perform for one another. During the semester, the student will perform a 50-minute Senior Recital that must be approved by the process specified on the Senior Recital Hearing Request form.

*Note:* This course may be repeated for credit in a different area of study. Students must also enroll in MUS 0020 (Recital Attendance).

**University Requirement(s):** Senior Experience

### **MUS 4741 - Private Instruction VIII (Composition)**

**Credits:** 3

**Prerequisite(s):** MUS 4731

**Description:** This course provides individual instruction in composition. It is a continuation of work begun in MUS 4731. It includes required weekly attendance at a one-hour performance class. At the end of the semester, the student must successfully pass a review by a faculty jury committee in order to pass the course. Students must also enroll in MUS 0020 (Recital Attendance).

### **MUS 4790 - Senior Recital Project**

**Credits:** 1

**Prerequisite(s):** MUS 3220

**Corequisite(s):** MUS 4730

**Description:** This course involves writing program notes for the repertoire selected for MUS 4740, Senior Recital Performance. For senior experience credit, the student must also complete MUS 4740, complete all General Studies requirements, and have senior standing.

**University Requirement(s):** Senior Experience

### **MUS 4800 - Seminar in Music Repertoire**

**Credits:** 2

**Prerequisite(s):** Senior Standing; MUS 2130 and MUS 3220

**Description:** This course is designed to broaden and deepen the student's knowledge of music literature in his or her chosen area of applied study. Individual student foci will be determined by an instrument-specific repertoire list, concentrating on important style periods for that instrument. Students make use of musical scores, in addition to listening and reading assignments, as they prepare presentations, which will outline elements of musical style and performance practice. This course, together with MUS 4740 Senior Recital Performance, fulfills the Senior Experience requirement.

**University Requirement(s):** Senior Experience

### **MUS 4860 - Co-Writing**

**Credits:** 3

**Prerequisite(s):** MUS 1130, MUS 1140, MUS 2866

**Description:** Songwriting is often a collaborative effort, and this course introduces students to the most effective ways to work with a team of artists to create original music and manage the business of co-creating songs (i.e., royalty splits). Throughout the semester, students examine the material and dynamics of great songwriting teams such as: Lennon/McCartney, Simon/Garfunkel, Jagger/Richards, etc., to better understand their creative processes. Students gain experience in the qualities necessary to work productively in a group, including time management, social skills, and organizational skills. In this upper level course, students are challenged to use a wide range of techniques and methodologies to co-create original music to a high professional standard. Students are asked to reflect on their processes and dynamics of artistic teamwork, and will take on multiple songwriting roles (i.e., lyricist, arranger, composer, etc.) throughout the course.

### **MUS 4862 - Writing Music for Film & TV**

**Credits:** 3

**Prerequisite(s):** MUS 1130, MUS 1140, MUS 2860, MUS 2864, MUS 2865, MUS 2866, MUS 3860

**Description:** This course examines the processes involved in writing music for film, television, and other forms of visual media. While analyzing well-known television and film composers (i.e. John Williams, Danny Elfman, Mike Post) and their music, students gain experience in writing for certain scenes, learning to establish mood, highlight plot points, and support the action on screen. Students also discuss the commercial practice of placement, synchronization, and licensing to show how the industry pairs music with film/television opportunities.

### **MUS 4880 - Record Label Operations**

**Credits:** 3

**Prerequisite(s):** MUS 1892, MUS 2880, MUS 2882, MUS 2886, MUS 3880, MUS 3882

**Description:** This course takes a comprehensive look at the day-to-

day business operations of classic and contemporary record labels. While reviewing how to acquire (artists and repertoire) and manage a roster of artists, this course focuses on the big picture and long-term planning that is needed to sustain such a business. Students gain experience in understanding how to establish and maintain distribution channels as well as the basics of the manufacturing process. Students analyze case studies of existing labels, but also propose ideas for establishing and running their own original record label(s).

## **MUS 4882 - Music Industry Event Management**

**Credits:** 3

**Prerequisite(s):** MUS 3880, MUS 3882

**Description:** This course examines how to plan, produce, promote, and manage special events, from small club gigs and fundraisers to festival concerts and publicity tours. Students start to build the organizational and communication skills necessary to design and execute such events. This course focuses on the analysis of past events, gaining insight into the processes and best practices for event creation and management. Additionally, students work to produce and/or manage original event(s) throughout the term.

## **MUS 4884 - Music Industry Case Study Research**

**Credits:** 3

**Prerequisite(s):** MUS 4880, MUS 4882

**Description:** This class critically assesses the careers of numerous notable figures in the modern music industry. This analysis of a cross section of managers, producers, record executives, artists and repertoire gurus, and publicity giants provides an intense, intimate, and in-depth insight into the lives and work of the industry's top professionals. Students are required to undertake extensive primary and secondary research on several notable music industry figures, drawing out lessons and developing models for their own careers.

## **MUS 4888 - Music Publishing and Copyright Law**

**Credits:** 3

**Description:** This course examines the processes of publishing songs, including the basics of how to navigate the complexities of state, national, and international copyright law. While reviewing a history of copyright law, students examine the roles of a publisher in acquisition, marketing, and creative development. The course also covers various types of publishing deals to familiarize students with their standard terms and conditions, as they learn to protect their rights as songwriters, artists, and managers. This course explores songwriting splits and how to negotiate a fair and equitable publishing deal. Students learn how to register their songs and examine the legalities of licensing and synchronization.

## **MUS 4890 - Senior Recital Performance**

**Credits:** 3

**Prerequisite(s):** MUS 4910, MUS 4920 in the primary instrument area

**Description:** This course is the culmination of the student's degree in Commercial Music Performance. The student is responsible for individually constructing, organizing, promoting, and executing an individual recital. While they may perform with others, each musical selection must feature the student for which the degree is to be awarded. Students meet with their faculty mentor to discuss their ideas and progress toward their final performance. The individual student are required to organize rehearsals in preparation for the final performance. Students are also required to construct extensive program notes, which explain their choice of music, personnel and staging while situating each of their song selections within their proper historical, social, and cultural context. Students must display a high level of professionalism throughout the semester as well as within the final performance. Repertoire should include a mix of original and pre-existing material, which displays a wide range of performance skills in several contemporary music genres.

## **MUS 4892 - Songwriting Portfolio**

**Credits:** 3

**Prerequisite(s):** MUS 4860, MUS 4862

**Description:** As a culmination of their studies, students compile an extensive and representative portfolio of their work to date, both recordings and written scores. Students examine and reflect on their own output as songwriters, identifying their style, strengths, weaknesses, and gaps in their resumes. Students devise and execute a plan to fill out their portfolio to establish a well-rounded and marketable collection of material, which allows them to take advantage of a wide range of opportunities in the contemporary music industry. Students are required to produce a final performance of their original songwriting work, which showcases their range of output to date.

## **MUS 4899 - Commercial Music Capstone**

**Credits:** 3

**Prerequisite(s):** MUS 4840, 4850, MUS 4860, 4862, MUS 4880, 4882

**Description:** This course is a culmination of the MSU @ DIME music degree, requiring students to integrate and apply the knowledge they have gained over the entirety of their studies. Students conduct ethnographic and library/online research in order to identify a range of potential career opportunities for themselves. Students demonstrate a comprehensive understanding of their field as they examine how these areas are relevant to their various potential career paths.

**University Requirement(s):** Senior Experience

## **MUS 4910 - Techniques Practicum**

**Credits:** 3

**Prerequisite(s):** MUS 3920

**Description:** This course is the culmination of technical development from the Techniques and Improvisation sequence. The course explores advanced technical concepts on a student's instrument in preparation for the Commercial Music Capstone Course and Senior Recital Performance. Students continue to learn professional-level

techniques to further master the craft of their specific instrument, utilizing a logical progression of exercises and application. The course explores the technical vocabulary for a variety of musical concepts across numerous genres.

*Note:* This course may be taken once per instrument area.

## **MUS 4920 - Personal Expression**

**Credits:** 3

**Prerequisite(s):** MUS 3920

**Description:** This course represents the culmination of improvisation and self-expression skills learned from the Techniques and Improvisation sequence. The course explores advanced improvisational concepts on a student's instrument in preparation for the Commercial Music Capstone Course and Senior Recital Performance. Students continue to experiment with professional-level improvisational concepts to further develop their personal style of expression on their instrument. Students apply their improvisational skills within a variety of musical contexts across numerous genres.

*Note:* This course may be taken once per instrument area.

## **MUS 4950 - Senior Project**

**Credits:** 3

**Prerequisite(s):** MUS 3220, permission of the instructor, completion of General Studies requirements, and senior standing.

**Description:** In this course, the student prepares an in-depth and focused project related to music theory, music history, music literature, music education, composition, performance practice, pedagogy, music therapy, or other music-specific topics. The project may be research-based or result in a creative body of work, but includes a research component and a written document. If the project is not research-based, other evidence of work will be included in addition to the written document, such as performance, web-based product, or other significant work approved by the instructor. The written document of the project shall be scholarly and well documented according to departmental standards. Fulfills the Senior Experience requirement for the BA in Music.

**University Requirement(s):** Senior Experience

## **MUS 4960 - Senior Composition Project**

**Credits:** 3

**Prerequisite(s):** MUS 3741, completion of General Studies requirements, and senior standing.

**Description:** This is the final composition project in which students compose, oversee public performances of their compositions, and give a public lecture on their compositional activities.

**University Requirement(s):** Senior Experience

## **MUS 4971 - Student Teaching and Seminar: Elementary (K-6)**

**Credits:** 6

**Prerequisite(s):** Successful completion of all requirements for the Bachelor of Music Education major, the teacher licensure program,

and general studies courses

**Corequisite(s):** MUS 4972

**Description:** This is a supervised, full-time, eight week student teaching experience in an accredited public or private elementary school, providing increasing responsibility for the teaching, supervision, and assessment of learners (grades K-6). Regularly scheduled observations and five hours of seminars conducted by an appointed university supervisor are part of the student teaching requirement. Teacher-candidates must complete a teacher work sample and be rated as proficient in all Colorado Teacher Quality Standards to receive MSU Denver's recommendation for teacher licensure.

*Note:* Initial sign-off on program requirements (e.g. teacher work sample/portfolio) by faculty advisor. For Senior Experience credit, the student must also complete MUS 4972.

**University Requirement(s):** Senior Experience

## **MUS 4972 - Student Teaching and Seminar: Secondary (7-12)**

**Credits:** 6

**Prerequisite(s):** Successful completion of all requirements for the Bachelor of Music Education major, the teacher licensure program, and general studies courses.

**Corequisite(s):** MUS 4971

**Description:** This is a supervised, full-time, eight week student teaching experience in an accredited public or private secondary school, providing increasing responsibility for the teaching, supervision, and assessment of learners (grades 7-12). Regularly scheduled observations and five hours of seminars conducted by an appointed university supervisor are part of the student teaching requirement. Teacher-candidates must complete a teacher work sample and be rated as proficient in all Standards for Colorado Teacher Quality Standards to receive MSU Denver's recommendation for teacher licensure.

*Note:* Initial sign-off on program requirements (e.g. teacher work sample/portfolio) by faculty advisor. For Senior Experience credit, the student must also complete MUS 4971.

**University Requirement(s):** Senior Experience

## **Native American Studies**

### **NAS 1000 - Introduction to Native American Studies**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on the reading and writing preassessment placement tests

**Description:** This course provides an opportunity to study the indigenous population of the United States. The primary focus of the course is on the historical, political, social, and economic relationship between Native Americans and how this culture is embedded in the American culture.

**University Requirement(s):** Ethnic Studies & Social Justice

### **NAS 1030 - Introduction to Social Justice and Decoloniality**

**Credits:** 3

**Description:** This course introduces students to the interdisciplinary fields of Social Justice and Decolonial Studies through interdisciplinary perspectives, methods, and approaches. Students learn about privilege, power, and oppression and their relationships to race, class, gender, sexuality, and other identities. This course asks complex and difficult questions regarding colonialism, decoloniality, sovereignty, and agency. It offers students opportunities to study social movements, and engage in social justice and decolonial praxis.  
*Note:* Credit will be granted for only one prefix.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Cross Listed Course(s):** AAS 1030, CHS 1030, GWS 1030

## **NAS 2240 - Introduction to Native American Literature**

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021 or NAS 1000

**Description:** Students study the oral and written literatures of Native Americans in their historical, political and social context. This course is suitable for non-English majors.

*Note:* Credit will be granted for only one prefix: ENG or NAS.

**Cross Listed Course(s):** ENG 2240

## **NAS 2700 - Geographies of Environmental Justice**

**Credits:** 3

**Description:** This class explores why people of color and lower income populations are subject to the disproportionate burden of pollution and contamination and analyzes collective struggles of affected people to democratize access to a clean environment. Environmental justice is at the intersection of social justice and environmentalism and helps us to better understand geographies of socio-environmental injustices and how people take actions to make the places where they live, work, and play safer. Students learn how issues such as air pollution, waste management, unsafe drinking water, working conditions on farms, food deserts, climate change, and other environmental hazards affect people living in low income communities across the United States.

*Note:* Credit will be granted for only one prefix, GEG or NAS.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS2

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** GEG 2700

## **NAS 3090 - Current Topics in Native American Studies**

**Credits:** 3

**Prerequisite(s):** NAS 1000 or permission of instructor

**Description:** The course will provide an in-depth study of an important topic in Native American Studies.

*Note:* This course may be repeated for credit under different topics.

## **NAS 3110 - Federal Indian Law**

**Credits:** 3

**Prerequisite(s):** NAS 1000

**Description:** This course addresses the legal and political relationship between the United States and American Indians. Students will study the major doctrines in Federal Indian Law, including the doctrines of Discover, Trust, Sovereignty, and Plenary Power with provide the legal/political basis for the U.S. and American Indian relationship. The course also provides a critical examination of current topics such as the continued political control exercised by the U.S. Government over Native American Nations and the meaning of Sovereignty in the context of U.S. and Native Nations.

*Note:* Credit will be granted for only one prefix: NAS or PSC.

**Cross Listed Course(s):** PSC 3110

## **NAS 3200 - Native American Politics**

**Credits:** 3

**Prerequisite(s):** NAS 1000 or PSC 1020 or Permission of instructor, and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** The focus of this course is to examine Native Americans as political beings. Important questions and strategies for understanding the rise and expansion of native politicization will be identified. In general, the students will be able to explain why, how and when movements that demand change emerge. By comparing and contrasting the Native American experience with other powerless groups in society, the students should be able to trace these historical and political factors that led to a change in the movement of insurgency and analyze the specific actions by insurgents that inevitably resulted in the failure or success of those specific actions.

*Note:* Credit will be granted for only one prefix: NAS or PSC.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** PSC 3200

## **NAS 3240 - American Indian Women**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or NAS 1001 Recommended

**Description:** This course is designed to expose the student to the diverse and varied works of American Indian women. By studying the literature, music, and dance of the American Indian woman, students explore the historical factors that have impacted the lives of both American Indians and non-native people. This course also examines the transition that American Indian women have made in order to survive and attempt to understand their struggles for freedom.

*Note:* Credit will be granted for only one prefix: NAS or GWS.

**Cross Listed Course(s):** GWS 3240

## **NAS 3242 - Contemporary Native American Literature**

**Credits:** 4

**Prerequisite(s):** ENG 1020 or ENG 1021 and ENG 2000 or ENG 2100 or NAS 1000

**Description:** Students read, analyze, and write about various forms of literature produced by and about the Native American experience with consideration of historical and social contexts. Students read important contemporary Native American writers in a variety of cultures and critical readings on indigenous history and pertinent theory, and students explore how historical contingencies and political debates inform literature, as well as how literature and culture can inform and challenge public and political opinion.

*Note:* Note: Credit will be granted for only one prefix: ENG or NAS.

**Cross Listed Course(s):** ENG 3242

## **NAS 3300 - Indigenous Geographies of North America**

**Credits:** 3

**Prerequisite(s):** GEG 1300 or NAS 1000 or PSC 1010 or junior or higher standing

**Description:** In this course, we examine Indigenous Peoples' relationships to land and power in North America with a focus on the United States. Colonial legacies of dispossession, genocide, and the reservation system frame how we discuss and interpret physical and symbolic violence against Indigenous Peoples. We begin with a historical geographic exploration of Indigenous land use patterns and how European arrival and invasion radically destabilized Native cultures. U.S. government policies and actions including the establishment of reservations and Tribal governments illustrate how institutions shape contemporary political, economic, social, cultural, and environmental relationships. Contemporary issues such as natural resource extraction, economic development, intersectionality, and cultural resilience influence the experiences of Native Americans on and off reservations.

*Note:* Credit will be granted for only one prefix.

**General Studies:** Social and Behavioral Sciences

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** GEG 3300, PSC 3300

## **NAS 3722 - Native American Cinema**

**Credits:** 4

**Prerequisite(s):** NAS 1000

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** Students examine films in several contexts, including the use of film by the dominant society as a means of creating a national identity, socializing Indians, and reinforcing power relationships in the political arena; the use of films by Native American filmmakers as an affirmation of identity and a mechanism for presenting an indigenous view of history, culture and political relationships with the dominant society. Students explore a range of genres, narrative and non-narrative films, live-action films, documentaries, experimental film, and animation. Students examine a broad range of topics, including film form (mise-en-scène, cinematography, editing, and sound); the use of film as a modern storytelling medium and as a mechanism for bridging cultural divides; film theory; and historical, cultural, economic, and theoretical aspects of each film/cinematic area.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** ENG 3722

## **Nursing, Accelerated**

### **NURA 3020 - Foundations of Professional Nursing Practice**

**Credits:** 6

**Prerequisite(s):** Admission to Accelerated Nursing option

**Description:** In this course, students will be introduced to the profession of nursing and the culture of the health care environment. The core knowledge, core competencies, and role development of the professional nurse are explored. Students begin to develop an understanding of human responses to health and illness within the nurse-patient relationship. Students begin to apply the nursing process, critical thinking, clinical reasoning, and therapeutic and multicultural communication. Practice environments for the development of basic nursing skills include the facilitated simulation laboratory and a clinical practicum in a health care facility.

### **NURA 3160 - Ethics and Professional Nursing Practice**

**Credits:** 3

**Prerequisite(s):** Admission into the Nursing Program

**Description:** The course prepares the professional nursing student to analyze ethical issues that emerge in the practice of nursing. The Magnet/Pathway's to Excellence concept of Exemplary Practice and the QSEN competencies of Patient-Centered Care, Teamwork and Collaboration, and Evidence-Based Practice are explored as they relate to ethics and professional nursing. This course introduces the student to ethical theories and principles as well as ethical decision-making models applied to professional nursing. Students apply critical thinking concepts to applicable codes of ethics, ethical theories, principles, and rules in discussing the ethical dilemmas encountered in professional practice. Values and beliefs are examined in the context of ethical issues, role development, and application in health care.

**Cross Listed Course(s):** NUR 3160, NURS 3160

### **NURA 3400 - Evidence Based Practice Through Nursing Research**

**Credits:** 3

**Prerequisite(s):** Admission into the Nursing Program, and NUR 3120 or NURS 3020 or NURA 3020

**Description:** Students in this course are introduced to the Evidence-Based Practice (EBP) research process. The knowledge and competence needed to critique published research are explored. Students learn how to use research in support of their EBP. Course content aligns with the Magnet/Pathway to Excellence concepts including Empirical Outcomes, Exemplary Professional Practice, New Knowledge, Innovations, and Improvements, and QSEN Competencies of EBP and Patient-Centered Care. Ethical and legal considerations are also discussed. Qualitative and quantitative research processes are examined. Students complete a literature search using appropriate databases on a researchable problem and

communicate findings. Emphasis is placed on the improvement of nursing practice through reading, using, and participating in research.

**Cross Listed Course(s):** NUR 3400, NURS 3400

### **NURA 3410 - Clinical Pharmacology**

**Credits:** 4

**Prerequisite(s):** Admission into the Nursing Program

**Description:** Clinical pharmacology covers the major principles of pharmacology, drug classifications, and pharmacotherapy. The nursing process, legal, ethical, cultural, and social values are also discussed in relationship to various disease processes and complex patient situations. Drug calculations are also covered. Critical thinking, communication, and safe medication administration is integrated in the course.

**Cross Listed Course(s):** NURS 3410

### **NURA 3500 - Mental Health Nursing**

**Credits:** 5

**Prerequisite(s):** NURA 3020 or NURS 3020, NURA 3410 or NURS 3410, NURA 3160 or NURS 3160, NURA 3700 or NURS 3700

**Description:** The focus of this course is on the application of foundational mental health nursing concepts and interventions in the care of patients. This course includes the application of developmental theories and ethical principles to the nursing care of mental health patients. Emphasis is placed on therapeutic communication techniques, health promotion and relapse prevention. Students apply the nursing process using critical thinking and decision-making skills while providing safe, basic care to selected patients.

**Cross Listed Course(s):** NURS 3500

### **NURA 3700 - Nursing Health Assessment**

**Credits:** 3

**Prerequisite(s):** Admission to the Nursing Program

**Description:** This course is designed for students to develop, practice, and demonstrate their health assessment competence. The student collects and organizes data to obtain a complete health history and perform a physical examination. Students have an opportunity to practice interviewing skills and physical examination techniques. Emphasis is placed on the use of critical thinking and demonstration of a physical examination while caring for individuals. Students are also introduced to the interpretation of assessment findings.

**Cross Listed Course(s):** NURS 3700

### **NURA 3810 - Medical Surgical Nursing Care I**

**Credits:** 6

**Prerequisite(s):** NURA 3020 AND NURA 3160 AND NURA 3410 AND NURA 3700

**Description:** This course builds on the concepts introduced in Foundations of Professional Nursing Practice. Focus is on utilization of core knowledge and core competencies related to the care of adults with basic and intermediate alterations in health. Students have the

opportunity to practice skills using simulation technology and in clinical practice settings. Critical thinking skills are used to begin to apply the nursing process to patient centered care. This course develops the role of the nurse in providing medical surgical nursing care. Students practice and apply skills and knowledge learned in the classroom and lab to the clinical environment.

### **NURA 4000 - Community Health Nursing**

**Credits:** 6

**Prerequisite(s):** NURA 4030 or NURS 4030 and NURA 4110 or NURS 4110 and NURA 4040 or NURS 4040 and NURA 4300 or NURS 4300

**Description:** Students in this course gain the tools for critically analyzing the principles of health promotion and disease prevention of families, groups, and communities. Cultural diversity, ethics, legal, and political responsibility of the nurse are discussed. The leadership roles of advocate, change agent, collaborator, resource person, and teacher are emphasized. The learner applies theories and models from the fields of public health, education, and nursing to community health nursing. Focus is placed on community needs assessment, epidemiology, communicable disease, vulnerable populations, and health risks across the lifespan.

**Cross Listed Course(s):** NURS 4000

### **NURA 4030 - Nursing Care of the Childbearing Family**

**Credits:** 5

**Prerequisite(s):** NURA 3810 or NURS 3810

**Description:** This course focuses on the management and provision of nursing care for childbearing person and their families. The nursing process is utilized to provide family-centered nursing care for the patient and family across the healthcare continuum. Emphasis is placed on the birthing person and newborn health promotion, as well as prevention concepts related to antepartal, intrapartal, postpartum, and neonatal life stages. Students examine the rationale and procedures for implementation of a variety of skills needed for the childbearing person and newborn. Students have the opportunity to practice skills using simulation technology and in clinical practice settings. Students apply core knowledge and competencies in the provision of care of the childbearing patient and their family, including the role of educator.

**Cross Listed Course(s):** NURS 4030

### **NURA 4040 - Quality Care and Patient Safety Using Nursing Informatics**

**Credits:** 3

**Prerequisite(s):** NUR 3400 or NURA 3400 or NURS 3400

**Description:** In this course, the student is introduced to the process of collecting and analyzing data used to improve the quality of care patients receive and enhance their safety. Course content aligns with Magnet/Pathways to Excellence of Empirical Outcomes, New Knowledge, Innovations, and Improvement and QSEN Competencies of Evidence-Based Practice (EBP), Quality Improvement, Safety, and

Informatics. A basic overview of nursing informatics and how it applies to clinical practice will be explored. During this course, students will navigate an electronic health record (EHR) to identify essential information that must be available in a common database that documents patient care. Analysis of data from the EHR will be compared with current relevant literature and selected national benchmarking goals. Introduction to patient satisfaction survey scores will be examined as they relate to patient-centered care, quality, and safety to improve overall practice. Ethical, legal, and regulatory considerations are upheld related to data security, confidentiality, and patients' right to privacy.

**Cross Listed Course(s):** NUR 4040, NURS 4040

## **NURA 4110 - Medical Surgical Nursing Care II**

**Credits:** 6

**Prerequisite(s):** NURA 3400, NURA 3500, NURA 3810

**Description:** This course expands on the concepts introduced in Medical Surgical Nursing Care I. Focus is on utilization of core knowledge and core competencies related to the care of adults with intermediate and complex alterations in health. Critical thinking skills are used to apply the nursing process to patient centered care. This course further develops the role of the nurse in providing medical surgical nursing care. Students have the opportunity to practice skills using simulation technology and in clinical practice settings.

## **NURA 4200 - Child and Family Health Nursing**

**Credits:** 5

**Prerequisite(s):** NURA 4030 and NURA 4110 and NURA 4040 and NURA 4300

**Description:** This theoretical and clinical course focuses on the application of the nursing process in the delivery of evidenced-based nursing care to children and their families. Health promotion, illness, injury prevention, health teaching, and anticipatory guidance are emphasized. Developmentally appropriate care is integrated into the management of pediatric disorders and diseases. Students develop clinical skills using simulation technology and clinical practice environments.

## **NURA 4300 - Leadership and Management in Professional Nursing Practice**

**Credits:** 3

**Prerequisite(s):** NURA 3810 AND NURA 3500 AND NURA 3400

**Description:** This course is designed to assist the student in developing as a professional nurse by investigating leadership and management theories and principles. This course emphasizes management, leadership, organizational theories, policy, regulatory requirements, evidence-based practice, and business economics.

## **NURA 4850 - Nursing Senior Experience**

**Credits:** 5

**Prerequisite(s) or Corequisite(s):** NURA 4000 and NURA 4200 OR NURS 4000 and NURS 4200

**Description:** Students in this capstone course will be provided with the opportunity to synthesize program concepts and theories. The clinical component is designed to support the student's learning needs. Students collaborate with faculty and the clinical preceptor to develop individual learning outcomes that relate to course objectives and program student learning outcomes.

**University Requirement(s):** Senior Experience

**Cross Listed Course(s):** NURS 4850

## **Nursing, RN to BSN**

### **NUR 3100 - RN to BSN Role Transition**

**Credits:** 3

**Prerequisite(s):** Admission to BRNCO

**Description:** This course facilitates transition to the role of the baccalaureate nurse. This course begins the exploration of the nursing program mission and philosophy with an emphasis on nursing theories, evidence-based practice, and regulatory aspects of the profession, professional behavior and individual accountability. This course integrates communication, critical thinking, and cultural humility in the context of baccalaureate nursing practice.

### **NUR 3120 - Introduction to Exemplary Professional Practice**

**Credits:** 3

**Prerequisite(s):** Acceptance into the BRNCO program

**Description:** This course facilitates the transition to the role of the baccalaureate nurse, examining the nursing profession with a focus on nursing theories and philosophy, Quality and Safety Education for Nurses, professional development, and Forces of Magnetism. This course integrates communication, critical thinking, teamwork, and patient-centered care in the context of baccalaureate nursing practice.

### **NUR 3150 - Introduction to Gerontology Nursing**

**Credits:** 3

**Prerequisite(s):** Admission to BRNCO

**Description:** This course emphasizes understanding the impact of individual and societal perceptions of aging and the aging process. Students examine cultural, legal, and environmental factors, and the diverse health status found in the older adult. Communication skills are developed as an essential feature of the care of the older adult in a variety of settings. The core knowledge concepts and role development of the professional nurse in caring for older adults are explored.

### **NUR 3160 - Ethics and Professional Nursing Practice**

**Credits:** 3

**Prerequisite(s):** Admission into the Nursing Program

**Description:** The course prepares the professional nursing student to analyze ethical issues that emerge in the practice of nursing. The Magnet/Pathway's to Excellence concept of Exemplary Practice and

the QSEN competencies of Patient-Centered Care, Teamwork and Collaboration, and Evidence-Based Practice are explored as they relate to ethics and professional nursing. This course introduces the student to ethical theories and principles as well as ethical decision-making models applied to professional nursing. Students apply critical thinking concepts to applicable codes of ethics, ethical theories, principles, and rules in discussing the ethical dilemmas encountered in professional practice. Values and beliefs are examined in the context of ethical issues, role development, and application in health care.

**Cross Listed Course(s):** NURA 3160, NURS 3160

### **NUR 3300 - End of Life Care**

**Credits:** 3

**Prerequisite(s):** Admission to BRNCO

**Prerequisite(s) or Corequisite(s):** NUR 3100, NUR 3800

**Description:** This course emphasizes the understanding of the impact of individual and societal perceptions of death and dying. Students examine cultural, ethical, and legal factors concerning end of life care. Communication skills are developed as an essential feature of care in a variety of settings. The core knowledge concepts and role development of the professional nurse in caring for dying patients are explored.

### **NUR 3400 - Evidence Based Practice Through Nursing Research**

**Credits:** 3

**Prerequisite(s):** Admission into the Nursing Program, and NUR 3120 or NURS 3020 or NURA 3020

**Description:** Students in this course are introduced to the Evidence-Based Practice (EBP) research process. The knowledge and competence needed to critique published research are explored. Students learn how to use research in support of their EBP. Course content aligns with the Magnet/Pathway to Excellence concepts including Empirical Outcomes, Exemplary Professional Practice, New Knowledge, Innovations, and Improvements, and QSEN Competencies of EBP and Patient-Centered Care. Ethical and legal considerations are also discussed. Qualitative and quantitative research processes are examined. Students complete a literature search using appropriate databases on a researchable problem and communicate findings. Emphasis is placed on the improvement of nursing practice through reading, using, and participating in research.

**Cross Listed Course(s):** NURA 3400, NURS 3400

### **NUR 3700 - Nursing Health Assessment**

**Credits:** 3

**Prerequisite(s):** Admission to BRNCO

**Description:** This course is designed for students to develop, practice, and demonstrate their health assessment competence. Utilizing the nursing process, the student collects and organizes data to obtain a complete health history and perform a physical examination. Students have an opportunity to practice interviewing skills and physical examination techniques. Emphasis is

placed on the use of critical thinking, health promotion, and demonstration of a physical examination while caring for individuals throughout their lifespan.

### **NUR 3770 - Nursing Care Coordination of Acute and Chronic Disease Management**

**Credits:** 3

**Prerequisite(s):** Admission into the Nursing Program

**Description:** This theory course builds on the student's previous knowledge of physiological and psychosocial components of illness. Magnet/Pathway's to Excellence concepts of Structural Empowerment and Exemplary Professional Practice and QSEN Competencies of Patient-Centered Care, Teamwork and Collaboration, and Evidence-Based Practice are integrated in the course to help clarify the role of the Care Coordinator of a baccalaureate-prepared nurse. Updates on genomics and genetics, pain management, the stress response, immune disorders, mental and behavioral health disorders, rehabilitative, and palliative, and end-of-life care are addressed. Nursing care coordination of acute and chronic disease concepts including pathophysiology, pharmacology, and physical assessment components are integrated with patient-centered, evidence-based disease management, and inter-professional collaboration to determine and provide safe, high quality, and cost-effective care.

### **NUR 3800 - Advances in Clinical Practice**

**Credits:** 3

**Prerequisite(s):** Admission to BRNCO

**Description:** This course is designed to update students about evolving clinical issues and practice trends. Focus is on the role of the nurse in collecting and disseminating evidence to enhance evidence based practice. Core knowledge in pathophysiology, pharmacology, medical surgical nursing, pediatric nursing, obstetric nursing, psychiatric nursing, and community health nursing are explored. Specific course content reflects individual student nursing experiences and needs. Topics include patient safety and error reduction. The student is expected to access electronic information resources.

### **NUR 3810 - Multicultural Care of Patients and Their Families**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** NUR 3120

**Description:** This course will provide nursing and pre-nursing students with the tools necessary to understand how multicultural care has been and is now being provided to patients and their families. It will bring to light the discrepancies and biases to people of color in the healthcare world and examine what we can do about it for more equity today. This course would help decrease stereotype threats by showing students diversity and have them examine their own biases.

### **NUR 3910 - Introduction to Critical Care Nursing**



**Credits:** 8

**Prerequisite(s):** Successful completion of course application process

**Description:** This course introduces the registered nurse to the field of critical care nursing. The American Association of Critical Care Nurses: "Essentials of Critical Care Orientation™" is used as the basis for the course. Foundational knowledge, skill based labs and clinical practice provide basic critical care education to novice critical care nurses to provide safe patient care.

## **NUR 3920 - Introduction to Emergency Nursing**

**Credits:** 8

**Prerequisite(s):** Successful completion of course application process

**Description:** This course introduces the registered nurse to the essential principles of emergency nursing. The Emergency Nurses Association online orientation modules™ and *Sheehy's Manual of Emergency Care* is used as the basis for the course. Foundational emergency nursing knowledge, skill-based laboratory, and clinical practicums provide basic education to novice emergency nurses to provide safe patient care.

## **NUR 4000 - Community Health Nursing**

**Credits:** 6

**Prerequisite(s):** NUR 3100, NUR 3150, NUR 3400, NUR 3700, NUR 3800, and NUR 4150, Active Colorado RN License

**Description:** This course provides the tools for critical analysis of the principles of health promotion and disease prevention of families, groups, and communities. Cultural diversity, ethics, legal, and political responsibility of the nurse is discussed. The leadership roles of advocate, change agent, collaborator, resource person, and teacher are emphasized. The learner applies theories and models from the fields of public health, education, and nursing, to community health nursing. Focus is placed on community needs assessment, epidemiology, communicable disease, vulnerable populations, and health risks across lifespan.

## **NUR 4010 - Population Health Nursing I**

**Credits:** 3

**Prerequisite(s):** NUR 3120

**Description:** Students in this course gain the tools to critically analyze the principles of health promotion and disease prevention in families, groups, communities, and, populations. Cultural diversity, ethics, legal and political responsibility of the nurse are discussed. The leadership roles of advocate, change agent, collaborator, resource person, and the teacher are emphasized. The learner applies theories and models from the fields of public health, education, and nursing to community health nursing. Focus is placed on epidemiology, communicable disease, and health risks across the lifespan.

## **NUR 4020 - Population Health Nursing Practicum**

**Credits:** 3

**Prerequisite(s):** Must have RN license verified before enrollment

**Prerequisite(s) or Corequisite(s):** NUR 4010

**Description:** The focus of this course is to provide the practical clinical experience required for Population and Community Health Nursing. The learner applies theory from fields of public health, education, and nursing to population and community health nursing. Focus is placed on community assessment, QSEN, Magnet Status, and the American Association of Ambulatory Care Nurses - Nurse Sensitive Indicators to consider how to achieve quality care in the community.

## **NUR 4040 - Quality Care and Patient Safety Using Nursing Informatics**

**Credits:** 3

**Prerequisite(s):** NUR 3400 or NURA 3400 or NURS 3400

**Description:** This course introduces the student to the process of collecting and analyzing data used to improve the quality of care patients receive and enhance their safety. Course content aligns with Magnet/Pathways to Excellence of Empirical Outcomes, New Knowledge, Innovations, and Improvement and QSEN Competencies of Evidence-Based Practice (EBP), Quality Improvement, Safety and Informatics. A basic overview of nursing informatics and how it applies to clinical practice will be explored. During this course students will navigate an electronic health record (EHR) to identify essential information that must be available in a common database that documents patient care. Analysis of data from the EHR will be compared with current relevant literature, and selected national benchmarking goals. Introduction to patient satisfaction survey scores will be examined as they relate to patient-centered care, quality and safety to improve overall practice. Ethical, legal, and regulatory considerations are upheld related to data security, confidentiality, and patient's right to privacy.

**Cross Listed Course(s):** NUR 4040, NURS 4040

## **NUR 4150 - Ethics and Professional Nursing Practice**

**Credits:** 3

**Prerequisite(s):** NUR 3100, NUR 3800, NUR 3700, NUR 3150

**Description:** This course prepares the professional nursing student to analyze ethical issues that emerge in the practice of nursing. This course introduces the student to ethical theories and principles as well as ethical decision making models applied to professional nursing. Students apply critical thinking concepts to applicable codes of ethics, ethical theories, principles, and rules in discussing the ethical dilemmas encountered in professional practice. Values and beliefs are examined in the context of ethical issues, role development, and application in health care.

## **NUR 4300 - Leadership and Management in Professional Nursing Practice**

**Credits:** 4

**Prerequisite(s):** NUR 4000

**Description:** This course is designed to assist the student in developing as a professional nurse by investigating leadership and management theories and principles. The course emphasizes management, leadership, organizational theories, policy, regulatory

requirements, evidence-based practice and business economics. Major emphasis is placed on accountability and communication.

### **NUR 4310 - Transformational Nursing Leadership**

**Credits:** 3

**Prerequisite(s):** NUR 3120, NUR 3400, NUR 4040

**Description:** This course is designed to assist the student in developing as a professional nurse leader-manager by applying concepts such as critical thinking, emotional intelligence, and effective communication to the nursing leadership role. This course emphasizes practice change, transformational leadership, QSEN competencies, Magnet components, and professional development.

### **NUR 4860 - Nursing Capstone: Culmination of the Magnet Journey**

**Credits:** 3

**Prerequisite(s):** NUR 3120 AND NUR 3770 AND NUR 3810 AND NUR 3160 AND NUR 3400 AND NUR 4040 AND NUR 4310 AND NUR 4010

**Prerequisite(s) or Corequisite(s):** NUR 4020

**Description:** This course provides nursing students with the opportunity to narrate their journey of Magnet® learning throughout the program. In this course, students will describe the process of effective change by linking theoretical constructs and philosophical tenets of previous classes in the program. Most notably, previous work from the Evidence Based Practice Using Nursing Research (NUR 3400), Quality & Patient Safety Using Nursing Informatics (NUR 4040), and Transformational Nursing Leadership (NUR 4310) will be synthesized to illustrate how Magnet® concepts were used to inform care and improve patient outcomes. An important objective of this class is for the student to summarize the relationship in their own practice between the Magnet® concepts and QSEN goals for improved patient outcomes.

**University Requirement(s):** Senior Experience

## **Nursing, Traditional**

### **NURS 3020 - Foundations of Professional Nursing Practice**

**Credits:** 6

**Prerequisite(s):** Admission to the Traditional Nursing option

**Description:** In this course, students will be introduced to the profession of nursing and the culture of the health care environment. The core knowledge, core competencies, and role development of the professional nurse are explored. Students begin to develop an understanding of human responses to health and illness within the nurse-patient relationship. Students begin to apply the nursing process, critical thinking, clinical reasoning, and therapeutic and multicultural communication. Practice environments for the development of basic nursing skills include the facilitated simulation laboratory and a clinical practicum in a health care facility.

### **NURS 3160 - Ethics and Professional Nursing Practice**

**Credits:** 3

**Prerequisite(s):** Admission into the Nursing Program

**Description:** The course prepares the professional nursing student to analyze ethical issues that emerge in the practice of nursing. The Magnet/Pathway's to Excellence concept of Exemplary Practice and the QSEN competencies of Patient-Centered Care, Teamwork and Collaboration, and Evidence-Based Practice are explored as they relate to ethics and professional nursing. This course introduces the student to ethical theories and principles as well as ethical decision-making models applied to professional nursing. Students apply critical thinking concepts to applicable codes of ethics, ethical theories, principles, and rules in discussing the ethical dilemmas encountered in professional practice. Values and beliefs are examined in the context of ethical issues, role development, and application in health care.

**Cross Listed Course(s):** NUR 3160, NURA 3160

### **NURS 3400 - Evidence Based Practice Through Nursing Research**

**Credits:** 3

**Prerequisite(s):** Admission into the Nursing Program, and NUR 3120 or NURS 3020 or NURA 3020

**Description:** Students in this course are introduced to the Evidence-Based Practice (EBP) research process. The knowledge and competence needed to critique published research are explored. Students learn how to use research in support of their EBP. Course content aligns with the Magnet/Pathway to Excellence concepts including Empirical Outcomes, Exemplary Professional Practice, New Knowledge, Innovations, and Improvements, and QSEN Competencies of EBP and Patient-Centered Care. Ethical and legal considerations are also discussed. Qualitative and quantitative research processes are examined. Students complete a literature search using appropriate databases on a researchable problem and communicate findings. Emphasis is placed on the improvement of nursing practice through reading, using, and participating in research.

**Cross Listed Course(s):** NUR 3400, NURA 3400

### **NURS 3410 - Clinical Pharmacology**

**Credits:** 4

**Prerequisite(s):** Admission into the Nursing Program

**Description:** Clinical pharmacology covers the major principles of pharmacology, drug classifications, and pharmacotherapy. The nursing process, legal, ethical, cultural, and social values are also discussed in relationship to various disease processes and complex patient situations. Drug calculations are also covered. Critical thinking, communication and safe medication administration is integrated in the course.

**Cross Listed Course(s):** NURA 3410

### **NURS 3500 - Mental Health Nursing**

**Credits:** 5

**Prerequisite(s):** NURA 3020 or NURS 3020, NURA 3410 or NURS 3410, NURA 3160 or NURS 3160, NURA 3700 or NURS 3700

**Description:** The focus of this course is on the application of foundational mental health nursing concepts and interventions in the care of patients. This course includes the application of developmental theories and ethical principles to the nursing care of mental health patients. Emphasis is placed on therapeutic communication techniques, health promotion and relapse prevention. Students apply the nursing process using critical thinking and decision-making skills while providing safe, basic care to selected patients.

**Cross Listed Course(s):** NURA 3500

## **NURS 3700 - Nursing Health Assessment**

**Credits:** 3

**Prerequisite(s):** Admission to the Nursing Program

**Description:** This course is designed for students to develop, practice, and demonstrate their health assessment competence. The student collects and organizes data to obtain a complete health history and perform a physical examination. Students have an opportunity to practice interviewing skills and physical examination techniques. Emphasis is placed on the use of critical thinking and demonstration of a physical examination while caring for individuals. Students are also introduced to the interpretation of assessment findings.

**Cross Listed Course(s):** NURA 3700

## **NURS 3810 - Medical Surgical Nursing Care I**

**Credits:** 6

**Prerequisite(s):** NURS 3020 AND NURS 3160 AND NURS 3410 AND NURS 3700

**Description:** This course builds on concepts introduced in Foundations of Professional Nursing Practice. Focus is on utilization of core knowledge and core competencies related to the care of adults with basic and intermediate alterations in health. Students have the opportunity to practice skills using simulation technology and in clinical practice settings. Critical-thinking skills are used to begin to apply the nursing process to patient-centered care. This course develops the role of the nurse in providing medical surgical nursing care. Students practice and apply skills and knowledge learned in the classroom and lab to the clinical environment.

## **NURS 4000 - Community Health Nursing**

**Credits:** 6

**Prerequisite(s):** NURA 4030 or NURS 4030 and NURA 4110 or NURS 4110 and NURA 4040 or NURS 4040 and NURA 4300 or NURS 4300

**Description:** Students in this course provides the tools for critically analyzing the principles of health promotion and disease prevention of families, groups and communities. Cultural diversity, ethics, and the legal and political responsibility of the nurse are discussed. The leadership roles of advocate, change agent, collaborator, resource person and teacher are emphasized. The learner applies theories and models from the fields of public health, education and nursing to

community health nursing. Focus is placed on community needs assessment, epidemiology, communicable disease, vulnerable populations and health risks across the lifespan.

**Cross Listed Course(s):** NURA 4000

## **NURS 4030 - Nursing Care of the Childbearing Family**

**Credits:** 5

**Prerequisite(s):** NURA 3810 or NURS 3810

**Description:** This course focuses on the management and provision of nursing care for childbearing person and their families. The nursing process is utilized to provide family-centered nursing care for the patient and family across the healthcare continuum. Emphasis is placed on the birthing person and newborn health promotion, as well as prevention concepts related to antepartal, intrapartal, postpartum, and neonatal life stages. Students examine the rationale and procedures for implementation of a variety of skills needed for the childbearing person and newborn. Students have the opportunity to practice skills using simulation technology and in clinical practice settings. Students apply core knowledge and competencies in the provision of care of the childbearing patient and their family, including the role of educator.

**Cross Listed Course(s):** NURA 3810

## **NURS 4040 - Quality Care and Patient Safety Using Nursing Informatics**

**Credits:** 3

**Prerequisite(s):** NUR 3400 or NURA 3400 or NURS 3400

**Description:** In this course, the student is introduced to the process of collecting and analyzing data used to improve the quality of care patients receive and enhance their safety. Course content aligns with Magnet/Pathways to Excellence of Empirical Outcomes, New Knowledge, Innovations, and Improvement and QSEN Competencies of Evidence-Based Practice (EBP), Quality Improvement, Safety, and Informatics. A basic overview of nursing informatics and how it applies to clinical practice will be explored. During this course, students will navigate an electronic health record (EHR) to identify essential information that must be available in a common database that documents patient care. Analysis of data from the EHR will be compared with current relevant literature and selected national benchmarking goals. Introduction to patient satisfaction survey scores will be examined as they relate to patient-centered care, quality, and safety to improve overall practice. Ethical, legal, and regulatory considerations are upheld related to data security, confidentiality, and patients' right to privacy.

**Cross Listed Course(s):** NUR 4040, NURA 4040

## **NURS 4110 - Medical Surgical Nursing Care II**

**Credits:** 6

**Prerequisite(s):** NURS 3400, NURS 3500, NURS 3810

**Description:** This course expands on the concepts introduced in Medical Surgical Nursing Care I. Focus is on utilization of core knowledge and core competencies related to the care of adults with

intermediate and complex alterations in health. Critical-thinking skills are used to apply the nursing process to patient-centered care. This course further develops the role of the nurse in providing medical surgical nursing care. Students have the opportunity to practice skills using simulation technology and in clinical practice settings.

### **NURS 4200 - Child and Family Health Nursing**

**Credits:** 5

**Prerequisite(s):** NURS 4030 and NURS 4110 and NURS 4040 and NURS 4300

**Description:** This theoretical and clinical course focuses on the application of the nursing process in the delivery of evidence-based nursing care to children and their families. Health promotion, illness, injury prevention, health teaching and anticipatory guidance are emphasized. Developmentally appropriate care is integrated into the management of pediatric disorders and diseases. Students develop clinical skills using simulation technology and clinical practice environments.

### **NURS 4300 - Leadership and Management in Professional Nursing Practice**

**Credits:** 3

**Prerequisite(s):** NURS 3400 AND NURS 3500 AND NURS 3810

**Description:** This course is designed to assist the student in developing as a professional nurse by investigating leadership and management theories and principles. This course emphasizes management, leadership, organizational theories, policy, regulatory requirements, evidence-based practice, and business economics.

### **NURS 4850 - Nursing Senior Experience**

**Credits:** 5

**Prerequisite(s) or Corequisite(s):** NURA 4000 and NURA 4200 OR NURS 4000 and NURS 4200

**Description:** Students in this capstone course will be provided with the opportunity to synthesize program concepts and theories. The clinical component is designed to support the student's learning needs. Students collaborate with faculty and the clinical preceptor to develop individual learning outcomes that relate to course objectives and program student learning outcomes.

**University Requirement(s):** Senior Experience

**Cross Listed Course(s):** NURA 4850

## **Nutrition**

### **NUT 1800 - Careers in Nutrition and Dietetics**

**Credits:** 1

**Description:** This course identifies and discusses career options and market trends within the fields of nutrition, dietetics, and food service management. It reviews the academic and professional requirements for successful entry into these fields.

### **NUT 2040 - Introduction to Nutrition**

**Credits:** 3

**Description:** This course is designed to provide students with an understanding of the fundamental concepts of human nutrition, including digestion, absorption, metabolism, and the function of nutrients as they relate to human health and disease.

*Note:* Credit will be granted for only one prefix: HON or NUT.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC2

**Cross Listed Course(s):** HON 2040

### **NUT 3000 - Nutrition: Past and Present**

**Credits:** 3

**Prerequisite(s):** NUT 2040

**Description:** In this course, the science of nutrition is explored within a historical context. Students learn how ideas and practices related to food, nutrition, agriculture and food technology shift in different times and places, beginning with prehistoric times and continuing through the 20th century. This class examines how the concept of nutrition itself has changed over time and how those changes have affected what societies and individuals consume, and how this impacts nutrition-related disease trends seen in modern day.

### **NUT 3040 - Nutrition Concepts and Controversies**

**Credits:** 3

**Prerequisite(s):** NUT 2040

**Description:** This course provides additional study of the chemistry and biochemistry of nutrients, metabolic functions in health and disease, food composition, digestion, absorption, and nutrient utilization with a focus on how these concepts relate to current nutrition topics being discussed in the popular press. This course is intended for non-nutrition majors.

### **NUT 3050 - Concepts of Lifecycle Nutrition**

**Credits:** 3

**Prerequisite(s):** NUT 2040

**Description:** This course is designed to increase the non-nutrition major's knowledge of the physiological, psychological, sociological, and cultural factors which influence nutritional needs and eating habits throughout the life cycle. Nutrient requirements, dietary planning guidelines, and techniques for assessing nutritional status will be presented for the following life stages: preconception, pregnancy, lactation, infancy, childhood, adolescence, and aging.

*Note:* Students cannot take both NUT 3290 and NUT 3050 for credit.

### **NUT 3101 - Body Image: Concepts and Approaches**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** Body image concerns too often inhibit women's, men's, and non-binary people's health and productivity. Like any challenge,

these also hold potential for stimulating personal and civic transformation. In this course, students from all backgrounds explore the genetic, developmental, social, cultural, technological, and geopolitical factors affecting perceptions of healthy weight, size, and body image. They engage with evidence-based behavior change theories, strategies, and activities. These expand their capacity for promoting healthy behaviors and productive perspectives in diverse settings including families, schools, sports, college, workplaces, healthcare, social media, and other types of communities.

**General Studies:** Social and Behavioral Sciences

## NUT 3110 - Food Science

**Credits:** 3

**Prerequisite(s):** RST 1200 (or permission of instructor) and NUT 2040

**Corequisite(s):** RST 3110

**Description:** In this course, students are introduced to foods as chemical systems; structure-function relationships of water, protein, lipids, carbohydrates, minerals, and natural products in foods; food safety fundamentals; preservation and preparation methods and effects on food quality.

*Note:* This course must be taken concurrently with RST 3110.

**General Studies:** Natural and Physical Sciences

## NUT 3150 - Advanced Nutrition - Macronutrients

**Credits:** 3

**Prerequisite(s):** NUT 1040 or NUT 1800, NUT 2040, MTH 1210, BIO 2320, CHE 2100, CHE 2150, DPD application submitted to department

**Description:** Digestion, absorption, metabolism and health effects of macronutrients, water and alcohol are covered in this course. Also included are basic concepts of energetics, electrolytes, artificial sweeteners and fiber.

## NUT 3160 - Advanced Nutrition - Micronutrients

**Credits:** 3

**Prerequisite(s):** NUT 1040 or NUT 1800, NUT 2040, MTH 1210, BIO 2320, CHE 2100, CHE 2150, DPD application submitted to department

**Description:** Digestion, absorption, metabolism and health effects of micronutrients are covered in this course. Also included are basic concepts of the Dietary Reference Intakes, phytochemicals, supplements, microbiome, epigenetics, and nutrigenomics.

## NUT 3170 - Advanced Human Nutrition

**Credits:** 3

**Prerequisite(s):** Permission of Instructor

**Description:** This course provides a detailed overview of the biochemistry, metabolism, digestion, absorption and utilization of both macronutrients and micronutrients. Health effects and interactions among macronutrients, micronutrients, and phytochemicals are explored. Recommended intakes, deficiencies,

toxicities and health issues are discussed. Nutrient sources of foods are included. This course can be used as a prerequisite advanced nutrition course covering macro and micronutrients to the MSU Denver nutrition master's program.

## NUT 3200 - Nutrition and Sports Performance

**Credits:** 3

**Prerequisite(s):** NUT 2040

**Description:** This course is designed to enable the student, through application of the basic principles of nutrition, to improve his/her health, fitness, and physical performance within the limits set by genetic endowment and level of training.

## NUT 3300 - Cultural Aspects of Nutrition

**Credits:** 3

**Prerequisite(s):** NUT 2040

**Description:** Students will learn about the formation and significance of cultural identity among people identifying with a Native American, African American, Hispanic, Asian, or European heritage and its importance as it relates to food choices, behaviors, and nutritional status. They will also examine the impact of cultural differences, the nutritional value of ethnic foods, nutrition-related health benefits and risks faced by various cultural groups, disparities in health care, and strategies toward successful prevention and intervention.

## NUT 3310 - Nutrition and Food of Mexico

**Credits:** 3

**Prerequisite(s):** Permission of the instructor

**Description:** This course is about the nutrition of Mexican citizens living in Mexico, as well as Mexican immigrants and Mexican Americans living in the United States. The course addresses nutritional status, typical foods consumed, food habits and beliefs, cultural and health beliefs related to nutrition, and government programs to improve nutritional status. Students will attend basic cooking classes and nutrition-related field trips. This course includes learning and using Spanish vocabulary for foods, eating, cooking, digestion and nutrition related diseases and conditions. Parts of the course are taught in English and parts in Spanish.

*Note:* This course is part of a study abroad program run in conjunction with the Department of Modern Languages.

## NUT 3320 - Nutrition Study Abroad

**Credits:** 3

**Prerequisite(s):** Nutrition Major, 2.5 GPA

**Description:** This is a variable topics course conducted in a study abroad format. The countries visited will vary as to where the course is offered. Students will study the food and culinary traditions of the country visited, how people obtain food, health and nutrition programs available and how all of these affect the nutritional health of the country's population.

## **NUT 3350 - Global Nutrition and Health**

**Credits:** 3

**Prerequisite(s):** ENG 1010

**Description:** In this course, students engage in a global assessment of nutrition among various groups. Students use behavioral theories and scientific approaches to examine the current nutrition status of the world's populations. This includes an assessment of population growth with respect to food, causes and consequences of malnutrition, the interaction of nutrition and disease, and possible solutions for addressing nutritional problems.

**General Studies:** Social and Behavioral Sciences, Global Diversity

## **NUT 3375 - Food and Culture**

**Credits:** 3

**Description:** This course is an exploration of how food procurement, dietary practices, ideologies of consumption, and food celebrations across cultures are related to varying environments, subsistence strategies, moral sensibilities, socioeconomic and political conditions, social identities, and social hierarchies. Using an anthropological approach, students examine how the ideological, emotional, symbolic, aesthetic, and social value of food and its marketing varies across cultures. In addition, course materials introduce students to the politics and social movements revolving around ethical food procurement and food as a human right.

*Note:* Credit will be granted for only one prefix: ANT or NUT.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Cross Listed Course(s):** ANT 3375

## **NUT 3400 - Nutrition and Weight Management**

**Credits:** 3

**Prerequisite(s):** NUT 2040

**Description:** This course is a study of the basic principles of, and latest trends in, weight management. This course includes coverage of assessment techniques, behavioral and non-behavioral treatment approaches and prevention strategies. The concept of "health at every (body) size" will be presented. Fad diets and programs with sound nutrition principles will be analyzed.

## **NUT 3500 - Food Safety**

**Credits:** 3

**Prerequisite(s):** NUT 2040, BIO 1080, BIO 1090

**Description:** This course covers the safety and toxicology of food and dietary supplements with respect to microbial and non-microbial contamination. Sources of contamination, ways to prevent or control contamination, consequences of contamination and methods of detection are covered. Beneficial aspects of microbes in food with respect to human health are also discussed.

## **NUT 3700 - Nutrition Education and Counseling**

**Credits:** 3

**Prerequisite(s):** NUT 2040

**Description:** The student will be prepared to participate in the specialized communications of nutrition professionals. Students will practice preparing, conducting, and analyzing group nutrition education, individual nutrition counseling, and healthcare team communications. Written communication guided by the nutrition care process will also be covered. This course is designed for nutrition majors.

## **NUT 3800 - Nutrition Documentaries and Books**

**Credits:** 1

**Description:** An examination of nutrition, health, and wellness messages in contemporary documentary films and books. The course will focus on critical analysis and evaluation to determine the validity and reliability of messages in documentary films and books.

## **NUT 3810 - Nutrition and Social Media**

**Credits:** 1

**Description:** This course examines nutritional messaging in social media. It covers critical thinking skills in evaluating validity of nutritional messaging. Students will explore different social media platforms, how nutrition stories are presented, and best practices for identifying if the sources are trustworthy.

## **NUT 3820 - Plant Based Nutrition**

**Credits:** 1

**Description:** The course examines vegan and vegetarian diets. Students will explore why vegan and vegetarian diets are chosen for health, social, environmental, religious or other reasons. There will be a focus on plant-based ingredients that are part of a vegan or vegetarian diet. Relationships of vegan and vegetarian diets to disease prevention and disease states will be examined.

## **NUT 3850 - Nutrition and Chronic Disease**

**Credits:** 3

**Prerequisite(s):** NUT 2040

**Description:** In this course, relationships between nutrition and chronic disease on an individual, group and/or population-level will be explored. The roles of nutrients, foods, dietary patterns and popular diet trends in the promotion, prevention and treatment of several chronic diseases will be explored. Students will evaluate current research related to chronic inflammation, diet and lifestyle choices and their connection to the progression of various health conditions. Chronic disease states to be discussed include, but are not limited to obesity, cardiovascular disease, diabetes, cancer, Alzheimer's, gastrointestinal health and diseases and osteoporosis.

## **NUT 3910 - Breastfeeding Management for the Health Professional**

**Credits:** 1

**Prerequisite(s):** Junior standing; or permission of instructor

**Description:** This course is designed to increase the students' knowledge in the area of breastfeeding support. This course is taught for students in healthcare related majors or minors and health professionals, and the role of the health care practitioner will be emphasized. The course will address barriers to breastfeeding, benefits of breastfeeding for mother, child, and environment, and the role of the health care practitioner in breastfeeding support.

## **NUT 3980 - Internship in Nutrition**

**Credits:** 1-15

**Prerequisite(s):** Major in Human Nutrition-Dietetics; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## **NUT 4000 - Nutrition and Public Health**

**Credits:** 3

**Description:** This course concerns the nutritional status of individuals, families, households, communities, and populations. Topics covered include health and nutrition assessment, programs and resources, legislation, education, and program planning as they impact nutrition and public health.

## **NUT 4010 - Dietetic Internship Application Preparation**

**Credits:** 1

**Description:** The majority of students studying Nutrition will go on to apply for a Dietetic Internship program. The system used by students to apply for Dietetic Internship programs is called the Dietetic Internship Centralized Application System (DICAS). There are many moving parts to filling out a DICAS application which can make it a complicated process. Additionally, there are hundreds of Dietetic Internship programs to choose from. This class would assist students in researching Dietetic Internship programs, navigating DICAS, and preparing all necessary documents in order to have a competitive and complete application.

## **NUT 4040 - Nutrition Research Design and Evaluation**

**Credits:** 3

**Prerequisite(s):** MTH 1210 and Junior Standing

**Description:** Understanding that modern research design and evaluation rarely occur alone and that nutrition professionals will be

expected to collaborate with other members of a healthcare and/or research team, this course will provide students with an advanced and practical understanding of applied research design and evaluation in the field of nutrition. Topics include integrating the process of conducting research with study design principles, statistical analysis, qualitative and quantitative methods, research report development, dissemination of research findings and research ethics.

*Note:* This course is stacked with NUT 5040. (Note: Credit will be granted for only one course.)

## **NUT 4050 - Global and Cultural Topics in Nutrition**

**Credits:** 3

**Prerequisite(s):** NUT 3150 and NUT 3160 or NUT 3170

**Description:** This course focuses on equipping students to work with diverse populations and provides students with a foundation of knowledge concerning historical, social, and economic factors driving global nutrition. The current and future state of global nutrition will be discussed along with historical and future methods for addressing global malnutrition. Topics include epidemiology of nutritional diseases and malnutrition, sustainable agriculture, ethics in food, analyzing cross-cultural communication skills, identifying and utilizing culturally appropriate strategies in counseling and client care, and exploring various cultural traditions.

*Note:* This course is stacked with NUT 5050. (Note: Credit will be granted for only one course.)

## **NUT 4060 - Nutrition Communication Strategies**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** NUT 4040, NUT 4050

**Description:** This course provides students with an opportunity to examine and apply strategies and principles of effective communication for diverse audiences in the field of nutrition. Emphasis will be placed on effective translation and dissemination of scientific findings to diverse audiences using a variety of communication strategies including individual counseling, group facilitation, advocacy, and public speaking. The evaluation, interpretation, and communication of scientific literature will also be emphasized.

*Note:* The course is stacked with NUT 5060 (Credit will be granted for only one course.)

## **NUT 4160 - Empowered Leadership in Nutrition**

**Credits:** 3

**Prerequisite(s):** RST 1200

**Description:** This course will introduce students to leadership concepts including: different leadership theories, leadership skills, diversity and inclusion, human resources, and more. Students will be provided the opportunity to balance and evaluate a budget from a foodservice operation. While some of this course will focus on the fiscal requirements of balancing a budget, a primary focus will be on empowering a workforce by treating people ethically and respectfully.

## NUT 4200 - Lifecycle Nutrition for Majors

**Credits:** 3

**Prerequisite(s):** NUT 3140 or NUT 3150

**Description:** This course is designed to increase the nutrition major's knowledge about the physiological, psychological, sociological, and cultural factors which influence nutritional needs and eating habits throughout the life cycle with a focus on evidence-based practices. Nutrient requirements, dietary planning guidelines, and techniques for assessing nutritional status will be presented for the following life stages: preconception, pregnancy, lactation, infancy, childhood, adolescence, and aging.

## NUT 4210 - Community Nutrition

**Credits:** 3

**Prerequisite(s):** NUT 3150

**Description:** The student will explore the nutritional status of individuals and families in the community. Topics covered include community assessment, programs and resources, legislation, education, and program planning as they impact nutrition for groups.

## NUT 4300 - Management in Dietetics

**Credits:** 3

**Prerequisite(s):** RST 1200 or RST 1550

**Description:** This course is designed to provide the foundational knowledge and skills required in operation of establishments related to dietetics practice, including clinical, community, public health, school food service and private industry. Topics covered include the theories of organization and management applied to these dietetics practice environments, with an emphasis on operations strategies, quality management and cost control, forecasting, and supply chain management.

## NUT 4350 - Leadership Principles in Nutrition

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** NUT 4300

**Description:** This course provides students with an opportunity to explore leadership concepts in Nutrition and Health. Students will study different leadership theories and practice the application to specific situations they may experience in the health care field. Students will also perform self-assessments related to learning and leadership styles, practice self-advocacy and promote team involvement. Emphasis will be placed on interdisciplinary relationships, leadership as it relates to employees of different backgrounds and experiences, and the application of the appropriate leadership theory.

## NUT 4700 - Medical Nutrition Therapy I

**Credits:** 3

**Prerequisite(s):** NUT 3150

**Description:** This course examines principles and application of

medical nutrition therapy as related to specific disease states. Topics include the nutrition care process, nutrition assessment, nutrition support, and therapeutic diets.

## NUT 4720 - Nutrition Capstone

**Credits:** 3

**Prerequisite(s):** NUT 3150

**Description:** Students will discuss topics of current relevance in nutrition and dietetics' career planning, further education opportunities, professionalism, ethical issues, research, and effective communication. The seminar will prepare the students for a career in nutrition and dietetics.

*Note:* Some sections of this course may be taught as Service Learning.

**University Requirement(s):** Senior Experience

## NUT 4750 - Medical Nutrition Therapy II

**Credits:** 3

**Prerequisite(s):** NUT 3160, NUT 4700

**Description:** This course integrates knowledge of pathophysiology of selected diseases with nutrition intervention and prevention of various disease states. Students are introduced to the skills required to plan and implement modified diets for selected medical conditions. The course incorporates understanding, assessing, application and teaching of dietary modifications while considering the physiological, psychological, social and cultural aspects of the individual.

## NUT 4800 - Medical Nutrition Therapy

**Credits:** 4

**Prerequisite(s):** NUT 3150

**Description:** This course examines principles and application of Medical Nutrition Therapy as related to specific disease states. The course integrates knowledge of pathophysiology of selected diseases with nutrition intervention of various disease states. Students are introduced to the skills required to plan and implement modified diets for select medical conditions. The course encompasses understanding, assessing, application, and teaching of dietary modifications while considering the physiological, psychological, social, and cultural aspects of the individual.

*Note:* Students cannot earn credit for NUT 4700/4750 and NUT 4800

## NUT 4950 - Lactation Management

**Credits:** 3

**Description:** A clinical training course that provides 50 of the required 95 hours of lactation-specific education (including the 5 hour communication requirement) to become eligible for the International Board Certified Lactation Consultant exam. This course explores breastfeeding anatomy and physiology. Discusses common breastfeeding issues. Topics include anatomy of the breast, supporting the breastfeeding dyad, culturally informed breastfeeding support, and education in community and clinical settings. The



course will be taught using competency-based learning and application of primary research.

## NUT 4970 - Clinical Skills for Breastfeeding Support

**Credits:** 3

**Prerequisite(s):** NUT 4950

**Description:** A clinical training course that provides 45 of the required 95 hours of lactation-specific education to become eligible for the International Board Certified Lactation Consultant exam. This course explores the principles and anthropology of human lactation, triage of breastfeeding problems, breastfeeding techniques, maternal and infant nutrition, and application of clinical breastfeeding support skills in real and simulated consultation scenarios. This dyad-focused information will prepare students to support breastfeeding in a variety of healthcare-related roles. This course will be taught using competency-based learning and application of primary research.

## NUT 4990 - Clinical Lactation Practicum

**Credits:** 1-8

**Prerequisite(s):** NUT 4950 and NUT 4970

**Description:** Students in the course will learn hands-on, practical experiences in the field of lactation.

## Philosophy

### PHI 1010 - The Big Questions: An Introduction to Philosophy

**Credits:** 3

**Description:** Philosophy asks questions such as: What am I? How can I know things? What is real? Does God exist? Students confront questions like these in a rigorous, critical, and open-ended manner. Philosophy is unlike other disciplines: students learn not just what others have discovered, but also how to think about themselves, the world, and the relation between them.

*Note:* Credit will be granted for only one prefix: PHI or HON.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH3

**Cross Listed Course(s):** HON 1011

### PHI 1030 - Thinking about Ethics: Morality and the Good Life

**Credits:** 3

**Description:** Have you ever had a hard time deciding the right thing to do? In this course, students learn how to think more critically about moral values and develop their own perspectives while considering questions such as: "How should I best live my life?" "What should I value?", "How can I best determine right from wrong?", "What does social justice require?", and "What do we owe to each other?"

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH3

## PHI 1060 - Ethics in Medicine and Science

**Credits:** 3

**Description:** In this course students acquire a knowledge base and the skills that allow them to reflect ethically upon issues in medicine and science. Students study different philosophical-ethical theories and approaches and learn how to apply them to different issues in medicine and science.

**Guaranteed Transfer:** GT-AH3

**University Requirement(s):** Arts and Humanities

## PHI 1080 - Philosophy of Protest

**Credits:** 3

**Description:** What is the point of protesting? Is there such a thing as a "good" or "bad" protest? In this class, students explore major ideas about the significance of protesting as it impacts society, both the good and the bad. Topics include: Is it ever ok for a protest to be violent? Do protests have political value? What makes a good protestor? Students in this class use political philosophy and ethical theories to examine protest movements in society.

**General Studies:** Arts and Humanities

## PHI 1110 - Language, Logic & Persuasion

**Credits:** 3

**Description:** This course is an introduction to critical analysis, thinking and expression, covering three main areas: (1) *language*: the significance of words, and their arrangements, in psychological appeals to the senses and the emotions; (2) *logic*: the structures of formal reasoning in arguments and in appeals to reason; and (3) *persuasion*: the rhetorical aspects of discourse and presentation, especially in appeals to ideals or character. Practical skills and applications will be emphasized.

**General Studies:** Oral Communication

## PHI 2040 - Philosophy of Religion

**Credits:** 3

**Prerequisite(s):** PHI 1010 or PHI 1030 or PHI 1040 or PHI 1050 recommended

**Description:** This is a course on the philosophical dimensions of religious faith, belief, and/or practice; the nature and scope of religious experiences; and/or the existence and/or source of divinity. This course satisfies the General Studies Arts and Humanities Requirement.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH3

## PHI 2440 - Symbolic Logic

**Credits:** 3

**Description:** This course is a general introduction to formal or symbolic logic. Topics covered include all aspects of sentential or propositional logic, beginning with the rules for determining the

validity of deductive arguments and continuing through to the symbolization and syntax of the first-order predicate calculus.

## **PHI 2600 - Chicana/o and Latina/o Religious Cultures**

**Credits:** 3

**Description:** This course will engage aspects of Chicana/o and Latina/o religious experiences, practices, and expressions in the United States of America. While the course is grounded in Chicana/o religious experience, other Latina/o communities will also be discussed with emphasis on comparative aspects of the groups. Some attention will be given to historical contexts in Iberia and Latin America, as well as questions of how one studies Latina/o religions, but most of the course will examine moments in which religious expressions intersect with politics, popular culture, and daily life in the U.S.A.

*Note:* Credit will be granted for only one prefix: CHS or PHI.

**Cross Listed Course(s):** CHS 2600

## **PHI 3000 - Ancient Greek and Roman Philosophy**

**Credits:** 3

**Prerequisite(s):** ENG 1010 or PHI 1010 or PHI 1030 or PHI 3020

**Description:** Students delve into the world of Ancient Greek and Roman thought, exploring the philosophical traditions that have shaped Western intellectual history, politics, culture to this day. The course pays special attention to Socrates, Plato, and Aristotle and their foundational investigations into the eternal questions of epistemology, metaphysics, ethics, politics, and how we can live the best life possible for human beings.

**General Studies:** Arts and Humanities

## **PHI 3010 - History of Medieval Philosophy: Islamic, Jewish, and Christian Voices**

**Credits:** 3

**Prerequisite(s):** One upper-division course in the humanities or social sciences, or one philosophy course; or permission of instructor

**Description:** Students in this course explore the major themes, figures, and texts of medieval philosophy (circa 325 to 1450) in North Africa, the Middle East, Central Asia, and Europe. Topics include the reception of Greek thought into Arabic and Latin, the relationship between reason and revealed religion, and arguments about the existence and attributes of God, necessity and freedom, and whether the world is eternal. Students examine Muslim, Jewish, and Christian thinkers (e.g. Augustine, Avicenna, al-Ghazali, Maimonides, Aquinas, Hildegard of Bingen) and investigate their intellectual context, interrelationships, and influences.

**General Studies:** Arts and Humanities, Global Diversity

## **PHI 3020 - Early Modern Philosophy: Europe and the Americas**

**Credits:** 3

**Prerequisite(s):** ENG 1010 or PHI 1010 or PHI 1030 or PHI 3000

**Description:** Students in this course explore the philosophical developments in Western philosophy during the early modern period (roughly 1600-1800 AD), which saw many thinkers reject the dominant Greco-Roman and medieval traditions and seek new foundations for knowledge. These developments not only coincided with, but also contributed and responded to revolutionary developments in science, politics, religion, and culture that still profoundly affect today's world. Through critical analysis of texts from a variety of philosophers, students will engage with the radically new ways of thinking about reality (metaphysics), knowledge (epistemology), the self and its relation to the world and others (ethics).

**General Studies:** Arts and Humanities

## **PHI 3040 - Algorithms, Rationality, and Beliefs**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 or PHI 1030 or permission of instructor

**Description:** How do we know things? This question is radically different in the age of algorithms and big data. Everyone who accesses information online has their environment shaped by the algorithms behind social media, search engines, ads, and more. In this class, we analyze how to best form beliefs despite online echo chambers, rationality online when faced with conspiracy theories, and algorithmic decision-making as a possible help or hindrance for obtaining knowledge. Students discuss the ways that algorithms, big data, and the internet impact beliefs within society.

**General Studies:** Arts and Humanities

## **PHI 3050 - Special Topics in the History of Philosophy: Variable Topics**

**Credits:** 3

**Prerequisite(s):** PHI 3000 and/or PHI 3020 recommended

**Description:** This course is devoted to special topics in the history of philosophy. These topics may involve eras falling outside the foci of the historical sequence, such as Hellenistic or Roman philosophy, Medieval or Renaissance philosophy, or nineteenth and twentieth century philosophy. Or they may consider the historical progression of a special topic, such as skepticism, that is considered in a more in-depth or advanced level.

*Note:* This course may be repeated for credit up to four times under different topics.

## **PHI 3120 - Philosophy of Language**

**Credits:** 3

**Prerequisite(s):** PHI 2440 is recommended

**Description:** This course is a general introduction to central questions and topics in the philosophy of language. Special consideration is given to historical and contemporary issues in the analytic tradition.

## PHI 3150 - Social and Political Philosophy

**Credits:** 3

**Prerequisite(s):** PHI 3000 or PHI 3020

**Description:** This is a course on selected topics in social and political philosophy, typically involving issues related to justice, rights, power, democracy, class, equality, freedom, property, representation, and community. Readings may include classical and contemporary sources.

## PHI 3170 - Early Modern Women Philosophers

**Credits:** 3

**Prerequisite(s):** One upper-division course in the humanities or social sciences, or one philosophy course; or permission of instructor

**Description:** Students examine and evaluate the work of some of the women philosophers of the early modern period (~1600-1800). Students discuss a variety of philosophical issues including social and political issues, such as women's equality, women's education, and political rule; metaphysical issues, such as mind-body dualism, vitalism, and the existence of God; and issues concerning the relationship between philosophy, science, and religion. Students also investigate the interactions between the authors studied and other philosophers working during the period.

## PHI 3180 - Feminist Philosophy

**Credits:** 3

**Prerequisite(s):** PHI 1010 or 1030 and junior standing are recommended

**Description:** This course involves an examination of traditional philosophical topics and questions from the perspective of contemporary feminist theory. Special consideration is given to feminist critiques of logic, rationality and scientific objectivity and to feminist approaches to ethical, social, and political thought.

*Note:* Credit will be granted for only one prefix: PHI or GWS.

**Cross Listed Course(s):** GWS 3180

## PHI 3320 - Metaphysics

**Credits:** 3

**Description:** This course is a comprehensive survey of traditional or contemporary problems in metaphysics. Topics typically covered include free will, causation, identity, God, and substance.

## PHI 3330 - Epistemology

**Credits:** 3

**Prerequisite(s):** PHI 2440

**Description:** This course provides a survey of key topics in the theory of knowledge such as skepticism, propositions, justification, perception, memory, induction, other minds, and naturalism.

## PHI 3340 - Philosophy of Race

**Credits:** 3

**Prerequisite(s):** English 1020 or ENG 1021 and one upper-division course in the humanities or social sciences (including philosophy); or permission of instructor

**Description:** In this course, students will explore key philosophical questions about race and racism, including the ethical, political, metaphysical, and epistemological aspects of racial and ethnic categories. Students examine the ways in which ethnically and racially marginalized groups in the United States have grappled with systemic challenges stemming from racism and white supremacy and celebrate the movements that have confronted these systems to advance social justice. The course provides students with tools to challenge, understand, and contextualize the treatment and experiences of ethnically and racially marginalized groups in the U.S.

**University Requirement(s):** Ethnic Studies & Social Justice

## PHI 3350 - Ethical Theories

**Credits:** 3

**Prerequisite(s):** PHI 3000

**Description:** This is a course on selected topics in ethical theory, including those derived from normative ethics, concerning the content of moral behavior, or those derived from meta-ethics, concerning the nature of ethical reflection. Readings may include both classical and contemporary sources.

## PHI 3360 - Business Ethics

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 or PHI 1030 or permission of instructor

**Description:** Does the phrase "Business Ethics" seem like it's about two conflicting ideas? In this course, students explore the intersection of business goals and ethical values. They learn how to communicate about ethics in a clear and professional way. Topics include: What are the responsibilities of a good business? How can employees avoid causing moral harm? How might businesses morally contribute to society?

**General Studies:** Arts and Humanities

## PHI 3370 - Computers, Ethics, and Society

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021 or PHI 1030 or permission of instructor

**Description:** Does technology make society better? This class examines the good and bad things that result at the intersection of computers and society. Students analyze how computer-based technologies might threaten societal values such as safety, knowledge, privacy, and freedom. Students learn how to apply ethical concepts to modern questions about how to best utilize technology.

**General Studies:** Arts and Humanities

## PHI 3380 - Science and Human Values: Variable Topics

**Credits:** 3

**Prerequisite(s):** PHI 3020

**Description:** This course is designed to serve students interested in learning about a variety of applied ethical issues arising from the rapid increases in scientific knowledge and technological ability. Typical issues could include those associated with questions of bioethics (sometimes called medical ethics), environmental philosophy, human dignity or global ethics.

*Note:* This course may be repeated for credit under different topics.

### PHI 3390 - Aesthetics

**Credits:** 3

**Prerequisite(s):** Two courses in philosophy or Permission of instructor

**Description:** A study of some basic concepts of aesthetics, focused either on a principal figure in the field (e.g. Plato, Kant, Schiller, or Nietzsche) or on a particular set of fundamental issues in aesthetics, e.g. the ontology of the work of art, intentions and originality, form and expression, criticism, aesthetic education, etc. May include an emphasis on a particular art (e.g. poetry, drama, film, jazz, or painting).

### PHI 3400 - Philosophy of Science

**Credits:** 3

**Prerequisite(s):** PHI 1010 and three additional hours in philosophy or Permission of the instructor

**Description:** An advanced, critical examination of the concepts and problems involved in contemporary science. The nature of scientific method, explanation, and law is covered. Physical, biological, and psychosocial sciences are investigated.

### PHI 3430 - Philosophy of Law

**Credits:** 3

**Prerequisite(s):** One upper-division course in the humanities or social sciences, or one philosophy course; or permission of instructor

**Description:** This course examines some of the conceptual foundations of law and some of the larger and smaller controversies in the philosophy of law.

### PHI 3450 - Human Nature and Conduct: Variable Topics

**Credits:** 3

**Prerequisite(s):** PHI 3000 or PHI 3020

**Description:** This variable topics course examines philosophical writings on the topic of human nature and/or concerns a critical investigation of social structures and cultural institutions that rely on some concept of human nature (either explicitly to implicitly). Possible themes may center around issues such as life and death, embodiment, nature vs. convention, responsibility, solitude and community, or personhood; alternately, the course may consider the ethical and social thought of an individual thinker, such as Dewey, Freud, or Habermas, or a school or movement, such as Stoicism,

British Idealism, or the conservative tradition, with an emphasis on human nature and/or society.

*Note:* This course may be repeated for credit under different topics.

### PHI 3460 - Environmental Ethics

**Credits:** 3

**Prerequisite(s):** ENG 1020 or PHI 1030 or permission of the instructor

**Description:** Students explore how traditional Western ethical theories apply to the relationship between humans and the natural environment while facing challenges from Indigenous and non-Western philosophies. They also consider how to achieve environmental justice toward human beings, non-human animals, and ecosystems. Students are encouraged to develop their own moral perspectives on key ethical issues concerning how humans treat each other, animals, and the broader environment.

### PHI 3480 - Histories of Desire: Variable Topics

**Credits:** 3

**Prerequisite(s):** PHI 1030

**Description:** This variable topics course contends with philosophical issues relating to love, desire, gender, and sexuality in a concrete cultural context. Possible themes might center around issues such as *eros* and *thanatos*, conscience and internalization, transgression and trauma, eroticism and art, ecstasy and spirituality, sexuality and identity, the body and its modification of mortification, queer histories, the care of self, or desire in language; alternately, the course may focus on topics or problems raised by the work of an individual thinker or group of thinkers, such as Freud, Bataille, Lacan, Klein, Foucault, Deleuze, Irigaray, or Kristeva.

*Note:* This course may be repeated for credit under different topics.

### PHI 3510 - Phenomenology

**Credits:** 3

**Prerequisite(s):** PHI 3020 is recommended

**Description:** This course is a study of at least two major 20th century phenomenologists. Different conceptions of the nature and scope of phenomenology are critically examined.

### PHI 3530 - Philosophy of Mind

**Credits:** 3

**Prerequisite(s):** PHI 2440

**Description:** This course is a study of mental phenomena, including traditional problems connected with the relation of mind and body, personal identity, solipsism and the knowledge of other minds, but also contemporary issues involving consciousness, perception, thought, feeling and volition in human, animal, and artificial contexts.

### PHI 3550 - Existentialism

**Credits:** 3

**Prerequisite(s):** PHI 3020 is strongly recommended

**Description:** Existentialism may be characterized as a philosophical and literary impulse, a multi-sided revolt against the "leveling down" of human existence by forces of industrialization, alienation, and homogenization. In the ideologies of mass society, existentialists identify a series of threats to human freedom and to the uniqueness of the individual. This course examines several approaches to a cluster of philosophical problems, rooted in the concrete realities of human existence.

### **PHI 3570 - Hermeneutics**

**Credits:** 3

**Prerequisite(s):** PHI 3020 is strongly recommended

**Description:** Hermeneutics is the study of the principles of interpretation, and it examines how human beings experience the world as intelligible. As a practice, hermeneutics is ancient; as a modern discipline, it is first codified in the nineteenth century and beyond. This course poses and assesses fundamental questions regarding the conditions of human understanding, particularly the complex relationship of writer, text, and reader in the interpretive process.

### **PHI 3700 - Philosophy and the Arts: Variable Topics**

**Credits:** 3

**Description:** This course is an examination of some of the most intriguing and illuminating points of intersection between philosophy and the literary, the performing or the visual arts, including film. It may address philosophy on the arts (issues relating to ontological status, truth, interpretation, authorship, and self expression); or philosophy in the arts (literary texts, performance pieces or artistic works that explicitly invoke philosophical problems or evoke philosophical doctrines in their portrayal of social or psychological realities); or philosophy as art problems connected with meaning, representation and form in philosophical works, including across multiple media).

*Note:* This course may be repeated for credit under different topics.

### **PHI 3810 - Major Philosophers: Variable Topics**

**Credits:** 3

**Prerequisite(s):** PHI 3000 or PHI 3020

**Description:** This course is an in-depth study of a specific philosopher, such as Aristotle, Aquinas, Descartes, Kant, Nietzsche, or Heidegger; or a group of related thinkers, such as Plato or Plotinus, Marx and the Young Hegelians, or Wittgenstein and Austin; or a movement of thought, such as German Idealism, American Pragmatism, or Logical Positivism.

*Note:* This course may be repeated for credit under different topics.

### **PHI 4100 - Senior Seminar**

**Credits:** 3

**Prerequisite(s):** Completion of all General Studies requirements and

senior standing

**Description:** This is a capstone course and is required of all philosophy majors. It is an in-depth consideration of a topic or author (or group of topics or authors) involving synoptic reflection, detailed interpretation and thematic synthesis, with in-class presentations and an emphasis on philosophical writing.

**University Requirement(s):** Senior Experience

## **Physics**

### **PHY 1000 - Physics of Nature**

**Credits:** 4

**Description:** This is an introductory survey course for nonscientists that emphasizes the main concepts of physics, including mechanics, properties of matter, heat, sound, electricity, and magnetism, light, modern physics, and relativity. The accompanying laboratory work is designed to illustrate the material discussed in the lectures.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

### **PHY 1020 - Physics of Advanced Materials**

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** MTH 1120 or equivalent

**Description:** This course is a seminar surveying the Physics of Advanced Materials and Applications. Topics may include, but are not limited to, the application of nanotechnology to: materials and manufacturing, electronics and computing, healthcare and medicine, pharmaceuticals, chemical catalysts, and transportation.

### **PHY 1250 - Physics of Aviation**

**Credits:** 6

**Prerequisite(s):** MTH 1110, or MTH 1310, or equivalent

**Description:** This one-semester course introduces the fundamentals of physics through technological applications, many of which are in aerospace science. Topics include measurement, motion, temperature, heat, properties of fluids, sound, oscillations, waves, and electricity and magnetism.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

### **PHY 2010 - College Physics I**

**Credits:** 4

**Prerequisite(s):** Concurrent registration with PHY 2030 is recommended. MTH 1120 or equivalent; and completion of either ENG 1009 or ENG 1010 or the General Studies requirement in Oral Communication.

**Description:** This first term of a one-year sequence covers the fundamentals of physics in a basic but thorough manner. The experimental aspects of physics are emphasized in the classroom and in the laboratory. Considerable time is devoted to problem-solving. Course content includes measurement, vectors, kinematics, dynamics,

gravitation, energy, momentum, rotational motion, properties of matter, heat, thermal properties of matter, thermodynamics, wave motion and sound. The course is algebra-based.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## PHY 2020 - College Physics II

**Credits:** 4

**Prerequisite(s):** Concurrent registration with PHY 2040 is recommended; PHY 2010 and completion of either ENG 1009 or ENG 1010 or the General Studies requirement in Oral Communication.

**Description:** A continuation of PHY 2010, the algebra-based introductory physics course. Topics include electricity and magnetism, electromechanical devices, AC circuits, geometrical and physical optics and modern physics.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## PHY 2030 - College Physics I Laboratory

**Credits:** 1

**Prerequisite(s):** Concurrent registration with PHY 2010 is recommended. MTH 1120 or equivalent; and satisfaction of either ENG 1009 or ENG 1010 or the General Studies requirement in Oral Communication.

**Description:** The first semester of a one-year sequence in laboratory work that emphasizes experimental techniques, procedures and formal report writing. Laboratory experiments reinforce or extend the work of the lecture portion of the course. Emphasis is on mechanics.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## PHY 2040 - College Physics II Laboratory

**Credits:** 1

**Prerequisite(s):** Concurrent registration with PHY 2020 is recommended. Completion of either ENG 1009 or ENG 1010 or the General Studies requirement in Oral Communication.

**Description:** This course is the second semester of a one-year sequence in laboratory work that emphasizes experimental techniques, procedures and formal report writing. Laboratory experiments are selected to reinforce or extend the work of the lecture portion of the course. Emphasis is on electrical measurements, waves, optics and modern physics.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## PHY 2200 - General Physics for Computer and Electrical Engineering

**Credits:** 4

**Prerequisite(s):** MTH 2410 or equivalent

**Description:** This is a one-semester introductory calculus-based physics course designed specifically for Computer Science

Engineering and Electrical Engineering majors. In this course, students examine the topics of kinematics, Newton's laws of motion, work and energy, electric forces, electric fields, electric potential, current & circuits, magnetism, and Faraday's law of induction.

**General Studies:** Natural and Physical Sciences

## PHY 2308 - Stretch General Physics I A

**Credits:** 3

**Prerequisite(s):** MTH 1410

**Description:** This first half-term of a one-year, introductory, calculus-based physics course is suitable for science and engineering students. The topics include motion, forces, and energy. General Studies credit, and credit for General Physics I, will be granted after completion of PHY 2309.

*Note:* This course is not available to physics majors. Stretch General Physics I A (PHY 2308) is the first semester in a two semester sequence designed to give students in service classes a bit of extra time to comprehend the material. The second semester is Stretch General Physics I B (PHY 2309). Both courses are three (3) credits but only four (4) credits of general studies Natural Sciences will be granted, equivalent to taking PHY 2311, after completion of PHY 2309.

**General Studies:** Natural and Physical Sciences

## PHY 2309 - Stretch General Physics I B

**Credits:** 3

**Prerequisite(s):** PHY 2308

**Description:** This second half-term of a one-year, introductory, calculus-based physics course is suitable for science and engineering students. The topics include motion, forces, rotation, collisions, gravity, and elasticity. General Studies credit, and credit for General Physics I, will be granted after completion of PHY 2309.

*Note:* This course is not available to physics majors. Stretch General Physics I A (PHY 2308) is the first semester in a two semester sequence designed to give students in service classes a bit of extra time to comprehend the material. The second semester is General Physics I B (PHY 2309). Both courses are three (3) credits but only four (4) credits of Natural Science general studies will be granted, equivalent to taking PHY 2311, after completion of PHY 2309.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## PHY 2311 - General Physics I

**Credits:** 4

**Prerequisite(s):** MTH 1410

**Corequisite(s):** Concurrent registration with PHY 2321 General Physics I Laboratory is recommended. Satisfaction of either ENG 1010 or the Oral Communication requirement.

**Description:** This first term of a one-year, introductory, calculus-based physics course is suitable for science and engineering students. The topics include motion, forces, rotations, gravity, and elasticity.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## PHY 2321 - General Physics I Laboratory

**Credits:** 1

**Prerequisite(s):** MTH 1120 or equivalent; and satisfaction of either ENG 1009 or ENG 1010 or the Oral Communication requirement

**Corequisite(s):** Concurrent registration with PHY 2311 is recommended

**Description:** This first semester of a one-year sequence in laboratory work emphasizes experimental techniques, procedures and formal report writing. Laboratory experiments reinforce or extend the work of the lecture portion of the course. Emphasis is on mechanics.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## PHY 2331 - General Physics II

**Credits:** 4

**Prerequisite(s):** MTH 2410, PHY 2311 or equivalent, and completion of either ENG 1009 or ENG 1010 or the Oral Communication requirement.

**Corequisite(s):** Concurrent registration with PHY 2341 is recommended.

**Description:** As a continuation of PHY 2311, this second term of a one-year introductory calculus-based physics course is suitable for science and engineering students. Topics treated include electricity and magnetism, circuits, electromagnetic oscillations and waves, physical optics, and geometrical optics.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## PHY 2341 - General Physics II Laboratory

**Credits:** 1

**Prerequisite(s):** MTH 1120 or equivalent, and satisfaction of either ENG 1009 or ENG 1010 or the Oral Communication requirement

**Corequisite(s):** Concurrent registration with PHY 2331 is recommended.

**Description:** This is the second semester of a one-year sequence in laboratory work that emphasizes experimental techniques, procedures and formal report writing. Laboratory experiments reinforce or extend the work of the lecture portion of the course. Emphasis is on electrical measurements, waves, optics and modern physics.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

## PHY 2620 - Sound and Music

**Credits:** 3

**Prerequisite(s):** A passing score on the mathematics pre-assessment exam

**Description:** This course considers the basic nature of sound waves, the ear and hearing, musical instruments, and acoustics. Although this course is mainly descriptive, some high school algebra is used.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GS-SC2

## PHY 2821 - Sophomore Physics Laboratory

**Credits:** 1

**Prerequisite(s):** PHY 2331 or the equivalent

**Description:** Students experiment with various laboratory equipment relevant to sophomore-level instruction, with an emphasis on experimental techniques, data analysis, and presentation of results.

## PHY 3082 - Energy and Environment

**Credits:** 3

**Prerequisite(s):** PHY 1000 or PHY 2010 or equivalent

**Description:** This course presents the supply and usage of energy resources and the environmental problems associated with our energy usage.

## PHY 3111 - Modern Physics I

**Credits:** 4

**Prerequisite(s):** MTH 2420 AND PHY 2331

**Description:** In this course, students are introduced to the topics of modern physics including special relativity, the development of quantum physics, the Schroedinger equation, and an introduction to atomic physics. Modern Physics began at the turn of the 20th century when several experiments revealed inconsistencies with the classical theories of physics. Students follow the development of new models by Einstein, Bohr, Planck, Heisenberg, Dirac, and Schroedinger. This course is the first of a two-course modern physics sequence, designed for physics majors and physics minors (Modern Physics II covers multi-electron atoms, molecular physics, quantum statistics, solid-state physics, nuclear and particle physics).

## PHY 3121 - Modern Physics II

**Credits:** 3

**Prerequisite(s):** PHY 3111

**Description:** Students in this course learn the concepts and formalism of quantum physics are used to allow for an understanding of the energy levels and configuration of the hydrogen atom, the strength of molecular bonds, atomic and molecular spectroscopy, solid-state physics, band theory, nuclear and subatomic physics. This course is also an introduction to quantum statistics, general relativity, and cosmology is also given. This is the second half of a two-course sequence which provides an introduction to modern physics.

## PHY 3231 - Vibrations, Waves, and Mathematical Methods

**Credits:** 4

**Prerequisite(s):** PHY 2331 and MTH 2420

**Description:** Students in this course are introduced to vibrations and waves associated with physical phenomena and the mathematical methods are necessary for analysis of these phenomena. Students cover topics including harmonic oscillators, resonance, coupled oscillators and normal modes of oscillation,

standing and traveling waves in elastic media, sound waves, pulses, and dispersion.

## PHY 3311 - Analytical Mechanics

**Credits:** 4

**Prerequisite(s):** PHY 3231 and MTH 3420, or Permission of instructor

**Description:** This is a course in classical mechanics at the intermediate level. Topics covered in the first semester of the calculus-based introductory physics course are now addressed with more sophisticated mathematical techniques and are applied to more complicated problems.

## PHY 3341 - Electricity and Magnetism I

**Credits:** 4

**Prerequisite(s):** PHY 3231 and MTH 3420, or Permission of instructor

**Description:** In this course students cover electromagnetism at the intermediate level, utilizing the mathematical tools of vector calculus, ordinary differential equations and partial differential equations. The main topics include electrostatics, potential theory, magnetostatics, fields in matter, Faraday's law of induction, Maxwell's equations, and electromagnetic radiation.

## PHY 3411 - Thermal Physics

**Credits:** 3

**Prerequisite(s):** PHY 3111 and MTH 3420

**Description:** Students in this course cover the basic concepts of the three related disciplines of thermodynamics, statistical mechanics, and kinetic theory. Students examine both microscopic and macroscopic behavior of various classical and quantum systems of noninteracting particles and spins.

## PHY 3711 - Junior Physics Laboratory

**Credits:** 2

**Prerequisite(s):** PHY 3111 and PHY 2821, or permission of instructor.

**Description:** This is the first term of a one-year sequence in laboratory work at the junior level. Topics include electrical measurements, electrical measuring systems, and experimental optics.

## PHY 3811 - Quantum Physics I

**Credits:** 4

**Prerequisite(s):** PHY 3231, and PHY 3111, and MTH 3420

**Description:** This is a junior-senior level course on quantum mechanics. The postulates of quantum mechanics are introduced, and solutions to the Schrödinger Equation are developed for discrete and continuous systems in one to three dimensions. Special emphases are given to the harmonic oscillator and the hydrogen atom. The formalism of operators in quantum mechanics and the uncertainty

principle are introduced. Matrix mechanics is then developed and applied to phenomena associated with angular momenta and spin, such as spin precession and nuclear magnetic resonance.

## PHY 4040 - Planetary Physics

**Credits:** 3

**Prerequisite(s):** PHY 3111, PHY 3231, and MTH 3420, or Permission of instructor.

**Description:** Students in this course learn about the physics of formation and the evolution of planetary and non-stellar bodies. The topics they cover include formation theory of planets, moons and comets; celestial mechanics; planetary atmospheres; planetary geology; geomorphology; and internal processes. The students also explore current concepts of habitability, detection of extrasolar planets, and possible astrobiology.

## PHY 4050 - Astrophysics

**Credits:** 3

**Prerequisite(s):** PHY 3231, and PHY 3111, and MTH 3420

**Description:** Students in this course cover current topics in astrophysics including stellar astrophysics, solar physics, star formation, stellar evolution, processes in the interstellar medium, galactic dynamics and evolution, formation of galaxies, and cosmology.

## PHY 4330 - Electricity and Magnetism II

**Credits:** 3

**Prerequisite(s):** PHY 3341

**Description:** This course is a continuation of material presented in Electricity and Magnetism and concentrates on electromagnetic radiation. Students in this course cover topics including the propagation of electromagnetic waves, interference and refraction, wave guides, the emission of electromagnetic radiation from antennas, and electromagnetic fields due to accelerating point-charges. Relativistic electromagnetism is also introduced in this course.

## PHY 4510 - Optics

**Credits:** 3

**Prerequisite(s):** PHY 3231 or equivalent

**Description:** Students in this course are introduced to select contemporary topics in optics, such as matrix methods in geometrical optics, the Fourier analysis approach to physical optics, and the interaction of light with matter.

## PHY 4611 - Computational Physics

**Credits:** 3

**Prerequisite(s):** PHY 3231, PHY 3111, AND MTH 3420, AND Senior Standing OR Permission of instructor.

**Description:** Students are introduced to advanced methods of computational physics in a structured and cohesive manner



concentrating on solving complex physical problems, especially systems with no analytic solutions. Several complex physical phenomena are modeled numerically. Topics include nonlinear second-order differential equations associated with Newton's second law, partial differential equations associated with the wave equation, heat diffusion, Schrödinger's equation, Laplace's equation, and methods of fitting and analyzing data, including regression and spectral methods.

**University Requirement(s):** Senior Experience

### **PHY 4650 - Solid State Physics**

**Credits:** 3

**Prerequisite(s):** PHY 3411 and PHY 3811 or Permission of instructor

**Description:** A course in which the basic thermal and electrical properties of solids are explained in terms of the Brillouin zone structures of phonons and electrons.

### **PHY 4711 - Senior Physics Laboratory**

**Credits:** 2

**Prerequisite(s):** PHY 3711, completion of General Studies requirements, Senior standing, or Permission of instructor

**Description:** This course provides laboratory work at the advanced undergraduate level. Individual student projects are emphasized.

**University Requirement(s):** Senior Experience

### **PHY 4810 - Quantum Physics II**

**Credits:** 3

**Prerequisite(s):** PHY 3811

**Description:** The primary aim of this course is for students to apply the formalism developed in PHY 3811 to understanding the properties of hydrogen (including the fine structure and hyperfine structure of energy states), multi-electron atoms, and molecules. In doing so, time-independent perturbation theory (both non-degenerate and degenerate) and time-dependent perturbation theory is introduced. Relativistic quantum mechanics, including the Dirac Equation, is also introduced. This course is the optional second semester of the two-semester quantum mechanics series.

### **PHY 4820 - Subatomic Physics**

**Credits:** 3

**Prerequisite(s):** PHY 4810

**Description:** An introductory treatment of the various concepts and models used to describe nuclear and high-energy particle phenomena.

### **PHY 4921 - Physics Senior Seminar**

**Credits:** 1

**Prerequisite(s):** PHY 4611 or PHY 4711 or permission of instructor; completion of General Studies requirements and senior standing

**Description:** This is a course in which graduating seniors conduct individual projects including a literature search on a topic of

current physics. Students will share a detailed technical report, computational model, or equivalent analysis with their peers and the department faculty.

**University Requirement(s):** Senior Experience

### **PHY 4950 - General Relativity**

**Credits:** 3

**Prerequisite(s):** PHY 3231, PHY 3111, and MTH 3420, or Permission of instructor

**Description:** This course is a one semester treatment of the topics of Special Relativity, General Relativity and modern Gravitational Theory. Essential elements of Newtonian physics and Special Relativity are reviewed from previous courses and expanded upon. Mathematical tools describing the geometry of space-time are developed, and the theory of General Relativity is presented and applied to a wide variety of physical phenomena.

## **Political Science**

### **PSC 1010 - American National Government**

**Credits:** 3

**Description:** This course introduces the basic principles, institutions, actors, and processes of American National Government. It allows the student to recognize the U.S. Constitution's design and its lasting influence. It also presents some of the changing social, economic, and political variables that create powerfully new conceptions of the structure, purpose, and flow of American politics.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS1

### **PSC 1011 - Leadership and Social Change**

**Credits:** 3

**Description:** In this course, students examine the place occupied by leadership at all levels of society and the responsibilities that accompany the leadership role. Students develop frameworks through which they explore their own potential for ethical and effective leadership. The course revolves, in multidisciplinary fashion, around the application of leadership theories, concepts, and skills to both everyday life and the broader challenges facing people, especially during times of transition and change.

*Note:* Credit will be granted for only one prefix.

**General Studies:** Social and Behavioral Sciences

**Cross Listed Course(s):** LDR 1010

### **PSC 1020 - Comparative Politics**

**Credits:** 3

**Description:** This course examines political societies and explores the basic ideas, structures, and issues of modern political systems in a comparative context.

*Note:* Credit will be granted for only one prefix: HON or PSC.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS1  
**Cross Listed Course(s):** HON 1023

## **PSC 1030 - Multicultural Politics for Non-Majors**

**Credits:** 3

**Description:** In this course students develop a practical understanding of the practice of politics in the United States using the tools of Social Movement Theory. Students learn about the challenges and opportunities for political activism from the perspective of the Latinx, Native American, African American, and Asian American social movements. Students develop a political science toolkit to understand and effectively participate in an increasingly diverse American politics.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

**University Requirement(s):** Ethnic Studies & Social Justice

## **PSC 1300 - Asia in Global Perspective**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** This course is an overview of Asia's diverse geographies, peoples, histories, and contemporary developments from an interdisciplinary perspective. Throughout the course, students investigate the intersection between domestic and global factors in shaping contemporary Asian experiences. Topics include Asia's dynamic cultures, rich philosophical, religious, and linguistic traditions, vibrant economies, and various types of political systems. Students also reflect on how issues such as colonization, nation-building, gender, and migration shape contemporary Asia and its many representations.

*Note:* Credit will be granted for only one prefix (SOC, ANT, GWS, HIS, LANG, or PSC).

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Guaranteed Transfer:** GT-SS3

**Cross Listed Course(s):** ANT 1300, GWS 1300, HIS 1260, LANG 1260, SOC 1300

## **PSC 2030 - Politics in the Media**

**Credits:** 3

**Description:** This course is an analysis of political issues as portrayed in print, broadcast, and electronic media. It is designed to provide students with the background and perspective needed for an informed understanding of issues confronting the political system.

## **PSC 2090 - The Black Lives Matter Movement and the Origins of Modern Black Protest**

**Credits:** 3

**Description:** This course applies sociological concepts and historical themes to an analysis of the origins and nature of the Black Lives Matter (BLM) movement. The course begins with brief coverage of black resistance in the colonial period to the Abolitionist Movement

but provides an in-depth exploration of modern black protest in the post-World War II civil rights decades and continues into the late 20th century with high-profile instances of police brutality. The remainder of the course follows a chronology, beginning in 2013 with the creation of #BlackLivesMatter and the growth of a new era of black protest. In addition to high-profile incidences of police brutality, attention is given to movement dynamics as shaped by Internet social media platforms and cable news. The course also addresses the #SayHerName movement, which has highlighted police violence against black women. Issues concerning misogyny are also covered, including black radical feminist critiques of black male patriarchy, and debates within the black community about the movement's focus. Finally, students will come away with a broad understanding of what systemic institutionalized racism is, as distinguished from incidences of racial violence by individual acts of terrorism or white supremacist terrorist organizations.

*Note:* The course is crosslisted. Credit will be granted for only one prefix.

**Cross Listed Course(s):** AAS 2090, HIS 2090, SOC 2090

## **PSC 2200 - Politics and Black People**

**Credits:** 3

**Prerequisite(s):** Completion of the General Studies requirement in Quantitative Literacy and either ENG 1009 or ENG 1010 or the General Studies requirement in Oral Communication.

**Description:** Black politics is examined as a vehicle and potential in decision making for positive change for Black people in this country. The realities and the challenges, both historical and current, are emphasized.

*Note:* Credit will be granted for only one prefix: PSC or AAS.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** AAS 2200

## **PSC 2230 - Introduction to International Relations**

**Credits:** 3

**Description:** This course introduces students to the discipline of international relations with a general survey of the theories and issues of relations between nation states, states and non-state actors. Issues covered in this course include the causes of war, conflict, and the pursuit of peace in the international system.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Guaranteed Transfer:** GT-SS1

## **PSC 2240 - Global Challenges in the Twenty-First Century**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on the reading and writing placement tests.

**Description:** This interdisciplinary course focuses on seven areas expected to have a revolutionary effect on the world in the coming decades: Population, Resources, Technology, Information, Economic Integration, Security and Conflict, and Governance. The course

develops the significance of each of these issues and explores the relationships among them.

## **PSC 2500 - The Search for Knowledge in Political Science**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020

**Description:** The 21st century information environment poses new challenges to engaged citizenship, particularly with regard to navigating the relationship between social science research, political persuasion, and policy making. This course introduces students to the basics of research in political science and develops their ability to create and interpret qualitative research. Students practice research literacy and qualitative research design with an applied focus, developing career and discipline-specific research skills. Students also develop the skills to become critical consumers of social science research.

## **PSC 3000 - American State and Local Government**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or Permission of instructor

**Description:** The organization, powers, functions, and practical workings of state, county, town, and city governments of the United States. Special attention is given to federal-state relations and to the Colorado state government and constitution.

## **PSC 3010 - Urban Politics**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020 or Permission of instructor

**Description:** This course introduces students to a variety of aspects of governing, politics and policy that occur within urban settings in the United States. To do so, the course focuses on the unique aspects of politics and policies that mark city politics. These unique aspects of urban politics include constraints on behavior as cities compete over people and resources, a rich cultural and racial diversity, crime, education, poverty, and many other issues that are pronounced within cities, and are thus uniquely dealt with through city politics.

## **PSC 3020 - Introduction to Public Administration**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020 or Permission of instructor

**Description:** This class introduces students to public management as a field of study and professional practice. Students prepare for careers in public service. Topics include the political environment of public administration, organization theory, decision-making, budgetary processes, intergovernmental relations, and ethics and professionalism in public service.

## **PSC 3025 - Political Campaigns: How to run successful campaigns**

**Credits:** 3

**Description:** Students are introduced to the historical trajectory, theoretical underpinnings and practice of modern political campaigns from the viewpoint of political candidates and campaign strategists. Students engage in the analyses of election contexts, develop campaign strategies, and utilize the tools of modern campaigns to better understand the complex nature of campaigns and the role they play in contemporary politics. Assignments are based on real world examples with a focus on how to build a winning campaign.

## **PSC 3040 - Housing Policy**

**Credits:** 3

**Description:** Housing is a complex interplay of social, economic, and environmental variables that directly impact individuals, families, and communities. In this course students develop an understanding of the complexity of housing, both as a public policy and as an economic endeavor. Through surveying several topics that include defining homelessness, exploring the history of housing in the United States, and understanding the complex world of affordable housing financing mechanisms, students gain a better understanding of and appreciation for the complexity of housing and housing policy in the United States by comparing international housing contexts.

## **PSC 3050 - Political Theory**

**Credits:** 3

**Prerequisite(s):** Completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** Examination of Western political ideas and ideals from Plato through Marx: the hopes and fears, questions and responses, dreams and realities about the state, humanity, justice, and politics. An opportunity to relate historical political thinking to modern problems.

## **PSC 3090 - Current Topics in Political Science: Variable Topics**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020 or Permission of instructor

**Description:** An in-depth study of an important topic of political science.

*Note:* Topics vary and the course may be repeated for credit as the topics change.

## **PSC 3100 - American Political Parties and Elections and Voting Behavior**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020 or Permission of instructor

**Description:** This course considers the nature and functions of parties in the U.S. political system: their membership, beliefs and internal organization. It examines campaign methods and financing, and analyzes the American voter and nonvoter, based on the latest research findings.

## **PSC 3110 - Federal Indian Law**

**Credits:** 3

**Prerequisite(s):** NAS 1000

**Description:** This course addresses the legal and political relationship between the United States and American Indians. Students will study the major doctrines in Federal Indian Law, including the doctrines of Discover, Trust, Sovereignty, and Plenary Power with provide the legal/political basis for the U.S. and American Indian relationship. The course also provides a critical examination of current topics such as the continued political control exercised by the U.S. Government over Native American Nations and the meaning of Sovereignty in the context of U.S. and Native Nations.

*Note:* Credit will be granted for only one prefix: NAS or PSC.

**Cross Listed Course(s):** NAS 3110

## **PSC 3120 - Constitutional Law I: Powers of Government**

**Credits:** 3

**Prerequisite(s):** PSC 1010

**Description:** Students in this course examine how the basic principles and doctrines of the Constitution have been interpreted, altered, and applied in response to the ever-changing social, economic, and political conditions in the United States. Major topics include the design of the United States Supreme Court, as well as the Supreme Court's interpretation of the Constitution regarding the judicial, legislative, and executive powers.

## **PSC 3130 - The American Presidency**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020 or Permission of instructor

**Description:** This course addresses the powers and functions of the presidency as the office has changed and evolved, with emphasis on recent experience. It explores styles of presidential leadership, relations with Congress, the bureaucracy, the media, the group influence and constituent relations. It examines internal organization, traditions, power structure and reform.

## **PSC 3140 - The American Congress and Legislative Process**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020 or Permission of instructor

**Description:** This course explores the powers and functions of the legislative branch of government; relations with the executive branch; interest group influence; constituent relations. It examines internal organization, traditions, power structure and reform.

## **PSC 3150 - Law and Society**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020

**Description:** In this course, students critically examine the American judicial system and the legal process. Students analyze the historical development and current organization of the judicial system, the major actors in the system, trial and appellate processes, and judicial decision-making.

## **PSC 3160 - Readings in Political Science and Public Administration: Variable Topics**

**Credits:** 1-3

**Description:** This course provides the opportunity for the student to explore important writings in a selected subject area of political science. It is a self-paced course under the guidance of the instructor.

*Note:* Topics vary and the course may be repeated for credit.

## **PSC 3170 - Leadership Studies**

**Credits:** 3

**Prerequisite(s):** Completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This class focuses on the modern development of leadership studies, from the cornerstone study by James MacGregor Burns in 1978 to the present. The course highlights the debates surrounding the search for a general theory of leadership, the role of values in the study of leadership and the value of leadership itself. A variety of perspectives are presented on the topics covered.

## **PSC 3180 - Constitutional Law II: Civil Liberties and Civil Rights**

**Credits:** 3

**Prerequisite(s):** PSC 1010

**Description:** Students in this course examine how the basic principles and doctrines of the Constitution have been interpreted, altered, and applied in response to the ever-changing social, economic, and political conditions in the United States. Topics include religious establishment, religious free exercise, freedom of speech, freedom of the press, the Second Amendment, civil rights and discrimination, and the rights of criminal defendants.

## **PSC 3190 - Trial Advocacy Lab**

**Credits:** 3

**Prerequisite(s):** PSC 1010 OR CJC 1010

**Description:** In this course students are introduced to the civil and criminal trial process in the United States as a means of preparing students to participate in the American Mock Trial Association's collegiate mock trial competitions. Topics include public speaking, opening statements, direct examinations, cross examinations, closing statements, working with evidence, and other related issues.

Throughout the course, students practice elements of the trial process using past and current American Mock Trial Association case materials, including staging a complete mock trial. The AMTA case packet alternates between civil and criminal cases every other year.

May be repeated once for a total of 6 credits. Instructor permission required.

## **PSC 3200 - Native American Politics**

**Credits:** 3

**Prerequisite(s):** NAS 1000 or PSC 1020 or Permission of instructor, and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** The focus of this course is to examine Native Americans as political beings. Important questions and strategies for understanding the rise and expansion of Native politicization will be identified. In general, the students will be able to explain why, how, and when movements that demand change emerge. By comparing and contrasting the Native American experience with other powerless groups in society, the students should be able to trace the historical and political factors that led to a change in the movement of insurgency and analyze the specific actions by insurgents that inevitably resulted in the failure or success of those specific actions.

*Note:* Credit will be granted for only one prefix: PSC or NAS.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** NAS 3200

## **PSC 3220 - Public Policy**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020 or Permission of instructor

**Description:** This course is an analysis of the ongoing development of government policy, covering the main stages of the policy process: agenda building, formulation, authorization, implementation, and evaluation.

## **PSC 3230 - Environmental Politics**

**Credits:** 3

**Prerequisite(s):** PSC 1010, PSC 1020 or Permission of instructor

**Description:** The class will explore the political and administrative issues in the field of environmental politics. Environmental areas to be reviewed will include environmental theory, organizations, political behavior, assessment, law, and decision-making.

## **PSC 3240 - Intergovernmental Relations**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or Permission of instructor

**Description:** This course is an analysis of the functioning of the American federal system and the changing forms of local/state/federal relationships. It surveys recent efforts to develop theories relating to the administrative processes of intergovernmental relations.

## **PSC 3250 - Policy Analysis and Program Evaluation**

**Credits:** 3

**Prerequisite(s):** PSC 1010

**Description:** How well do public programs, agencies, and policies

perform? Are they effective and efficient in meeting their goals? In short, how well does the public sector do what it is supposed to do? This course in applied policy analysis prepares students to answer these questions using performance evaluations of programs and policies in the public sector. Performance evaluations as they concern effectiveness of public programs, efficiency or cost-benefits of public programs, and other key dimensions of public programs make up the focus of this course. Students make extensive use of case studies from the public sector. Methods of investigation - both qualitative and quantitative--are addressed in the course for their usefulness in performance evaluation functions.

## **PSC 3260 - Politics of Money and Public Budgets**

**Credits:** 3

**Prerequisite(s):** PSC 1010

**Description:** This course examines the political dynamics of public budgeting processes. This includes the political jockeying that occurs between interest groups, parties, officials, policymakers, and the public in budgeting processes. The course also examines budgeting changes over time and addresses issues like the federal deficit and health care and other major expenditures in political and comparative contexts. In sum, the course aims to study the extraordinary coordination involved in passing a budget and achieving accountability. While a major focus of the course is federal budgeting processes, the course also examines state and local processes as part of its examination of public budgets and finances.

## **PSC 3280 - Public Sector Human Resources Management**

**Credits:** 3

**Prerequisite(s):** PSC 1010

**Description:** This course examines the theory and practice of human resource management in the public sector. In particular, the course is centered on core processes within public sector human resource management: strategic workforce planning, effective recruitment and retention, workforce development, and employee relations. The course includes study of recent developments in the field including the growth in information technology capabilities, which has impacted all processes with human resource management.

## **PSC 3300 - Indigenous Geographies of North America**

**Credits:** 3

**Prerequisite(s):** GEG 1300 or NAS 1000 or PSC 1010 or junior or higher standing

**Description:** In this course, we examine Indigenous Peoples' relationships to land and power in North America with a focus on the United States. Colonial legacies of dispossession, genocide, and the reservation system frame how we discuss and interpret physical and symbolic violence against Indigenous Peoples. We begin with a historical geographic exploration of Indigenous land use patterns and how European arrival and invasion radically destabilized Native cultures. U.S. government policies and actions including the

establishment of reservations and Tribal governments illustrate how institutions shape contemporary political, economic, social, cultural, and environmental relationships. Contemporary issues such as natural resource extraction, economic development, intersectionality, and cultural resilience influence the experiences of Native Americans on and off reservations.

*Note:* Credit will be granted for only one prefix.

**General Studies:** Social and Behavioral Sciences

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** GEG 3300, NAS 3300

## **PSC 3310 - American Foreign Policy**

**Credits:** 3

**Prerequisite(s):** PSC 1010 and PSC 1020 or permission of instructor

**Description:** Students in this course use decision-making theory to describe and explain the evolution of U.S. foreign policy in the 20th and 21st centuries. Students develop the perspective necessary to understand how U.S. policy is made, the variety of interests that inform U.S. foreign policy, and the factors that help to explain and predict policy change over time.

## **PSC 3320 - International Law**

**Credits:** 3

**Prerequisite(s):** PSC 2230

**Description:** This course examines past and present efforts of nations to regulate their relations and resolve conflicts through the use of existing legal doctrine, or the development of new law in response to new problems, such as the uses of outer space and ocean resources.

## **PSC 3330 - International Organizations**

**Credits:** 3

**Prerequisite(s):** PSC 2230

**Description:** How do nation-states manage to cooperate within an international system that seems designed to promote conflict? Students in this course use the theory and practice of international organizations, with an emphasis on regional and global institutions, to explain how states and non-governmental organizations coordinate policy to help address transnational challenges.

## **PSC 3340 - International Political Economy**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020; ECO 1040 or ECO 2010 recommended

**Description:** This is a survey course of the major issues and themes of international political economy. It covers the basic theoretical orientations and the international institutions that structure the international economy. It provides students with all the necessary background to understand the intersection of economics and politics in the international system.

## **PSC 3350 - Global Issues Forum: Variable Topics**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020

**Description:** This is a variable topics course in which students explore a particular contemporary issue in global politics with a combination of in-class and online content, as well as with an experiential learning component. Specific issues will vary but will focus on understanding the issue in an international and/or comparative political context. This class includes a service-learning component where students will have the opportunity to apply the material from class in a real-world setting under the direction of the instructor.

*Note:* This class may be repeated for different content for up to 6 elective credits in the Comparative Politics/International Relations major concentration. Some sections of this course may be taught as Service Learning.

## **PSC 3360 - Advanced Problems in International Relations**

**Credits:** 3

**Prerequisite(s):** PSC 2230

**Description:** This class analyzes the various policy challenges within a globalized international system, with an emphasis on the application of theoretical perspectives to these problems. Courses offered as Advanced Problems in International Relations consider a particular issue within the international system and the theoretical perspectives that may help us to understand this problem.

*Note:* Students may repeat this course under different topics for up to 6 semester hours.

## **PSC 3365 - Structural Violence, Poverty and Human Rights**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** In this course, students apply a structural violence framework to make visible the power inequalities that result in producing and reproducing injustices and violations of socioeconomic rights. The use of ethnographic case studies allows students to explore a human rights-based approach to collective actions for justice. Through group discussion, analysis, and workshops, student learn to take political responsibility for injustices beyond those we individually witness or experience.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** ANT 3365, GWS 3365

## **PSC 3379 - Middle Eastern Cultures**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ANT 1310 or PSC 1020

**Description:** This course introduces students to various aspects of Middle Eastern cultures, including family life, marriage, kinship, religious practices, communal, ethnic, class, and gender identities. Using anthropological approaches of holism and cultural relativism to studying cultures, the course highlights the region's diverse ethnic, religious, linguistic and economic groups, its visual, popular,

national, gender, and social cultures, and how colonial history and foreign powers have influenced it using ethnographic case studies and cultural histories from Afghanistan, Bahrain, Egypt, Iran, Israel, Israel, Jordan, Kuwait, Lebanon, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, and Yemen.

**General Studies:** Social and Behavioral Sciences, Global Diversity  
**Cross Listed Course(s):** ANT 3379

## PSC 3400 - Contemporary Africa

**Credits:** 3

**Description:** This course focuses on the political, social and economic realities of post independence Africa. Africa's relations with the outside world and the question of South Africa are also examined in this course.

*Note:* Credit will be granted for only one prefix: PSC or AAS.

**Cross Listed Course(s):** AAS 3400

## PSC 3450 - Politics of China, Korea, and Japan

**Credits:** 3

**Prerequisite(s):** PSC 1020

**Description:** Students in this course are introduced to fundamental political themes among selected East Asian countries (China, South/North Korea, and Japan) and explanations of the differences. We attempt to answer questions from the perspective of comparative politics. For example, why are some Asian countries democracies while others are authoritarian? Does the Western model of democracy work for China? What are some of the important similarities in terms of political processes and outcomes that we find in China and democratic regimes? What is the historical background for democracies in Japan and South Korea? The goal of this course is equipping students to analyze political events, drawing on the theoretical explanations provided in the class and apply it to their own judgement about politics in general.

## PSC 3500 - Conducting Quantitative Political Analysis

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020 and PSC 2500

**Description:** In this course, students develop quantitative research methods skills. Topics include measures of central tendency and dispersion, frequency tables, the logic of inferential statistics, t-tests, Chi-square tests, and linear regression analysis. Students conduct analysis both by hand and using statistical software such as R (or equivalent). Students also develop the skills necessary for political analysis and informed interpretation, presentation, and critical consumption of social science data.

## PSC 3520 - American Political Thought

**Credits:** 3

**Prerequisite(s):** PSC 1010 or Permission of instructor

**Description:** Is there an American political philosophy? This course

is a study of some of the significant individuals and ideas that have shaped and are shaping political thinking in America.

## PSC 3530 - Gender and Global Politics

**Credits:** 3

**Prerequisite(s):** GWS 1001 or PSC 1020

**Description:** This course introduces students to the application of feminist theorizing of international relations to critical global issues. The first part of the course examines feminist international relations theory to ascertain how gender informs global politics. The second part of the course examines a variety of global issues, such as war, global economic relations, human trafficking, and the environment, to see how the ways we understand, and therefore construct policies to deal with these issues, are gendered.

*Note:* Credit will be granted for only one prefix: GWS or PSC.

**Cross Listed Course(s):** GWS 3530

## PSC 3540 - Women in the Developing World

**Credits:** 3

**Prerequisite(s):** GWS 1001 or PSC 1020 or ANT 1310

**Description:** This course presents a cross-cultural study of women's lives in the developing world by examining two main issues: the influence of culture on women's issues and politics' impact on women. By the end of this course students will not only learn about the lives of women in the developing world but also become familiar with how women across the globe articulate the desire for equality.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** ANT 3540, GWS 3540

## PSC 3600 - Comparative Politics Area Studies: Variable Topics

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020 or Permission of instructor

**Description:** This course is a thorough examination of the political system or systems of a selected foreign nation or geographical region, such as the Middle East, Western Europe, or Latin America.

*Note:* Subject matter varies and the course may be repeated for credit.

## PSC 3630 - Latin American Politics

**Credits:** 3

**Prerequisite(s):** PSC 1010 or 1020 and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This course will provide the student with the core concepts used within the social science literature in Latin American countries; will broaden intellectual horizons beyond United States borders to question ethnocentrism regarding what is means to be developed; and will examine the causes, processes, and outcomes of revolution and social conflict.

## **PSC 3640 - Regional Defense and Development: East Asia**

**Credits:** 3

**Prerequisite(s):** PSC 1020

**Description:** This course surveys the developmental and security issues in East Asia arising from the rise of China as an economic and political powerhouse. The course takes a comparative approach to understanding China's interests and actions in the region and provides students with the tools necessary to understand the role of China as an international actor in the 21st century.

## **PSC 3670 - European Politics**

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020

**Description:** This course examines the states of Europe with a concentration on the major theoretical, empirical, and substantive issues in contemporary European political systems. The European Union is also addressed in detail. Students explore how political events in Europe affect the relationship between the United States and Europe. The comparison between political life in the United States and Europe is discussed throughout the semester.

## **PSC 3790 - The Political Economy of Immigration**

**Credits:** 3

**Description:** This course studies the fundamentals of the political economy of immigration, with a focus on immigration's effects on global wealth creation, and the parallels between international trade in goods and international trade in labor. The course also explores immigration's net fiscal effects, cultural effects, and political effects, and explores a wide range of possibilities for immigration reform.

**Cross Listed Course(s):** ECO 3790, SOC 3790

## **PSC 3800 - On Leaders and Leadership**

**Credits:** 3

**Description:** There are questions about leaders and leadership that have emerged in a variety of contexts throughout the human experience. This course examines those questions by focusing, first, on the general issues connected to leaders and leadership, and, then, by analyzing the role of leaders and the operation of leadership in the organized political world. Such a comparison highlights the similarities and the differences that exist between broad concepts of leadership and the actual practice and meaning of leadership in politics.

## **PSC 3910 - African Politics and Government**

**Credits:** 3

**Prerequisite(s):** AAS 1130, AAS 2300, or Permission of instructor

**Description:** This course will survey present-day political systems in Africa and examine factors, internal and external, that have contributed to their emergence.

*Note:* Credit will be granted for only one prefix: PSC or AAS.

**Cross Listed Course(s):** AAS 3910

## **PSC 3980 - Internship in Political Science**

**Credits:** 1-15

**Prerequisite(s):** Major in Political Science; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## **PSC 4020 - Democracy**

**Credits:** 3

**Prerequisite(s):** PSC 1010, PSC 1020, PSC 2230, PSC 2500, Senior standing at time of course or permission of instructor.

**Description:** This course serves as the capstone class for Political Science majors. It refines students' knowledge of political science and their skills in research and writing. As a culmination of the major, it asks students to think critically, analytically, and extensively about democracy within the discipline of political science and apply research and writing skills to a synthetic project. This course requires senior standing or permission of instructor.

*Note:* Substantive topics may change under the umbrella topic of Democracy. Consult with the department for specific substantive content during the semester you enroll.

**University Requirement(s):** Senior Experience

## **PSC 4240 - Gender and Violence**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or GWS 1200 or GWS 1550 or CJC 1010 or PSC 1020 or SOC 1010 or permission of instructor

**Description:** Students analyze key patterns and structures of gender and sexual violence, with a special focus on the diverse experiences of women, queers and gender-variant people. Students draw from disciplines such as queer/trans theory and transnational feminism to illuminate iterations of and resistance to gender-based violence, including how 'safety' and 'precarity' are distributed unevenly across groups due to various social formations. Topics in this course include sexual violence, interpersonal violence, family violence, trafficking, state violence (including carceral, medical and military violence), among others.

*Note:* Credit will be granted for only one prefix: CJC, GWS, PSC, or SOC.

**Cross Listed Course(s):** CJC 4240, GWS 4240, SOC 4240



## PSC 4310 - American Foreign Policy

**Credits:** 3

**Description:** Students in this course uses decision-making theory to describe and explain the evolution of U.S. foreign policy in the 20th and 21st centuries. Students develop the perspective necessary to understand how U.S. policy is made, the variety of interests that inform U.S. foreign policy, and the factors that help to explain and predict policy change over time.

*Note:* This class is offered as both a 4000 and 3000-level course. Please contact an advisor to select which level is appropriate for your degree program.

## PSC 4320 - International Law

**Credits:** 3

**Prerequisite(s):** PSC 2230

**Description:** Students in this course examine past and present efforts of nations to regulate their relations and resolve conflicts through the use of existing legal doctrine, or the development of new law in response to new problems, such as the uses of outer space and ocean resources.

*Note:* This course is offered as both a 3000 and 4000-level course. Please consult an advisor to find out which level is appropriate for your degree program.

## PSC 4340 - International Political Economy

**Credits:** 3

**Prerequisite(s):** PSC 1010 or PSC 1020; ECO 1040 or ECO 2010 recommended

**Description:** Students in this survey the major issues and themes of international political economy. They cover the basic theoretical orientations and the international institutions that structure the international economy. Students are provided with all the necessary background to understand the intersection of economics and politics in the international system.

*Note:* This course is offered as either a 3000 or 4000-level course. Please contact an advisor to find out which level is appropriate for your degree program.

## Professional Studies

### SPS 4500 - Teaching Assistantship in the College of Professional Studies

**Credits:** 3

**Prerequisite(s):** 15 semester hours of coursework in major; junior or senior standing; permission of faculty member and department chair

**Description:** This course provides undergraduate students with an experience as a teaching assistant in courses offered through academic departments within the School of Professional Studies. Under close faculty supervision, this course provides training and support for students to learn about higher education pedagogy and processes in teaching courses within the student's selected major.

Students will put into use what they learned in previous major courses to assist other students enrolled in the major courses. The experience includes seminar meetings, along with additional hours of application each week using students' content knowledge and developing pedagogical skills.

## Psychology

### PSY 1001 - Introductory Psychology

**Credits:** 3

**Description:** Why do we behave the way we do, make the choices we make, and feel the way we feel? How do experiences like trauma, learning to ride a bike, and falling in love affect our brains? How do culture, gender, and age influence our interactions with each other and the world? Students are introduced to the science of human behavior and mental life, including biological foundations (neuroscience, sensation, consciousness), cognitive factors (thinking, memory, perception), developmental processes (learning, psychological changes across the lifespan), social and cultural influences (gender, personality, social psychology), and mental and physical health (psychological disorders, therapies, and ways to improve overall well-being).

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

### PSY 1800 - Developmental Educational Psychology

**Credits:** 3

**Description:** This course focuses on concepts, principles, and methods by which all humans develop psychologically and how these factors can be used to better understand how infants, children, and adolescents learn. Students will learn about milestones of child development (physical, social-emotional, cognitive) from birth to adolescence, and the influence of the family, peers, and school on development during the preschool and elementary school years. Students will conduct observations of children and the learning/teaching process in classrooms to practice applying course concepts.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

### PSY 2001 - Careers and Professional Development in Psychology

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course provides students with an overview of careers and opportunities in the field of psychology. Topics include the sub-specialties and professions within psychology, career options for psychologists, and graduate school and/or bachelor's level employment. Students learn the differences between psychology sub-specialties and the educational requirements for entering different specialties. In addition, students learn professional skills such as creating a resume, creating a personal statement, using professional etiquette, searching research databases, and writing in APA style.

## **PSY 2120 - Brain and Behavior**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course provides an introductory overview of the brain and its role in behavior from a psychological perspective. Topics discussed may include drugs, perception, brain injuries, mental illness, and cognition. An understanding of how the brain directs both normal and abnormal behavior is used to investigate current topics.

## **PSY 2150 - Positive Psychology**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course introduces students to the field of Positive Psychology, the scientific study of optimal living. Relevant psychological theory and research will be used to explore topics including: happiness, positive emotions and cognitions, goal-setting, character assessment, health, love and interpersonal relationships, applications to social institutions, positive psychotherapy, and positive psychology interventions.

## **PSY 2210 - Psychology of Human Development**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course presents the development of behavior from conception through maturity and death and is intended to help the student understand the developmental characteristics of different age groups and the determinants of their individual and collective behaviors.

## **PSY 2240 - Parenting Across the Lifespan**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course is designed to help students understand the role of parents, developmentally appropriate expectations, and how cultural variations influence parenting. Students learn specific parenting techniques from a variety of approaches including how to implement them. The emphasis is on research-based information.

## **PSY 2270 - Death, Dying, and Grieving**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** Students in this course learn about the psychological aspects of death and dying throughout the lifespan. This includes learning about how individuals cope with their own or others' mortality, from infancy through older adulthood. Emphasis is placed on common causes of death, decisions concerning death, stages in the death process, psychotherapy with the dying person and family members, and psychological as well as cross-cultural interpretations of death and dying rituals.

## **PSY 2310 - Statistics for the Social and Behavioral Sciences**

**Credits:** 3

**Description:** This course exposes students to statistical measurement and analysis in the social and behavioral sciences, including descriptive statistics, probability, sampling distributions, t-tests, ANOVA, and correlation. The course requires students to learn how to interpret and report output using appropriate APA format.

## **PSY 2410 - Social Psychology**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course covers the major topics, theories, methods, and applications of social psychology. Topic areas include research methodology, person perception, attraction, helping behavior, aggression, attitudes, persuasion, group processes, and intergroup relations. Both classic and recent works are discussed.

## **PSY 2850 - Psychology of Sexuality**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course is a survey of human sexual functioning, and covers sexual anatomy and physiology, the biological and environmental influences on the development of sexuality and sex roles, and the interface of human psychological functioning with sexual identity and behavior. Topics covered include sex research, sexual health, gender development, sexual orientation, sexuality across the lifespan, atypical behaviors and sexual disorders, intimate relationships, ethical and commercial aspects of sexuality.

## **PSY 2950 - Contemporary Issues: Variable Topics**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** Courses included under this umbrella deal with issues of personal importance to students, with an emphasis on applying psychological principles and knowledge to contemporary questions, rather than mastery of an academic content area in psychology. Course content will vary, and the course may be repeated twice with different topics for a maximum of nine hours.

## **PSY 3000 - Theories of Personality**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** Students will learn the major contemporary theories of personality. The course will consider the following perspectives on human behavior and mental processes: psychodynamic, behavioral and cognitive behavioral, humanistic, trait and factorial, and neurobiological. The underlying assumptions and research support for these theories will be examined.

## **PSY 3010 - Research Methods in Psychological Science**

**Credits:** 3

**Prerequisite(s):** PSY 2310

**Description:** This course provides an introduction to the fundamental principles and procedures of research in psychological science. Students gain knowledge in research ethics, basic sampling procedures, measurement, and research design. This course is to be taken concurrently with or prior to PSY 3011 - Laboratory for Research Methods in Psychological Science .

## **PSY 3011 - Laboratory for Research Methods in Psychological Science**

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** PSY3010

**Description:** This course is the laboratory that accompanies PSY 3010 Research Methods in Psychological Science and engages students in activities that reinforce the concepts of PSY 3010. The course provides hands-on experience with fundamental research methods in psychological science. Exercises include collecting, analyzing, and reporting psychological data.

## **PSY 3030 - Multicultural Psychology**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course examines theories of difference and their application to behavior. Diversity across race/ethnicity, gender, class, and sexual orientation is explored. A significant portion of the coursework is directly devoted to African American, Asian American, Hispanic/Latina(o), and Native American identity development.

**University Requirement(s):** Ethnic Studies & Social Justice

## **PSY 3050 - Psychology of Gender**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course presents a survey of major contemporary approaches to gender, including a range of scientific and theoretical work. A constructionist approach is utilized to synthesize the views. The course then reviews several major areas of application, including relationships, health, violence, workplace, and achievements.

*Note:* Credit will be granted for only one prefix: PSY or GWS.

**Cross Listed Course(s):** GWS 3050

## **PSY 3070 - Psychology of Sexual Orientation**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course explores psychological theory and research dealing with sexual orientation, with an emphasis on lesbian, gay, and bisexual (LGB) identity. Topics include historical and theoretical

frameworks, homophobia and heterosexism, origins of sexual orientation, LGB identity development and coming out, diversity, relationships and parenting, the role of community, and others.

*Note:* Credit will be granted for only one prefix: PSY or GWS.

**Cross Listed Course(s):** GWS 3070

## **PSY 3170 - Social Justice: Self and Citizenship: A Service Learning Course**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or PSY 1001 and six additional semester hours in Women's Studies or six additional semester hours in Psychology

**Description:** Social justice encompasses research, activism and current events about manifestations of social oppression and social change. This course focuses upon psychological theory and self-identity in the context of multicultural and social justice issues (e.g., classism, racism, sexism, heterosexism, and ableism). Lectures, readings, and discussions are integrated with a required service learning placement involving 30 hours of volunteer work in a setting for the underserved. Students have the opportunity to a) reflect on their values, assumptions, place within, and emotional reactions to social oppressions; b) analyze the political systems that surround their communities and institutions; and c) apply their reflections to their career goals and personal development.

*Note:* Credit will be granted for only one prefix: PSY or GWS. Some sections of this course may be taught as Service Learning.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** GWS 3170

## **PSY 3240 - Infancy**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** The focus of the course is development during the infancy period, from birth to approximately 3 years of age. Key themes are genetic as well as prenatal influences on infant development, the major theories of child development, and research related to infant behavior. The course will emphasize the physical/biological, cognitive, and social emotional aspects of development during this period.

## **PSY 3250 - Child Psychology**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course covers the major theories of child development and research related to child behavior. A social science emphasis is placed on prenatal, physical, social, cognitive, emotional, language, and psychological development of typically-developing children.

## **PSY 3260 - Psychology of Adolescence**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course covers the major theories of adolescence and research related to adolescent behavior. The physical, cognitive, and social/emotional developments of this period will be emphasized, including the influences of peers, parents, and schools. Problems and concerns specific to adolescent development will also be discussed.

### PSY 3270 - Adulthood and Aging

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course is a developmental study of the adult from young adulthood throughout the remainder of life. The course will provide a broad overview of emotional, behavioral, social, physical, and intellectual changes that occur during adulthood. Both theories and research findings will be emphasized; applications will be included.

### PSY 3340 - Cognitive Development and Learning

**Credits:** 3

**Prerequisite(s):** PSY 1001 or PSY 1800

**Description:** Students in this course learn about human cognitive development and learning. Topics include major theoretical perspectives and how they are applied to teaching children, adolescents, and adults. Additionally, the roles of motivation, problem solving and intelligence in learning and cognition are explored. How cognitive theories are applied to teaching literacy acquisition, scientific and mathematical skills are also examined.

### PSY 3350 - Psychology of Social Development

**Credits:** 3

**Prerequisite(s):** PSY 1001 or PSY 1800

**Description:** Several important aspects of social, emotional, and personality development across childhood into adolescence will be critically examined. Topics pertain to the development of behavior (e.g., aggression, helping), social cognition (e.g., achievement motivation, person perception), emotion (e.g., expression, temperament) and relationships (e.g., peers, family).

### PSY 3370 - Undergraduate Research Assistant

**Credits:** 3

**Prerequisite(s):** PSY 2310; and permission of department

**Description:** Students will work with individual faculty members to hone the student's research and writing skills. Students will assist in conducting research under the direct supervision of a faculty member. Within this context, students will develop the skills necessary to conduct research, will explore methods of measurement and data collection, and will employ analytic tools that will enable them to perceive relationships and patterns. They will synthesize bodies of knowledge to develop a deeper understanding of the topic under investigation. Course work will culminate in the synthesis and dissemination of project results.

*Note:* Departmental permission is required to enroll in this course, and it may be repeated once for a maximum of six hours of credit.

### PSY 3380 - Clinical Neuropsychology

**Credits:** 3

**Prerequisite(s):** PSY 1001 and (PSY 2120 or BIO 1000 or BIO 1030 or BIO 1080) and junior status

**Description:** This course covers the history of neuropsychology; the assessment of organic and nonorganic brain damage; and the causes, assessment, behavioral outcomes, treatment, and prognosis of various brain disorders and diseases.

### PSY 3390 - Undergraduate Teaching Assistant Training

**Credits:** 3

**Prerequisite(s):** PSY 1001 and permission of instructor

**Description:** Students will serve as a teaching assistant for a specified course under the direct supervision of the instructor. Students need to have already taken the course for which they will be serving as a teaching assistant. The use of various pedagogical theories, methods, strategies, and ethical principles relevant to the teaching of psychology will be explored. Students will develop the skills necessary to create, as well as implement, a variety of course materials, learning assessment tools, and grading procedures. Professional development as it relates to the scholarship of teaching will be emphasized. Departmental permission is required to enroll in this course, and it may be repeated once for a maximum of six semester hours of credit.

### PSY 3400 - Child Psychopathology

**Credits:** 3

**Prerequisite(s):** PSY 1800, or PSY 2210 or PSY 3240 or PSY 3250 or PSY 3260 or PSY 3620

**Description:** This course explores child (infant, early childhood, and adolescent) psychopathology from a developmental perspective, recognizing that pathology expresses itself in different ways at different ages and stages of development. Concepts such as risk and resilience and etiological trajectories are emphasized, with a review of the major types of psychopathology seen in infants, children, and adolescents. This includes: learning disabled, intellectually developmentally disabled, physically impaired, chronically ill, emotionally disturbed, and neurologically impaired individuals including those with mood disorders, anxiety disorders, autism spectrum disorders, and ADHD.

### PSY 3410 - Health Psychology

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course examines how biological, psychological, and social factors interact with and affect health behaviors. Topics include the promotion of health; prevention, management, and treatment of illness; experience, treatment, and consequences of stress and pain; and experience, coping, and treatment of chronic health problems. The course also addresses the healthcare system and

its implications for patient-practitioner interactions and health outcomes.

### **PSY 3440 - Cravings and Addictions**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course offers a multidisciplinary analysis of a broad range of addictive disorders, including alcohol or other drugs, and a spectrum of behavioral disturbances, including excessive eating, exercising, gambling, and risk taking. Emphasis is placed on contemporary strategies for prevention, early intervention and treatment.

### **PSY 3450 - Organizational Psychology**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** Organizational Psychology is a comprehensive survey course, applicable to any student whose career places them in an organization. Content includes approaches to organizational structure, culture, and change; organizational behavior such as leadership, teamwork, conflict, power, management strategies, feedback and communication styles; personnel selection and appraisal; theories of motivation and performance; and diversity and its impact on the changing organization in the global context.

### **PSY 3460 - Psychology of Play**

**Credits:** 3

**Prerequisite(s):** PSY 1001 or PSY 1800

**Description:** This course covers the role of play in child development. Students learn about historical and cross-cultural perspectives of play, developmental changes in play from infancy through adolescence, theories of play, and how adults can facilitate physical, cognitive, and social-emotional growth through play.

### **PSY 3470 - Psychology of Violence and Aggression**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course provides an in-depth overview of contrasting theoretical approaches to the explanation, prediction, and control of violent and aggressive behaviors, including psychobiological, radical behaviorism, social learning, cognitive social learning, and psychopathological approaches. Specific behavioral foci include youth violence, criminal violence, inner-city gang violence, white-collar aggression, combat, terrorism, sexual violence, self-mutilation, etc., from both legal and psychological perspectives. This course explores socialization systems leading to the development of aggressive and violent behavioral tendencies and factors facilitating the maintenance of these dispositions. Prevention and intervention strategies are considered.

### **PSY 3490 - Child Life Theory and Practice**

**Credits:** 3

**Prerequisite(s):** PSY 1001 or PSY 1800

**Description:** This class covers the theoretical and practical aspects of a child life specialist practice. Students learn about the history and scope of this profession, including how it fits into current healthcare models. Developmental theory is applied to elucidate how injury, illness, and healthcare impact children and families. Practical skills concerning how to apply developmentally-appropriate interventions within the patient- and family-centered model are reviewed. This includes applications of play therapy and other evidence-based interventions. Students also learn about guiding principles and ethical standards for child life specialist professionals.

### **PSY 3500 - Research Issues: Variable Topics**

**Credits:** 3

**Prerequisite(s):** PSY 3010; or permission of instructor

**Description:** Students will be led through in-depth considerations of current areas and issues in experimental psychology, focusing on the scientific investigation of various aspects of psychological functioning.

*Note:* Course content will vary, and the course may be repeated twice with different topics for a maximum of nine hours of credit.

### **PSY 3560 - Psychopharmacology**

**Credits:** 3

**Prerequisite(s):** PSY 1001 and (PSY 2120 or BIO 1000 or BIO 1080 or BIO 1081) and junior standing

**Description:** This course provides the foundation for understanding the basic mechanisms of drug action, specifically how drugs are delivered and removed from their sites of action. The pharmacological features of different classes of drugs and the ways in which drugs produce their biological effects are discussed. Pharmacodynamic and pharmacokinetic principles are explored through a study of both therapeutic drugs and recreational drugs. A review of regulatory and governmental control issues is included.

### **PSY 3580 - Development in the Family Context**

**Credits:** 3

**Prerequisite(s):** PSY 1001 or PSY 1800

**Description:** Students in this course learn about theoretical, empirical and applied information on the dynamics of the family across the lifespan. Students learn about change and diversity within the family system as well as the importance of considering a variety of sociocultural contexts to understand the family as a developmental context across the life-span.

### **PSY 3620 - Psychological Disorders: Perspectives, Symptoms, and Treatment**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** Students in this course examine and evaluate the major theories of psychological disorders: biological, behavioral, cognitive,

and sociocultural. Descriptions of the cognitive, behavioral, and emotional patterns that lead to distress, dysfunction, and diagnosis are provided, and the current classification system and assessment procedures are examined. Students examine causal models of mental health conditions from an integrated systems approach. Biological, psychological and social treatments of psychological disorders are also discussed and evaluated. Classification, etiology and treatment are examined using case studies.

### **PSY 3630 - Forensic Psychology**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course is an examination of the field of forensic psychology and the interaction between psychology and the law. It includes the roles and responsibilities of forensic psychologists, victimology, competency and insanity, assessing dangerousness, domestic violence, child abuse, sex offenders, psychopathology, criminal motivation and punishment, eyewitness testimony, and expert testimony.

### **PSY 3700 - Psychology of Group Prejudice**

**Credits:** 3

**Prerequisite(s):** PSY 1001 or AAS 1010 or GWS 1001

**Description:** This course covers psychological theory and research that examines causes, effects, expressions, and reduction of group prejudice. Various types of group prejudice are addressed, most notably prejudice against cultural and ethnic minorities in the United States (i.e., Native Americans, African Americans, Hispanic Americans, and Asian Americans). Sexism and heterosexism also are discussed.

*Note:* Credit will be granted for only one prefix: AAS, GWS, or PSY.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** AAS 3700, GWS 3700

### **PSY 3920 - Gender Politics of Health**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or SOC 1010 or PSY 1001

**Description:** This course focuses on health issues specific to women and the challenges historically faced by women in the health care arena. Students will learn about the role of patriarchal medical mythologies that exist throughout various cultures in the oppression of women, especially minority women, and how women have reclaimed healing, health, and communities of medical knowledge production. This course specifically explores feminist, physiological, psychological, and sociological factors in women's health within a global context.

*Note:* Credit will be granted for only one prefix: PSY, SOC, GWS, or ITP.

**Cross Listed Course(s):** SOC 3920, GWS 3920, ITP 3920

### **PSY 3970 - Practicum**

**Credits:** 3

**Description:** This practicum is a field experience course in psychology. Departmental permission is required to enroll in this course.

*Note:* This course may be repeated once for a maximum of 6 credits.

### **PSY 3980 - Internship in Psychology**

**Credits:** 1-3

**Prerequisite(s):** PSY 1001; major or minor in psychology or in human development and family studies; junior or senior status; permission of instructor

**Description:** Students are supervised by a faculty member within the major department and acquire practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub and the Department of Psychological Sciences.

*For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* This course may be taken for 1-3 credits (serving 50 hours in internship for each credit). It may be taken up to three times for a maximum of 6 credit hours. Each time students complete an internship, they must participate in both the internship and the seminar.

### **PSY 4100 - Clinical/Counseling Psychology: Treatment, Practice, and Skills**

**Credits:** 3

**Prerequisite(s):** PSY 1001; PSY 3000 or PSY 3620 or PSY 3400

**Description:** Students in this course survey clinical and counseling psychology therapeutic procedures and techniques. Emphases of the course include therapeutic modalities, assessment, and diagnosis. There is a focus on ethical and multicultural issues related to the practice of psychology, as well as legal and licensing issues in the practice of clinical/counseling psychology and related practice fields. This course has a Service Learning Designation such that some sections may include a Service Learning component.

*Note:* Some sections of this course may be taught as Service Learning.

### **PSY 4150 - Psychological Assessment**

**Credits:** 3

**Prerequisite(s):** PSY 1001 and PSY 2310; and PSY 3000 or PSY 3620

**Description:** Students in this course learn about psychological assessment procedures, including interviews and behavioral observations, as well as tests of achievement, aptitude, intelligence, interests, and personality. Reliability, validity, and standardization of the instruments are emphasized. The utility and limitations of each type of measure also are addressed.

*Note:* This course was previously named Psychological Testing.

Credit will be granted for the course under the current or previous title, but not both. The course taken under the current title can be used for Grade Replacement purposes with the previous title.

## **PSY 4320 - Advanced Psychological Research Methods**

**Credits:** 3

**Prerequisite(s):** PSY 3010 and senior standing

**Description:** In this course students propose and design an empirical psychological study under the guidance of the instructor. Students conduct and analyze a research study using scientifically valid quantitative and/or qualitative methods to investigate psychological phenomena. Students present their research and write a manuscript of the results. This course may be used to fulfill the Senior Experience requirement, and is strongly recommended for students interested in applying to graduate school in Psychology.

**University Requirement(s):** Senior Experience

## **PSY 4330 - Psychology in the "Real World": Thinking Like a Psychologist**

**Credits:** 3

**Prerequisite(s):** PSY 3010 and senior standing

**Description:** In this course, students apply principles of scientific inquiry to evaluate claims about psychological phenomena made in both scholarly and popular media sources. Students learn to evaluate and synthesize information from multiple sources to answer questions and address problems of personal and professional interest, such as anticipated "real world" challenges in parenting or workplace leadership. As a capstone experience, this course requires students to integrate skills and competencies developed across the major curriculum. This course may be used to fulfill the Senior Experience requirement.

**University Requirement(s):** Senior Experience

## **PSY 4450 - Advanced Psychological Data Science**

**Credits:** 3

**Prerequisite(s):** PSY 2310

**Description:** In this course, students will learn about advanced multiple psychological science data procedures and methods. Students will study multivariate statistics such as multiple regression, multi-factor factorial analysis of variance, and multivariate analysis of variance, and more through a hands-on team-based project. Students will learn how to use statistical software such as jamovi, R, or JASP to perform the necessary statistical tests to solve real-world problems. Emphasis will be on understanding, application, and interpretation of multivariate statistics in both the academic and workforce settings.

## **PSY 4510 - History and Systems of Psychology**

**Credits:** 3

**Prerequisite(s):** PSY 3010 and senior standing

**Description:** Students critically survey major theoretical and meta-

theoretical systems in psychology from a historical perspective. Philosophical assumptions as well as cultural and political forces are discussed. Similarities and differences among the various theoretical models are highlighted. The student synthesizes and critically evaluates material from previous courses in psychology.

**University Requirement(s):** Senior Experience

## **PSY 4520 - Sensation and Perception**

**Credits:** 3

**Prerequisite(s):** PSY 1001 and (PSY 2120 or BIO 1000 or BIO 1030 or BIO 1080 or BIO 1081) and junior standing.

**Description:** This course examines how information about the outside world is sensed and how that information is organized and interpreted to form perceptions. Anatomy and physiology of the sensory systems are studied, as are perceptual theories, models, controversies, and applications.

## **PSY 4540 - Behavioral Neuroscience**

**Credits:** 3

**Prerequisite(s):** PSY 1001; BIO 1000 or BIO 1080; PSY 2120; and junior standing

**Description:** This course provides an in-depth study of the brain. How the brain develops and interacts with other systems in the body is examined. This course also investigates how the brain impacts behaviors such as: sleep, learning and memory, stress and health, and motivation.

## **PSY 4570 - Cognitive Psychology**

**Credits:** 3

**Prerequisite(s):** PSY 1001 and PSY 3010

**Description:** This course examines current research and theories in cognitive psychology. Topics covered include: attention, pattern recognition, perception, memory, language, thinking, categorization, problem solving, reasoning, and decision making. The information processing and other perspectives to the study of cognition are examined.

## **PSY 4650 - Advanced Internship in Psychology**

**Credits:** 3

**Prerequisite(s):** PSY 3010, senior standing, and permission of instructor.

**Description:** In this advanced internship, students participate in a community-based field placement to develop clinical and/or research skills that prepare them for the workplace and/or graduate studies in psychology. Under the supervision of a psychology faculty member, internships provide practical, hands-on experience related to the research and/or practice of psychology. In addition to the internship hours, students attend an interactive seminar that supports learning at the placement site and allows students to apply theoretical knowledge learned in the psychology curriculum to real life situations and experiences. Internship placements must be established prior to

enrollment in this course in consultation with the C2 Hub and the Department of Psychological Sciences.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

**University Requirement(s):** Senior Experience

## **PSY 4700 - Senior Experience in Human Development and Family Studies**

**Credits:** 3

**Prerequisite(s):** PSY 2310 and Senior Standing

**Description:** This is the Senior Experience course for the Human Development and Family Studies major. The course examines and applies the most commonly used research methodologies in human development and family studies. It is a problem-based course in which students synthesize knowledge and skills learned throughout their coursework to propose evidence-based solutions to real-world problems related to working with children and families. The course involves critical analysis of theories of human development, evaluating published research, critiquing, and applying research methods to address practical problems in the field of human development and family studies.

**University Requirement(s):** Senior Experience

## **PSY 4950 - Pro-seminar in Psychology: Variable Topics**

**Credits:** 3

**Prerequisite(s):** Junior standing and Psychology Major or Minor; or junior standing and HDFS Major or Minor

**Description:** This course is an intensive teaching seminar, intended for advanced students majoring or minoring in psychology or human development and family studies, organized around a selected theme.

*Note:* Course content will vary, and the course may be repeated once for credit under a different topic.

## **PSY 4970 - Psychology of the Scholarship of Teaching and Learning**

**Credits:** 3

**Prerequisite(s):** PSY 1001

**Description:** This course focuses on the psychology of teaching and learning as applied to higher education classrooms. The course emphasizes psychological theory and research used to enhance teaching and advance learning. Topics include syllabus creation, review session preparation, student centered teaching techniques, and preparation for academic careers. Participation in a teaching project is a required part of the class and provides experience in the application of the course concepts.

*Note:* Students who receive credit for PSY 4970 Teaching of Psychology may not receive credit for PSY 4970 Psychology of the Scholarship of Teaching and Learning.

## **Public Health**

## **PUB 1000 - Principles of Public Health**

**Credits:** 3

**Description:** Students in this course are introduced to the field of public through a broad overview of strategies and interventions that regulate population level health. Students learn: 1) a historical context of public health, 2) an overview of population and community health problems and factors associated with them, 3) reviews the health care infrastructure and workforce of health professions, and 4) explores interventions implemented by community, state and national levels of public health systems. Taking a focused approach to current issues and strategies in the field, students examine health disparities, quality and accessibility, as well as best practices to promote health equity and sustainability in our local and global communities.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

## **PUB 2000 - Community Health Worker Fundamentals**

**Credits:** 3

**Description:** Students in this course will learn the basic concepts of community health work and the patient-centric concept of assisting patients along the health care continuum. Students will develop skills necessary to effectively communicate and build relationships with patients within the complex systems they live in. Students will also learn how to evaluate and locate health care resources and support systems in relation to an individual's health. Consideration of varying stages of care, social determinants that impact physical health, and reducing disparities in access and treatment will be reviewed. Barriers to care, problem solving, and managing information and resources will also be discussed.

## **PUB 3000 - Health Behavior Theory and Practice**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Prerequisite(s) or Corequisite(s):** PUB 1000

**Description:** Students will learn about the stages of behavior change and the theoretical basis for health behaviors. The course will provide content of what theory is, how theories were originated and developed over time to address modern public health needs, and factors that influence health behaviors as well decisions that control those behaviors. Students will not only explore the most frequently applied health behavior theories, but also understand the concepts and constructs within each theory, and ultimately demonstrate how health behavior theories are used in overall public health practice. The course will take special interest in illuminating how theories can be applied in a variety of settings, with different populations, and addressing an assortment of health issues.

## **PUB 3010 - Community Health Survey, Assessment and Health Improvement Planning**



**Credits:** 3

**Prerequisite(s):** PUB 1000

**Description:** Students will learn concepts and methods of community health improvement and the role of assessment. This course will cover important community health topics including systems thinking that leads to coordination of health care and public health activities to achieve community health goals; the nature of health and its determinants; the use of quantitative and qualitative methods; data analysis; community mobilization and capacity building; and the impact of current national policy, including the Affordable Care Act, on community health improvement.

## **PUB 3020 - Introduction to Epidemiology in Public Health**

**Credits:** 3

**Prerequisite(s):** PUB 1000

**Prerequisite(s) or Corequisite(s):** PSY 2310

**Description:** Students will learn basic principles, concepts, and methods of epidemiology within population health. Topics will include the dynamic behavior and study of disease, critical data gathering and analysis of population health measures, ethical concepts in epidemiological study design and analysis, and investigating disease problems and the associations between risk factors and disease outcomes.

## **PUB 3030 - Essentials of Environmental Health in Public Health Practices**

**Credits:** 3

**Prerequisite(s):** PUB 1000

**Description:** Students will learn about the role of public health in environmental issues and general public safety. The course will address important topics and methodological approaches in the environmental health field in order to provide an overview of the field. Critical issues identified in this course relate to basic life support matters such as pure water, clean air and hazardous waste disposal; and the impact of uncontrolled population growth on the environment, natural resource shortages and climate change. Students will develop an appreciation of the balance between human life activities and environmental resources.

## **PUB 3400 - Human Trafficking: Public Health Response**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** Students explore human trafficking utilizing global public health frameworks to examine the interprofessional nature of community response in Colorado. A review of multidisciplinary perspectives on labor and sex trafficking provides a comprehensive understanding of this human rights issue. Further, students examine the tactics used by traffickers to recruit and control victims and the effects of abuse on survivors. Students will be presented with an overview of the United Nations, U.S. federal and Colorado state laws

to curb trafficking. Finally, students evaluate global and local efforts of the current anti-trafficking movement, including ways to be involved.

*Note:* Credit may be granted for only one prefix.

**Cross Listed Course(s):** AAS 3405, CJC 3650, GWS 3400, HSP 3405, SWK 3405

## **PUB 4000 - Health Policy - Practice and Development**

**Credits:** 3

**Prerequisite(s):** PUB 1000 or HCM 3150

**Description:** Students will learn about the role of health policy, and the various ways in which policy and law effect the public health and health care systems. The course will have students analyze the transformations taking place in health care delivery and public health systems, focusing on the development, influences and consequences of health policies and laws. Key policy topics that will be reviewed are the accessibility, cost, and quality of health care, the safety of food, water and the environment, the right to make decisions about our health, the role of public health preparedness, and the pursuit of health equity in our diverse communities.

## **PUB 4010 - Health Program Planning, Implementation, and Evaluation**

**Credits:** 3

**Prerequisite(s):** PUB 1000

**Prerequisite(s) or Corequisite(s):** PUB 3000

**Description:** Students will learn how to implement public health programs and evaluate their effectiveness. The course is grounded in public health practice and will begin developing important skills in the development and implementation of program plans and evaluation projects. Students will explore the application of evaluation strategies with an emphasis on evidence-based public health. Lastly the course will focus on social determinants of health as a critical evaluation concept, seeking to understand key elements in our communities that impact health outcomes, and to develop appropriate strategies to promote health equity for all.

## **PUB 4020 - Peer Health Education- Field Experience**

**Credits:** 3

**Prerequisite(s):** Senior Standing and Approval of Instructor

**Description:** As a senior experience and service learning course, students (or MSU Peer Health Educators) in this course learn about the design, implementation and evaluation of health education programs through a direct community experience. In the course students gain knowledge on the importance and application of evidence-based public health education. Students are trained in a selected evidence-based health education curriculum and facilitating the delivery of health education sessions to students in identified local high schools. The selected health education curriculum builds students' facilitation skill in delivering health information through different instruction modalities (i.e. lectures, discussions, and engagement activities) and focuses on areas such as sexual and behavioral health, substance abuse, mental health, and

overall well-being. MSU PHE students are trained to provide information and resources to support skill development in high school students when making health behavior choices. The course includes training on the health education curriculum guided by the course instructor and additional support from teachers and staff at the participating schools and community partners.

*Note:* Credit is granted for one prefix only. Some sections of this course may be taught as Service Learning.

**University Requirement(s):** Senior Experience

**Cross Listed Course(s):** HSP 4025

## **PUB 4030 - Advanced Community Health Worker**

**Credits:** 3

**Prerequisite(s):** PUB 2000

**Description:** Students in this course develop skills necessary to perform community health work and implement program improvement. They also learn the social and emotional aspects of receiving a health diagnosis and how to navigate a patient through finding resources related to their health-related social needs. Students also practice evaluating resources and creating community health referral networks, exploring health improvement programs, and practice using the tools that community health workers use within community-based organizations and in the community.

## **Reading**

### **RDG 3111 - Emergent Literacy K-3**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** EDU 2111 or ECE 2100 or SED 2200

**Description:** This K-3 literacy course focuses on language arts components of emergent literacy development, including oral language development, listening, phonological and phonemic awareness, the alphabetic principle, high frequency vocabulary development, decoding, spelling, and writing development, and fluency development. Instructional strategies and assessment techniques that support the acquisition of literacy, current approaches in teaching emergent readers, and materials used in literacy instruction are also covered.

### **RDG 3222 - Teaching Elementary School Writing**

**Credits:** 3

**Prerequisite(s):** RDG 3111

**Corequisite(s):** RDG 3333, RDG 3335

**Prerequisite(s) or Corequisite(s):** EDU 3444; EDU 3445

**Description:** This course focuses on components of K-6 developmental writing programs that develop 21st century writing abilities for diverse learners. Topics include professional knowledge of writing as a sociolinguistic process, with application to lesson design, assessment methods, and effective feedback that build upon K-6 students' strengths and needs. Teacher candidates implement these practices in the co-requisite field experience.

## **RDG 3280 - Teaching Content Literacy Skills**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** EDS 3210 and EDS 3240 or MUS 3351 or MUS 4361 or HPS 3400 and HPS 3410 or HPS 3500 and HPS 3510.

**Description:** This course is for students seeking educational licensure in a K-12 or Secondary content area. Course content and objectives prepare teacher candidates to develop students' ability in reading, writing, speaking, viewing, and listening. Teacher candidates acquire literacy tools, including assessment strategies, to scaffold content instruction for diverse learners. Literacy strategies are applied to positively impact student content learning.

## **RDG 3333 - Intermediate Literacy 4-6**

**Credits:** 3

**Prerequisite(s):** RDG 3111

**Corequisite(s):** RDG 3222, RDG 3335

**Prerequisite(s) or Corequisite(s):** EDU 3444, EDU 3445

**Description:** This course focuses on literacy instruction for the intermediate grades 4-6. This course addresses several key areas: intermediate identities and literacies, effective reading and learning practices, expanding comprehension, teacher and student assessment of literacy development, learning strategies, vocabulary knowledge, and literacy in the content areas. An additional focus is matching assessed student abilities and needs to appropriate instructional models and curricular content.

## **RDG 3335 - Field Experience: K-6 Literacy**

**Credits:** 1

**Prerequisite(s):** RDG 3111

**Corequisite(s):** RDG 3222, RDG 3333

**Prerequisite(s) or Corequisite(s):** EDU 3444, EDU 3445

**Description:** This field placement involves 45 hours in an elementary school classroom. Teacher candidates apply knowledge of reading and writing development to observe and practice organizing a comprehensive plan of instruction throughout the content areas based on assessment of student abilities, appropriate instructional methods and required curriculum. Students apply a growing repertoire of various instructional models that range from general classroom structure to explicit skill teaching. This course is a field experience taken concurrently with RDG 3222 and RDG 3333.

## **RDG 4222 - Perspectives on Literacy: Variable Topics**

**Credits:** 3

**Prerequisite(s):** RDG 3111

**Prerequisite(s) or Corequisite(s):** RDG 3222, RDG 3333, RDG 3335

**Description:** This course focuses on expanding traditional definitions and conceptions of literacy in order to teach to the evolving needs of diverse populations. Expanded notions of literacy include: Digital literacies, disciplinary literacy, visual literacy, out-of-school

literacies, and translanguaging. This course is intended to challenge the scope of teacher candidates' literacy knowledge and perceptions for the purpose of establishing a positive and broadened perspective of teaching and learning with expanding best practices. Teacher candidates examine the various roles of teachers, learners and literacy from global perspectives in order to further develop their teaching identities.

### **RDG 4333 - Individual Assessment and Instruction in Literacy**

**Credits:** 3

**Prerequisite(s):** RDG 3111

**Prerequisite(s) or Corequisite(s):** RDG 3222, RDG 3333, RDG 3335

**Description:** In this course, the focus is on working one-on-one with a K-6 student in a field setting to collect, examine, and interpret that student's assessment data in order to provide data-based instruction in conjunction with standards. Working with one student to practice giving assessments, planning, and delivering literacy instruction based on student strengths and weaknesses provides the opportunity for an in-depth understanding of the teach-assess-adjust cycle. Collaborative work with peers and other professionals assists with skill development in aligning assessment data and literacy instruction with content.

### **RDG 4444 - Accountability in Whole Class Literacy Assessment**

**Credits:** 3

**Prerequisite(s):** RDG 3222, RDG 3333, RDG 3335, EDU 3550, EDU 3665, EDU 3666

**Corequisite(s):** EDU 4011; EDU 4115 or EDU 4116

**Description:** This course focuses on collecting and interpreting whole class assessment data in order to plan literacy instruction. Topics include how state and federal legislation affect literacy instruction, as well as methods for differentiating literacy instruction. Collaborative planning as part of an educational team is a further focus. Application of this course content will be in the partnering residency.

### **RDG 4970 - Teaching of Psychology**

**Credits:** 3

**Prerequisite(s):** Fifteen semester hours of psychology and junior or Senior standing, psychology major or minor

**Description:** This course provides intensive experience as an undergraduate teaching assistant under close faculty supervision. The experience includes lecture/seminar meetings and additional hours of application each week. During the seminar portion of the course, students will learn about preparing a learning environment, performing textbook selection, and writing materials required for teaching. Students will also be given guidance on job/graduate school preparation.

*Note:* Students may take the course only once for credit but may later

do a two-credit independent study with a different supervising professor.

## **Real Estate**

### **REL 2200 - Real Estate Principles**

**Credits:** 3

**Description:** In this course, students will be exposed to a high level overview of real estate principles and practices, including the many possible careers in real estate, such as development, residential and commercial sales, appraisal, title, lending, property management, ownership, and investment, as well as general risks and mitigation principles. Students will also examine the financing of real estate projects/acquisitions, the management of risk in the banking industry, the responsibilities of banks towards customers and other stakeholders, the regulation of lending for real estate, the regulation of mortgage brokers, the role of the public trustee, and other lending/security aspects of real estate.

### **REL 2400 - Introduction to Affordable Housing**

**Credits:** 3

**Prerequisite(s):** ENG 1020 or ENG 1021; and Completion of General Studies Quantitative Literacy Requirement

**Description:** In this course, students are exposed to a high-level overview of affordable housing principles and practices, including the many possible careers in the housing industry, such as finance and development, property management, and resident services. Students also examine the shifting policy focus of affordable housing over time, the current state of the Colorado housing market with an affordability perspective, and gain insights into the many types of affordable housing providers as well as organizations that provide funding.

### **REL 3000 - Residential Property Management**

**Credits:** 3

**Prerequisite(s):** FIN 3800 and junior standing

**Description:** In this course, students examine issues specific to residential property management, including long-term and short-term property rentals. In particular, students develop an approach to the profitable management of property subject to zoning and local area regulation of high turnover rentals, taxes, and compliance issues. Students explore best practices in record-keeping and Colorado trust account management. Finally, students learn how to assess and mitigate risk, particularly as applied to the mechanics of enforcement and notices and process of evictions.

### **REL 3010 - Affordable Housing Property Management**

**Credits:** 3

**Prerequisite(s):** REL 2400

**Description:** This course is designed to provide an overview of

affordable housing property management. As part of the overview, we will focus on affordable multifamily housing of various types: tax credits, supportive housing, and special needs. We will also discuss other tools such as Housing Choice Vouchers.

During the course, we will look at an overview of affordable housing programs and the role that property managers play. We will look at compliance issues such as fair housing laws, as well as compliance specific to affordable housing. We will also look at ways in which - as a class of real estate - affordable housing properties are maintained. Resident services and community engagement are fundamental to the success of affordable housing properties, and these will be examined as well.

## **REL 3200 - Real Estate Market Analysis**

**Credits:** 3

**Prerequisite(s):** FIN 3800 and junior standing

**Description:** Unlock the complexities of real estate market analysis with this comprehensive course. This course equips students with the essential skills and knowledge to effectively evaluate real estate markets, understand market dynamics, and make informed investment decisions.

## **REL 3300 - Commercial Property Management and Leases**

**Credits:** 3

**Prerequisite(s):** FIN 3800 and junior standing

**Description:** In this course, students explore and apply the terminology and concepts specific to commercial property management, such as capitalization rates, recovery and absorption, mixed use, zoning, anchor tenants, and common expense allocation, and other advanced management concerns. In addition, students analyze and discuss commercial leases.

## **REL 3400 - Real Estate Financial Modeling**

**Credits:** 3

**Prerequisite(s):** FIN 3800 and junior or senior standing

**Description:** Dive deep into the essential tools and techniques of real estate financial modeling with this comprehensive course. This course is designed for real estate students, financial analysts, investors, and professionals seeking to enhance their skills in creating robust financial models for real estate projects.

## **REL 4200 - Appraisal Principles, Procedures, and Ethics**

**Credits:** 3

**Prerequisite(s):** FIN 3800 and junior standing

**Description:** Students explore the theoretical principles that underlie real estate appraisal methods, as well as practical application of appraisal concepts. Students examine the roles of ethics, impartiality, and general principles of the Uniform Standards of Professional Appraisal Practice (USPAP).

## **REL 4300 - Real Estate Finance and Investment**

**Credits:** 3

**Prerequisite(s):** REL 4200 and junior standing

**Description:** Enter the dynamic world of real estate finance and investment through this comprehensive course. This course offers an in-depth exploration of the financial and investment principles that drive the real estate market.

## **REL 4400 - Principles and Issues in Real Estate Title and Title Insurance**

**Credits:** 3

**Prerequisite(s):** FIN 3800 and junior standing

**Description:** In this course, students learn the concepts and processes involved in titling property such as: alternate types of titling; grantor/grantee indices and title abstracts; insurance policy riders, exceptions, and potential ramifications; and general issues regarding county requirements, buildable lots, and subdivisions. Students also explore various methods of real estate ownership, including rights of survivorship, limited partnership syndications, closely-held LLCs/corporations, and general tax considerations in ownership structures.

## **Recreation and Tourism Management**

### **RTM 2000 - Commercial Development**

**Credits:** 3

**Description:** Students in this course will be comprehensively introduced to the planning, development, and management of sustainable recreation, tourism, and hospitality businesses. Emphasizing the importance of social entrepreneurship, corporate social responsibility, business for good, ethics, and community development, students will gain insights into the critical aspects of managing an enterprise, resource allocation, place-based considerations, risk mitigation, marketing, and operations management.

### **RTM 2730 - Sport in Society**

**Credits:** 3

**Description:** This course will examine the relationship of sport to society, using social theory and historical perspectives. The course emphasizes the impact of sport on American culture.

*Note:* Credit will be granted for only one prefix: SM or RTM.

**Cross Listed Course(s):** SM 2730

### **RTM 3100 - Adventure Instruction**

**Credits:** 3

**Description:** Students will explore what makes an effective adventure instructor and facilitator. Of note, the course combines instructional theory, practical approaches, and developmental goals in a unified process for the adventure instructor.

## **RTM 4000 - Destination Development**

**Credits:** 3

**Description:** This course prepares students for successfully planning, managing, and promoting sustainable recreation and tourism destinations. The course delves into integrating sustainability principles in destination management, marketing, and planning across diverse settings, such as urban, public, private, and volunteer agencies. Students will also explore contemporary issues related to economics and policy in both local and global contexts within the recreation and tourism industry.

## **RTM 4100 - Adventure Travel**

**Credits:** 3

**Description:** This course prepares students with professional knowledge of the central theories and practices related to adventure travel. Students develop a comprehensive knowledge related to risk management strategies, business operations, and the environmental and sociological impacts of adventure in modern society. The course covers topics such as the role of adventure in society, the adventure planning process from a business operations perspective, the relationship between adventure and the environment, risk management, and various adventure subsectors.

## **Recreation Professions**

### **RECR 1870 - Recreation, Leisure, and Well-Being**

**Credits:** 3

**Description:** This course provides an overview of recreation and leisure, including career opportunities. Philosophy, history, leisure education, and the interrelationships among governmental institutional, voluntary, and commercial/private recreation and park agencies are discussed.

### **RECR 2110 - Recreation Leadership Skills and Techniques**

**Credits:** 4

**Description:** This course is designed to develop and enhance recreation leadership skills used in the delivery of recreation and park services.

### **RECR 2210 - Nature, Leadership, and Outdoor Recreation**

**Credits:** 3

**Description:** This course is designed to help you develop professional knowledge of the central theories related to outdoor recreation. More specifically, the course explores the history of outdoor recreation, nature, experiential learning, and expedition planning.

## **RECR 2330 - Advocacy, Leisure, and the Aging Adult**

**Credits:** 3

**Description:** This course studies the impact of advocacy and social action programs for the aging adult. Discussions include issues at the local, state, and national levels and their implications for recreation programs. Students will have the opportunity to become involved with community advocacy programs.

### **RECR 3330 - Introduction to Therapeutic Recreation Services**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** RECR 1870 or permission of instructor

**Description:** This course surveys the recreation needs of individuals with disabilities. It provides an overview to therapeutic recreation services, including those in both health-care agencies and community-based settings.

### **RECR 3430 - Program Development in Therapeutic Recreation**

**Credits:** 3

**Prerequisite(s):** RECR 3330

**Description:** This course focuses on applying programming concepts including conceptualization, planning, implementation, and evaluation of comprehensive and specific therapeutic recreation services. Equipment, program modifications, and adaptations are discussed.

### **RECR 3530 - Techniques in Therapeutic Recreation**

**Credits:** 4

**Prerequisite(s):** RECR 3330

**Description:** This course will examine tools, techniques, and procedures utilized in the delivery of therapeutic recreation services. Assessment, individual treatment plans/program plans, documentation, and community integration skills are discussed. Application of content to practice in the field is required.

### **RECR 3840 - Design and Maintenance of Recreation and Park Resources**

**Credits:** 4

**Prerequisite(s) or Corequisite(s):** RECR 1870 or permission of instructor

**Description:** This course examines the planning, design, and maintenance of recreation facilities and equipment, including recreation centers, sports areas, parks and open space, aquatic areas, and commercial recreation facilities.

## **RECR 3860 - Self-Assessment for Outdoor Recreation Professionals**

**Credits:** 3

**Prerequisite(s):** RECR 2210

**Description:** To promote effectiveness as a future outdoor recreation professional, and as a leader, the overall structure of the course seeks to address the essential quality of developing the vision of reflection-in-action.

## **RECR 3870 - Internship Seminar for Recreation and Park Professions**

**Credits:** 2

**Prerequisite(s):** RECR 3970 or Permission of instructor

**Description:** The course prepares the recreation major for an internship placement in the recreation and parks field. Topics include goal setting, agency identification, supervisor qualifications, professional certification, ethics, professional development, time management, philosophy, and financial issues.

## **RECR 3930 - Contemporary Issues in Recreation and Parks: Variable Topics**

**Credits:** 1-3

**Description:** This is a variable titled course focusing on a variety of contemporary issues impacting the recreation and park field.

*Note:* This course cannot be repeated for credit under a similar title.

## **RECR 3970 - Practicum in Recreation Services**

**Credits:** 3

**Prerequisite(s):** RECR 2110 or Permission of instructor

**Description:** This is a 90-hour, structured practical experience working in recreation, services. The course allows students to apply concepts learned in the classroom and to explore career opportunities. This experience will be under the supervision of an agency professional and an MSU Denver faculty member.

## **RECR 3980 - Internship in Recreation Professions**

**Credits:** 1-15

**Prerequisite(s):** Major in Recreation Professions; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## **RECR 3990 - Field Experience in Recreation and Park Professions**

**Credits:** 1-3

**Prerequisite(s):** Permission of instructor

**Description:** This course provides the student with an opportunity to gain practical experience in recreation and parks, including settings such as recreation centers, resorts, private clubs, nonprofit organizations, hospitals and health-care organizations, specialized sports facilities, and outdoor areas.

## **RECR 4030 - Issues and Trends in Therapeutic Recreation**

**Credits:** 3

**Prerequisite(s):** RECR 3330

**Description:** This course focuses on contemporary issues impacting the profession in therapeutic recreation and includes topics such as standards of practice, ethical guidelines, credentials, philosophies, training and competency, reimbursement and research initiatives.

## **RECR 4130 - Administration of Recreation and Park Services**

**Credits:** 3

**Prerequisite(s):** RECR 1870, RECR 2110, RECR 3970; or Permission of instructor

**Description:** This course provides knowledge of the principles and practices required for the management of recreation and park agencies. Topics include personnel management, fiscal management, legal aspects, computer applications, evaluation, and research.

## **RECR 4150 - Advanced Techniques in Therapeutic Recreation**

**Credits:** 4

**Prerequisite(s):** RECR 3330, RECR 3530; or Permission of instructor

**Description:** This course focuses on intervention techniques applicable to the leadership of therapeutic recreation. Individual and group facilitation techniques are discussed, including the development of a leisure-education program. Opportunities for involvement in clinical or community-based therapeutic recreation programs will be provided.

## **RECR 4550 - Aquatic Management**

**Credits:** 3

**Prerequisite(s):** Permission of instructor

**Description:** This course emphasizes the development, organization, and management of diverse aquatic programs and facilities. Course content includes topics for certifications, including Certified Pool Operator.

## **RECR 4630 - Recreation Programs for the Older Adult**

**Credits:** 3

**Prerequisite(s):** At least junior standing

**Description:** This course studies the role of recreation and leisure services as they relate to understanding the needs of services for the older adult. Emphasis will be on recreation planning in senior centers, skilled nursing facilities, day-care centers and long-term care facilities.

## **RECR 4790 - Applied Research and Evaluation**

**Credits:** 2

**Prerequisite(s):** RECR 4130

**Corequisite(s):** RECR 4890

**Description:** This course provides students with the opportunity to learn and practice applied research and program-evaluation skills in conjunction with their internship.

## **RECR 4810 - Grants and Grant Writing in the Health Professions**

**Credits:** 3

**Description:** This course provides the student in the health professions with an understanding of funding sources, resources to locate funding agencies, and the grant writing process. Students will write a grant proposal for a community agency.

## **RECR 4850 - Advanced Administration and Evaluation**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** RECR 4130

**Description:** This course provides an intensive opportunity to develop administrative skills necessary in both recreation management and therapeutic recreation settings. Topics include research and evaluation methodologies with a focus on applied concepts, marketing through traditional and social media approaches, and sources of funding through bonds, partnerships, sponsorships and grants.

## **RECR 4890 - Internship in Recreation, Parks, or Therapeutic Recreation**

**Credits:** 10-14

**Prerequisite(s):** Recreation Professions major, senior standing, completion of core and concentration area courses, minimum 2.75 GPA, completion of General Studies requirements

**Description:** This course is designed to provide the recreation major with an intensive practical experience in the field of recreation, parks, or therapeutic recreation. Students must complete a minimum of 12 weeks with 480 clock hours at their agency for 10 credits. Each additional credit requires 40 more clock hours and 1 additional week

at their agency for a maximum of 640 clock hours over 16 weeks.

**University Requirement(s):** Senior Experience

## **RECR 4960 - The Ethics of Recreation**

**Credits:** 3

**Prerequisite(s):** RECR 2210, Junior Standing

**Description:** This course is intended for students interested in working in recreation professions. It will focus on understanding and applying theory and constructing a personal ethic of the role of recreation in real-world situations. Theoretical support for this course will be derived from diverse areas including the ethic of care, environmental ethics, social justice, and critical race theory. Students will be engaged in understanding theories through both in-class lecture and discussion.

## **Religious Studies**

### **RLG 1040 - Asian Religions**

**Credits:** 3

**Description:** In this course, students explore the rich religious traditions that originated in Asia (such as Hinduism, Buddhism, Confucianism, and Taoism) by studying their historical development, key ideas and teachings, central figures and events, and varieties of cultural expression. Students investigate questions such as: What is religion? How do religions begin and develop over time? And, why do religions end?

**General Studies:** Arts and Humanities, Global Diversity

**Guaranteed Transfer:** GT-AH3

### **RLG 1050 - Judaism, Christianity, Islam**

**Credits:** 3

**Description:** In this course, students explore the rich religious traditions of Judaism, Christianity, and Islam by studying their historical development, key ideas and teachings, central figures and events, and varieties of cultural expression. Students investigate questions such as: What is religion? How do religions begin and develop over time? And, why do religions end?

**General Studies:** Arts and Humanities, Global Diversity

**Guaranteed Transfer:** GT-AH3

### **RLG 1090 - Religion, Justice, and Liberation Movements**

**Credits:** 3

**Description:** Students in this course explore the complex tapestry of religious traditions that have contributed to social justice and liberation movements in the United States. Drawing on a variety of case studies, we analyze how various religious traditions have inspired struggles for freedom, equality, and human rights. Through historical and contemporary lenses, students examine how religion shapes and is shaped by activism and social change.

**University Requirement(s):** Ethnic Studies & Social Justice

## RLG 3410 - South and East Asian Philosophies and Religions: Variable Topics

**Credits:** 3

**Prerequisite(s):** RLG 1040

**Description:** Students conduct an in-depth study of a specific thinker, such as Pantajali, Sankara, or Vivikenanda; or of a pair or group of thinkers, such as Confucius and Lao-tzu; or of a recognized movement of thought or tradition, such as Theravada or Zen Buddhism; or of a concept or problem, such as karma and reincarnation; or of a genealogy of sacred texts, such as the Vedas and the Upanishads; or of a conjunction of epic texts, such as the Mahabharata and the Ramayana. Course materials are rooted primarily in a South or Eastern Asian context.

*Note:* This course may be taken up to three times (for 9 credits), with different topics.

## RLG 3610 - Religious Studies: Variable Topics

**Credits:** 3

**Prerequisite(s):** RLG 1040 or RLG 1050

**Description:** This course offers either comparative studies of religion or an in-depth study of a specific thinker, such as Paul, Augustine, Mamonides, or Martin Luther King Jr.; or a pair or group of thinkers, such as Luther and Calvin or Buber and Rosenzweig; or a recognized movement of thought or tradition, such as Shia or Sunni Islam; or a particular concept or problem, such as sin and redemption; or a genealogy of sacred texts, such as the Tanakh and the New Testament; or a conjunction of epic texts, such as Gilgamesh, Genesis, and On the Worship of Isis and Osiris.

*Note:* This course may be repeated for credit under different topics.

## Restaurant Management

### RST 1200 - Basic Cooking Skills

**Credits:** 3

**Description:** This course serves as an introduction to fundamental cooking skills, methods, theories and techniques. Students demonstrate proficiency in food safety and sanitation principles, learn to incorporate sustainable food practices, including local food sourcing, composting, upcycling, and seasonality. Students take the ServSafe Food Handler Certification in the course.

### RST 1550 - Food Fundamentals

**Credits:** 3

**Description:** The fundamentals of food are explored through visual and sensory analysis. Food identification, selection and sourcing are explored through demonstrations, videos, and kitchen tours of the Hospitality Learning Center. Course activities utilize food and kitchen vocabulary vital to a professional food service manager. The principles of food safety and sanitation and their relationship to the daily operations of food service are integrated throughout the course.

ServSafe Food Handler Certification is achieved by each student during this course.

### RST 2200 - Foodservice Management Fundamentals

**Credits:** 4

**Description:** This course introduces essential skills for professional foodservice management including food and kitchen safety, professional and quantity culinary and baking techniques, production planning, and kitchen management. Students also learn principles of food identification, storage and preparation, as well as sustainable food practices including local food sourcing, food waste mitigation and seasonality. Students complete a safe food certification in the course.

### RST 2420 - Cannabis in the Kitchen

**Credits:** 3

**Description:** Students in this course develop an in-depth understanding of the preparation, dosing, and portioning of cannabidiol (CBD) in commercially viable foods. The course will cover the various ways CBD is consumed, the multiple applications of CBD in food preparation, and the commercial uses of both hemp and cannabis plants in food production. Students will engage in hands-on learning activities to develop their skills in dosing and portioning of CBD extract in food products.

### RST 2500 - Basic Baking Skills

**Credits:** 3

**Description:** This course introduces students to the fundamentals of baking. Topics include mixing methods, leavening, baking science, terminology, equipment, ingredients, weights and measurements, formula conversion and costing of recipes. Students will produce a wide variety of baked goods using basic baking techniques.

### RST 2550 - Food Preparation and Science

**Credits:** 3

**Prerequisite(s):** HTE 1533 or RST 1550

**Description:** This course is designed to introduce students to properties of foods and changes that occur during preparation. Students will learn basic skills in food preparation and presentation while implementing food safety and sanitation standards. Students will conduct quality tests on prepared food and use data to evaluate the appearance, composition, taste, tenderness and selection of food products.

### RST 3000 - Taste the World: A Global Sensory Experience

**Credits:** 3

**Description:** In this course, students analyze the connection between global cultures and their impact upon individual and societal traditions and social mores of food production and service. Students



gain awareness of global food culture through taste and evaluation of historically and socially distinct foods. Students further engage in the social behaviors, tools, preparation techniques and service methods, to gain awareness of the complex human, social, political, religious, and geographic influences on food cultures.

**General Studies:** Social and Behavioral Sciences, Global Diversity

### RST 3110 - Food Science Laboratory

**Credits:** 1

**Prerequisite(s):** RST 1200 or permission of instructor and NUT 2040

**Corequisite(s):** NUT 3110

**Description:** This lab accompanies NUT 3110 - Food Science. In the lab, students observe the fundamental roles of physical properties and chemical reactions of proteins, lipids, and carbohydrates in food systems. Students also test principles underlying food function and stability and engage in analyses of food properties.

**General Studies:** Natural and Physical Sciences

### RST 3350 - International Cooking: Variable Topics

**Credits:** 1-3

**Description:** In this course, students explore the culinary history, traditional cooking methods, indigenous ingredients, and role various international cuisines play as part of global food culture. Students will prepare meals using authentic ingredients and tools for preparation and service. Students will learn about food traditions, taboos, and dining etiquette as practiced by various cultures throughout the world.

*Note:* This course may be taken up to 3 times under different topics

### RST 3530 - Healthy International Cooking

**Credits:** 3

**Description:** In this course, students explore the culinary history and development of cuisines from global cultural perspectives, and examine the elements of food flavors through the exploration of the nutritional value of food. Students will experience cuisines from worldwide regions utilizing authentic ingredients and tools for preparation and service. The principles of healthy cooking and nutrition will be employed and applied to food types to include the demonstration of cooking with less fat and less salt. Students develop and analyze healthy cooking techniques for international recipes and menus. An emphasis is placed on the influences that have developed cultural traditions, taboos and dining etiquette as practiced by the global populations. Students will also earn the ServSafe Food Handler's Certificate, and review the basics of proper kitchen sanitation.

### RST 3540 - Baking and Pastry

**Credits:** 3

**Prerequisite(s):** HTE 1603 or RST 2550

**Description:** This course introduces students to the fundamentals of baking and pastry production. The focus is on mixing methods,

leavening, baking science, terminology, equipment, ingredients, weights and measurements, formula conversion and costing of recipes. The students will successfully and consistently produce saleable items and will have the opportunity to act in a supervisory role while in this course.

### RST 3600 - Cost Controls for Food & Beverage

**Credits:** 3

**Description:** This course develops the skills for a manager of food and beverage operations in the hospitality or health care industries. Procurement, preparation and service to final accountability of sales and costs are covered.

### RST 3875 - Food Preservation Techniques

**Credits:** 3

**Description:** This course concentrates on aspects of cooking with products found in urban agriculture and urban homesteading environments. This includes cooking with local farm and ranch products. This course also reviews several food preservation methods, including canning, pickling, brining, smoking, curing, drying and freezing. Students can expect to learn protein fabrication, cheese making, sustainable food preservation methods, as well as how to procure locally grown items.

### RST 3905 - Farm to Table Sustainability

**Credits:** 3

**Description:** In this course, students explore the food system through a sustainability lens, with emphasis on purchasing, food waste management, and foodservice operations. Students learn about sustainable practices through field trips, site visits, and hands on cooking classes in food preservation, fostering a holistic understanding of sustainable food systems.

*Note:* Students are responsible for their own transportation for field trips.

### RST 3920 - Plant-Based Cooking

**Credits:** 3

**Prerequisite(s):** RST 1200 or instructor permission

**Description:** Students in this course explore plant-based diets, plant-forward menus, and the preparation of plant-based foods and recipes. Students investigate why vegan and vegetarian diets are chosen for health, social, religious, or other reasons. Course activities and materials focus on preparing and evaluating meals created with plant-based ingredients, modifying recipes to meet plant-based standards, and determining best preparation methods for food quality and nutritional value.

### RST 3950 - Healthy Lifestyle Cooking: Variable Topics

**Credits:** 1-3

**Description:** Students plan, prepare and evaluate healthy recipes in a kitchen laboratory setting. Additionally, students create healthy menus and modify recipes to meet specific nutritional objectives. Students also create a healthy cooking demonstration to illustrate a recipe that meets specified nutritional parameters and also appeals to a wide audience.

*Note:* This course may be taken up to 3 times under different topics

## **RST 4100 - Applied Foodservice Operations**

**Credits:** 4

**Prerequisite(s):** BVG 2015 or BVG 3250; RST 1200; HLDR 3600; HLDR 4000; Junior or Senior Standing

**Description:** In this course, students learn the proper use of quantity food equipment and tools, advanced culinary techniques, menu planning, yield tests, production planning, recipe conversions, plate design, and table service techniques. The student gains advanced skills in cooking methods of fruits and vegetables, meats, poultry, seafood, dairy, egg products and baked goods. Students plan and serve an event to the public as part of their learning experience.

**University Requirement(s):** Senior Experience

## **RST 4500 - Concept Development for Restaurants**

**Credits:** 3

**Prerequisite(s):** HTE 2015 or BVG 2015 and HTE 3603 or RST 3600

**Description:** This course provides the student with the ability to conceptualize and create a business plan for a restaurant concept. Students build concepts based on local health, liquor and zoning regulations, using real property as a basis to create their concepts. Students can expect to gain knowledge of all the duties of a restaurant business plan, including theme concept development, menu engineering, floor plan design, equipment needs, beverage program development, budgeting, and estimate costs of food and beverage service. Students also define market demographics, and create a competition analysis.

**University Requirement(s):** Senior Experience

## **Secondary Education**

### **EDS 1001 - Advancing Social Justice and Educational Equity: Challenges and Strategies**

**Credits:** 3

**Description:** The purpose of this course is to introduce historical, sociological, and cultural principles that account for school experiences of diverse groups in public education. Students learn how issues of social justice and educational equity reflect and interact with communities and schools. Students examine racism and its intersections with classism, ableism, linguisticism, and sexism in educational settings. This course includes a service learning component in which students apply the material from class and critically reflect on their service experience.

*Note:* Some sections of this course may be taught as Service

Learning.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

**University Requirement(s):** Ethnic Studies & Social Justice

## **EDS 2680 - Portfolio Development Workshop**

**Credits:** 1

**Description:** Students learn to identify, analyze, discuss, and document learning gained through experience. Students integrate prior experiential learning with current educational needs and goals. Basic principles of adult learning and developmental theory are introduced as they apply to the student's experience. Students will prepare a prior-learning portfolio. Those who are interested may develop this portfolio into an application for credit for prior learning.

## **EDS 3000 - Education, Culture & Politics: A Puerto Rican Perspective**

**Credits:** 3

**Description:** This course focuses on the history, culture, educational and political systems of the island of Puerto Rico. Several class sessions will be held in Denver to discuss the before mentioned issues. The study abroad trip to Puerto Rico will include visiting and observing K-12 schools (public, private, urban and rural) to gain an understanding of the offerings, philosophies of education, accessibility and/or diversity issues at said schools. The influence of politics will also be highlighted as one of the connecting threads of the life and culture of Puerto Rico.

## **EDS 3130 - Foundations of Educational Psychology and Philosophy**

**Credits:** 4

**Prerequisite(s):** Satisfactory completion of General Studies requirements in Social and Behavioral Sciences I; at least sophomore status

**Corequisite(s):** EDS 3140

**Description:** Teacher candidates in this course will explore psychological and philosophical theories of education as they apply to secondary classrooms. Candidates will investigate four questions essential to future teachers: 1) Why do we have schooling? 2) How do people learn? 3) Who decides what and how students are taught? and 4) What do teachers do? Candidates address these questions by making connections between the fields of developmental psychology, educational philosophy, social policy, and school governance. Teacher candidates will demonstrate their understanding of these essential questions by articulating their educational philosophy and creating learning designs grounded in theory and best practices. This course -informed by current research on cognition, motivation, and culture -is designed to promote a deeper understanding of the rewards and challenges associated with becoming an effective teacher. Finally, this course requires concurrent enrollment in EDS 3140, a 60-hour field experience in a diverse middle or high school where candidates are prompted to apply these theories within classroom

settings.

**General Studies:** Social and Behavioral Sciences

## **EDS 3140 - First Field Experience in Secondary Education**

**Credits:** 1

**Prerequisite(s):** Completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy; and sophomore standing.

**Corequisite(s):** EDS 3130

**Description:** This course provides the teacher candidate with an opportunity to apply theory to practice in order to make appropriate decisions in multicultural urban secondary schools under the guidance of an experienced classroom teacher. During this sixty-hour field placement, teacher candidates are introduced to practices of schooling. They complete projects and performance tasks demonstrating developing proficiency toward performance-Based Standards for Colorado Teachers.

## **EDS 3150 - Critical Sociocultural Lenses for Teachers**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** EDS 3140 or EDS 3240 or MUS 3351 or PETE 3010 or PETE 3410 or PETE 3510

**Description:** The ethnic studies and social justice framework of this course supports teacher candidates' ability to critically analyze systems that shape classroom interactions, curricula, and schooling. It addresses racial, ethnic, and linguistic inequities and hierarchies of power as primary lenses for understanding and analyzing the socially constructed concepts related to human identity and the relationship of these social constructs to systems of formal education in the United States. Teacher candidates will examine their own location in larger systems so they may better serve their students, especially those from historically marginalized communities.

*Note:* This course requires previous completion of or concurrent enrollment in a field experience: EDS 3140, EDS 3240, or MUS 3351.

**General Studies:** Social and Behavioral Sciences

**University Requirement(s):** Ethnic Studies & Social Justice

## **EDS 3200 - Educational Psychology Applied to Teaching**

**Credits:** 3

**Prerequisite(s):** EDS 3110 and EDS 3120, or permission of instructor; and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This course provides an emphasis on making appropriate decisions to meet the developmental needs of diverse children, with special focus on children in middle and high school. The teacher candidate develops professional teaching skills needed to establish an effective classroom group and to integrate participation of other school professionals and parents in meeting student needs.

Students apply theory to educational practice as they investigate psychosocial, cognitive, and moral development; student characteristics; assessment; learning theories; student motivation; and classroom management.

## **EDS 3210 - Classroom Management, Planning, and Assessment in Secondary Schools**

**Credits:** 3

**Prerequisite(s):** EDS 3130 or EDU 3550, EDS 3140 or EDU 3665

**Corequisite(s):** EDS 3240

**Prerequisite(s) or Corequisite(s):** EDS 3150

**Description:** Teacher candidates synthesize content knowledge, educational theories and pedagogy into standards-based instruction. An Assessment Cycle approach is used to develop an outcomes-based model of teaching and learning. Teacher candidates plan lessons and units integrating Colorado's Model Content Standards in their endorsement areas, integrating literacy, mathematics, and technology. They investigate a variety of approaches to classroom management and learn to differentiate instruction to meet the needs of diverse groups of learners.

## **EDS 3240 - Field Experience: Classroom Management, Planning and Assessment in Secondary Schools**

**Credits:** 1

**Prerequisite(s):** EDS 3130 or EDU 3550, EDS 3140 or EDU 3665

**Corequisite(s):** EDS 3210

**Description:** This course integrates content knowledge, educational theories and pedagogy in a 60-hour, standards-based field experience in a secondary school. Field placements are arranged by education faculty. Teacher candidates apply the principles of teaching and classroom management in making appropriate decisions for diverse learners. This course requires concurrent enrollment in EDS 3210.

*Note:* Some sections of this course may be taught as Service Learning.

## **EDS 3280 - Disciplinary Literacy in Culturally and Linguistically Diverse Schools**

**Credits:** 3

**Prerequisite(s):** EDS 3130 and EDS 3140 (or MUS 3351 or ARTE 3601); EDS 3150

**Prerequisite(s) or Corequisite(s):** EDS 3210 and EDS 3240 (or PETE 3400 and 3410; or PETE 3500 and 3510; or MUS 4361; or ARTE 4130; or ARTE 4230)

**Description:** This course brings together future teachers of various secondary education academic disciplines, grade levels, and backgrounds to explore disciplinary literacy and the teaching of literacy and language acquisition in K-12 classrooms, and to consolidate their learning throughout the licensure program. Students will learn about the role of language, specifically the literacy practices of reading, writing, speaking, listening, thinking, visualizing, and representing to gain content knowledge across academic disciplines in culturally and linguistically diverse schools,

as well as a hands-on, student-centered approach to prepare teachers who actively promote justice through diversity, equity and inclusion.

## **EDS 3960 - Field Experience in Teaching Science in Secondary Schools**

**Credits:** 1

**Prerequisite(s):** EDS 3210, EDS 3240

**Corequisite(s):** SCI 3950

**Description:** This 60-hour field experience provides opportunities to develop teacher candidates' professional and pedagogical skills in a science classroom. In coordination with the classroom teacher, teacher candidates design and implement science content lessons, prepare for and supervise laboratory investigations, and adjust science instruction for students with diverse needs. Course assignments and evaluations are designed to help teacher candidates become reflective practitioners. Field placements will be arranged by MSU Denver faculty in collaboration with local schools.

## **EDS 4010 - Action Research within Communities of Practice**

**Credits:** 3

**Prerequisite(s):** Senior Standing or permission of department

**Description:** In this senior experience course, students will have opportunities to synthesize the knowledge, skills, and theoretical constructs learned throughout their undergraduate studies. Students will design an action research project relevant to their field of study, discipline, and/or profession. The course requires students to identify applicable research topics, formulate research questions, analyze the quality and credibility of research, synthesize research to develop and organize a literature review, select appropriate research designs and methods, and develop a research proposal aligned with the elements and requirements outlined by MSU Denver's IRB process and Human Subjects Protection Program. Students will have the opportunity to present and discuss their research proposals to demonstrate developed expertise.

**University Requirement(s):** Senior Experience

## **EDS 4290 - Student Teaching and Seminar: Secondary 7-12**

**Credits:** 6,12

**Prerequisite(s):** Completion of all requirements of the teaching major and the Secondary Education Program; initial sign-off on program requirements (e.g., teacher work sample/portfolio) by faculty advisor

**Description:** This is a supervised, full-time, 16-week student teaching experience in an accredited public or private secondary school, providing increasing responsibility for the instruction, assessment, and supervision of an identified group of learners, 7-12 grade levels. Regularly scheduled observations and 10 hours of seminars conducted by an appointed college supervisor are part of the student-teaching requirement. Teacher candidates must complete a teacher work sample and be rated as proficient in all Performance-Based Standards for Colorado Teachers to receive MSU Denver's

recommendation for teacher licensure.

*Note:* Students enrolled for 12 credits spend 16 weeks full-time in a single placement. Only students needing two student-teaching placements and seeking K-12 special education, linguistically diverse or second endorsement enroll for EDS 4290 for 6 credits and spend 8 weeks full-time in the EDS 4290 placement.

**University Requirement(s):** Senior Experience

## **Science**

### **SCI 2600 - Integrated Biology and Earth Science**

**Credits:** 3

**Prerequisite(s):** Minimum performance standard scores on reading and writing pre-assessments

**Description:** The course examines the application of fundamental scientific principles in biology and earth systems by examining the basic building blocks of life, evolution of life, the human body, ecosystem structure and development, terrestrial formations and surface processes, atmospheric processes, the solar system, and the universe. This class includes laboratory experiments, which a focus on biology and earth science.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

### **SCI 2610 - Integrated Physical and Chemical Sciences**

**Credits:** 3

**Prerequisite(s):** MTH 2620

**Description:** The course examines the nature of energy and matter, their interactions and changes, and the application of fundamental scientific concepts to the study of our natural world. These concepts are explored through hands-on laboratory experiments that focus on basic physics and chemistry principles.

**General Studies:** Natural and Physical Sciences

**Guaranteed Transfer:** GT-SC1

### **SCI 3950 - Teaching Science in Secondary Schools**

**Credits:** 3

**Prerequisite(s):** EDS 3130, EDS 3140

**Corequisite(s):** SCI 3960

**Prerequisite(s) or Corequisite(s):** EDS 3210, EDS 3240

**Description:** Secondary Science Methods explores the nature of science and inquiry in preparation for teaching science in a secondary school environment. Teacher candidates learn to choose, develop, and implement curriculum based upon students' needs, a deep understanding of how people learn science, and how to align with both state and national content standards. Inclusive and anti-racist approaches to student assessment, family engagement, safety, and professional development are also emphasized.

### **SCI 3960 - Field Experience in Teaching Science in Secondary Schools**

**Credits:** 1

**Prerequisite(s):** EDS 3130, EDS 3140

**Corequisite(s):** SCI 3950

**Prerequisite(s) or Corequisite(s):** EDS 3210, EDS 3240

**Description:** This 60-hour field experience provides opportunities to develop teacher candidates' professional and pedagogical skills in a science classroom. In coordination with the classroom teacher, teacher candidates design and implement science content lessons, prepare for and supervise laboratory investigations, and adjust science instruction for students with diverse needs. Course assignments and evaluations are designed to help teacher candidates become reflective practitioners. Field placements are arranged by the Office of Clinical Experiences & Partnerships in collaboration with local schools.

## Social Work

### SWK 1010 - Introduction to Social Work

**Credits:** 3

**Description:** You will be introduced to the profession of social work. You will learn about the historical and philosophical perspectives of generalist social work practice and social welfare programs in response to human needs, human rights, and societal/social problems. You will gain an overview of the social worker's role in the fields of health, mental health, policy, family and child welfare, corrections, and social justice work with marginalized and oppressed populations such as older adults, ethnically and culturally diverse individuals and communities, individuals with disabilities, children, LGBTQIA+ individuals and communities, and other historically oppressed/marginalized individuals, groups, and communities.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

### SWK 1050 - How to Change the World

**Credits:** 3

**Description:** Operating from human rights and social justice frameworks, this course is an introduction to how to address some of our most pressing social problems. A range of topics will be covered such as environmental and food justice, healthcare, children's rights, racial justice, immigration, gender, LGBTQ+ rights, criminal justice, poverty, and income inequality. The class will include social science content on theories and methods of social and political change such as political advocacy, activism, research, social movements, and civic engagement. Students will hone their critical thinking skills by studying and posing solutions to our nation's complex social challenges.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

### SWK 1600 - Community Engagement and Civic Responsibility

**Credits:** 3

**Description:** In this course, you will focus on providing a community-oriented, service-learning, and civic engagement experience from a social work perspective. In this course, you will provide at least 30 hours of services to a community organization to enhance your academic and civic learning and complete a final project demonstrating your knowledge of social problems related to your service-learning site. Before beginning the service-learning experience, course materials will introduce you to the role of student learning within an agency context. In this class, you will also reflect on social justice issues, understand socioeconomic and political factors that affect our communities, and apply your reflection and learning to your personal and professional development.

*Note:* Some sections of this course may be taught as Service Learning.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

### SWK 3010 - Social Work Practice with Children and Youth

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course examines how social workers may work effectively with children and youth in a variety of social service settings. This course examines the developmental needs and rights of children and youth, and issues that may emerge in young people's ecological contexts. Students will utilize the social work generalist intervention model to examine best practice approaches with this population.

### SWK 3020 - Case Management Practice

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** Case management is a foundational practice within the field of social work. Case management is a process involving the assessment, intervention plan, implementation, and monitoring of services in a variety of social service organizations. The process enables social workers to coordinate services for clients across systems addressing multiple needs. This course will take students through the entire case management process from intake through monitoring to termination.

### SWK 3030 - Social Work with Older People

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course focuses on social work practice with older adults and their families. The course examines the social context of aging, the aging process, accompanying changes, and the impact on older persons and their families. Emphasis is also on the nature of

support systems and the social work role in sustaining and enhancing functioning and well-being.

## **SWK 3040 - Creative Approaches to Change**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course will examine social work interventions that utilize creativity and innovation to facilitate change at micro, mezzo, and macro levels. Creative modalities such as art, drama, music, writing, physical activities, and other innovative practices will be examined for their utility in creating social change. This course will examine how selected social work issues have been addressed using creative modalities.

## **SWK 3050 - Theories for Individual and Social Change**

**Credits:** 3

**Prerequisite(s):** Admitted to major

**Description:** Theories are a framework for understanding human behavior and our larger social world. They guide social workers and helping professionals, providing a framework for working with individuals, families, groups, communities, and organizations to support growth and change. In this course you learn to differentiate between social work perspectives, social theory, and practice theory, and examine how they may be used strategically to guide social work practice. In addition, this course emphasizes the crucial importance of diversity, equity, and inclusion in social work practice, recognizing the multifaceted dimensions of the human experience and the imperative of addressing systemic inequalities. Emphasis is placed on cultivating a deep understanding of the reciprocal relationship between theory and practice, preparing students to apply theoretical frameworks effectively in their roles as social work practitioners.

## **SWK 3060 - Human Behavior in the Social Environment II**

**Credits:** 3

**Prerequisite(s):** SWK 3050

**Description:** This course expands on content from HBSE I, focusing on how practice theories undergird change processes in social work. This course provides an overview of prominent practice theories, such as cognitive behavioral, crisis intervention, narrative and solution focused theories. Students will engage in the application of social and practice theories within social work settings in order to create meaningful change with client systems.

## **SWK 3070 - Environmental Justice in Social Work**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course will examine how the environment relates to issues of social justice and inequality. Students will examine how

environmental issues such as pollution, disasters, and waste sites disproportionately affect marginalized communities. This course examines urban, rural, and suburban spaces, as environmental issues shape individual and community well-being in each of these spaces. Issues of community organizing and activism are examined as tools for effecting change on these topics. Students will apply the generalist intervention model to issues of sustainability, and environmental protection and management.

## **SWK 3090 - Critical Reflection: Exploring Social Work Thinking and Knowledge**

**Credits:** 3

**Prerequisite(s):** SWK 1010, SWK 1600, Written Communications General Studies

**Description:** In this course, you will explore how the frames of history, context, meaning, power, and possibility influence our past and current practice. As part of this exploration, you will learn about epistemology, ethics, values, and other philosophical concepts directly impacting how we think about and act in practice. A deep dive into social work ethics and values provides a necessary foundation for your current ethical student conduct and your future social work practice. Finally, you will develop a framework for how we think in social work, both critically and reflectively, with the intention of reducing bias and increasing possibility.

*Note:* If a student has completed their Written Communication general studies through a different combination of courses, please contact the Department of Social Work for a registration override.

## **SWK 3100 - Child Welfare and the Law**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course will provide students with an overview of the legal framework for the delivery of child welfare services. It will include federal and state mandates relating to child-abuse prevention and treatment, adoption, and Indian Child Welfare. The role and processes of the court system will be discussed.

## **SWK 3110 - Social Justice and Activism in the Chicana/o Community**

**Credits:** 3

**Prerequisite(s):** CHS 1000

**Description:** Students in this course are provided an in-depth sociological, historical and political analyses of community-based organizations, the processes by which they originated, leadership styles, and information relative to their missions and functions within the Chicana/o community. Students will analyze theories regarding social change as they apply to social justice, activism and community organizing.

*Note:* Credit will be granted for only one prefix: CHS, HON, or SWK.

**General Studies:** Social and Behavioral Sciences

**University Requirement(s):** Ethnic Studies & Social Justice  
**Cross Listed Course(s):** CHS 3100, HON 3101

## **SWK 3120 - Unraveling Inequalities in Social Work Practice**

**Credits:** 3

**Prerequisite(s):** SWK 1010, Written Communications General Studies

**Description:** In this course, you will delve into the complexities of institutionalized oppression and privilege, examining their impacts on individuals and communities. You will explore how social identities, such as race, gender, class, and sexual orientation, have been shaped by history, and contribute to everyday experiences of inequality in the U.S. Using the frameworks of intersectionality, anti-racism, human rights, and liberationism, you will learn strategies for creating a more just and equitable world, in individual relationships as well as in social systems. In this course, you will also have the opportunity to cultivate cultural humility and critical self-reflection in examining your own identities and experiences, as tools for anti-oppressive social work practice. Come along on a transformative journey to build a more equitable society!

*Note:* If a student has completed their Written Communication general studies through a different combination of courses, please contact the Department of Social Work for a registration override.

## **SWK 3130 - Social Work and Criminal Justice Issues**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course is designed to help prepare social workers for employment in criminal and juvenile justice settings with a focus on micro, mezzo and macro practice. The course provides students with understanding, awareness, and skills to engage as leaders in multi-disciplinary social work practice within both the criminal and juvenile justice systems advancing social, economic, and environmental justice. Students will be exposed to the policies affecting the larger issues of criminal justice reform, court procedure and process for both defendants and victims, as well as the various treatment and rehabilitation methods used by the system to address victim and offender interventions and treatments.

## **SWK 3140 - The Black Community**

**Credits:** 3

**Prerequisite(s):** AAS 1010 or AAS/SOC 2000, or Permission of instructor, and Completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This course relates fundamental concepts and theories of sociology and African American studies to the study of the Black community through an analysis of educational, political, religious, economic, and family dimensions. It emphasizes local, national, and international Black communities. Classic and contemporary black community studies are examined.

*Note:* Credit will be granted for only one prefix: AAS, SOC, or SWK.

**University Requirement(s):** Ethnic Studies & Social Justice  
**Cross Listed Course(s):** AAS 3300, SOC 3140

## **SWK 3150 - Social Work and Child Maltreatment**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course will provide students with the basic knowledge of intervention and treatment in situations of child maltreatment. This course will be taught from a family-centered, culturally appropriate framework. Students will learn intervention models as currently practiced in county departments of social/human services.

## **SWK 3350 - Social Work Experience, Practice and Communication**

**Credits:** 3

**Prerequisite(s):** Admitted to major

**Description:** This course delves into the intricate intersection of professionalism and communication within the realm of social work. Through an exploration of social service landscapes, you will critically analyze the core principles of professionalism and the implications for effective practice. Emphasizing experiential learning, you will immerse yourself in 45 hours of service work within community-based agencies, bridging theoretical knowledge with real-world applications. Additionally, you will cultivate your critical thinking abilities and refine your professional writing skills for effective social work practice. This course fosters a culture of continuous self-assessment and peer feedback, empowering you to evolve as competent and ethical professionals, adept at navigating diverse professional settings.

## **SWK 3400 - Leadership and Program Administration in Social Work**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** Students will learn and practice leadership skills including how to motivate and engage people; resolve conflict; empower marginalized populations; create strategic plans; and publicly speak to promote culturally sustaining, just and equitable change. Leadership theory and practice will inform student's awareness and development of their own leadership styles and ethical application of leadership skills. Students will explore program administration through learning about program evaluation, management, basic budgeting and financing, and relevant legal issues.

## **SWK 3405 - Human Trafficking: Public Health Response**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** Students explore human trafficking utilizing global public health frameworks to examine the interprofessional nature of community response in Colorado. A review of multidisciplinary perspectives on labor and sex trafficking provides a comprehensive understanding of this human rights issue. Further, students examine the tactics used by traffickers to recruit and control victims and the effects of abuse on survivors. Students will be presented with an overview of the United Nations, U.S. federal and Colorado state laws to curb trafficking. Finally, students evaluate global and local efforts of the current anti-trafficking movement, including ways to be involved.

*Note:* Credit may be granted for only one prefix.

**Cross Listed Course(s):** AAS 3405, CJC 3650, GWS 3400, HSP 3405, PUB 3400

## SWK 3410 - Engaging for Change

**Credits:** 3

**Prerequisite(s):** SWK 1010, SWK 1600, General Studies requirements

**Description:** Engaging for change is at the heart of generalist practice! With an interactive and experiential approach, you will delve into the art of building meaningful connections with diverse individuals, empowering them to navigate life's challenges and realize their full potential. In Engaging for Change you will be guided through change frameworks that explore generalist practice, social problems, values, and relationships through history, meaning, context, power, and possibility. You will emerge equipped with the knowledge, skills, and process of change frameworks necessary to engage with individuals in a variety of social work settings, empowering them to lead lives of resilience, dignity, and self-determination.

*Note:* If a student has completed their Written Communication general studies through a different combination of courses, please contact the Department of Social Work for a registration override.

## SWK 3420 - The Power of Groups in Social Work

**Credits:** 3

**Prerequisite(s):** SWK 3050, SWK 3410, Admitted to the major

**Description:** This course provides essential knowledge and skills for effective generalist social work practice with groups. You will explore group dynamics, leadership, structures, conflict resolution, and change processes within group level contexts. Using the change framework, such as the generalist intervention model, you will have the opportunity to learn engagement, teaching and learning, intervention, evaluation, and termination strategies tailored to group settings. Through case studies and practical exercises, you will develop the expertise to facilitate positive and sustainable change through diverse group environments.

## SWK 3500 - Social Work Practice with LGBTQ People

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course explores concepts and methods useful in assessing and addressing the strengths, developmental needs, and social issues pertinent to lesbian, gay, bisexual, transgender, queer (LGBTQ) as well as other sexual minority identities. Multiple levels of practice issues are explored, including individual, group, family, policy, and community. Concepts of oppression and privilege are explored as they relate to LGBTQ people's experiences as well as experiences within LGBTQ communities.

*Note:* Credit will be granted for only one prefix: GWS or SWK.

**Cross Listed Course(s):** GWS 3500

## SWK 3510 - Spirituality and Religion in Social Work

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** Faith and spirituality play an integral role in people's lives and the social work profession. "The inclusion of spirituality as a concept according to the Council on Social Work Education is not only a demonstration of one's cultural competence, but a part of one's ethical responsibility" (CSWE, 2018). This course will explore the role faith plays in the lives of our clients, communities, and social service agencies, and examines many faith traditions including atheist and agnostic frameworks. This course critically looks at the past, present, and future of religion and faith with regard to how it has supported social change and at the same time denied human rights and caused historical trauma. Self-examination of our own beliefs and practices will increase awareness of how our faith impacts ourselves, our practice, and those we work with. Finally, students will learn and practice ways of integrating and using faith, religion, and spirituality in our social work practice to make change.

## SWK 3520 - Making Change in a Digital World

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course prepares students in social work and allied helping professions to harness technology for social good. We are living in a world that requires our understanding and fluency in a digital language and culture to make change at the micro and macro level. This course examines what it means to be a digital citizen and have digital literacy. Students will explore how power and oppression are present in the most far-reaching areas of our digital world, most of which we don't even see. Finally, this course analyzes digital helping best practices and work on these skills (i.e., telehealth, social media, support groups, public health information) to facilitate change.

## SWK 3530 - Being Well in a Profession of Well-Being

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021



**Description:** Promoting health and well-being are common goals for social work practitioners. This course focuses on healing justice and the role of holistic well-being in professional practice, specifically how practitioners can work on their own holistic well-being while providing care to others. Students will examine the science and strategies of well-being (e.g., mindfulness, positive psychology, vulnerability) while considering all system levels (i.e., micro, mezzo, macro) as possible sources for support and intervention.

### **SWK 3540 - Social Work in Healthcare Settings**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** Promoting health and well-being are common goals for social work practitioners. This course examines issues of health, illness, and well-being within a social and cultural context, particularly in regards to health disparities (e.g., race, class, gender). Students will learn about the myriad roles that social workers play in health and medical settings, with special attention paid to case management. Finally, students will examine strategies to enhance health and well-being through micro, mezzo and macro interventions.

### **SWK 3550 - Social Work Practice with Grief and Loss**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** This course will address grief and loss across the lifespan from a social work perspective including traditional, ambiguous, and disenfranchised grief. Students will be provided with information about why and how humans grieve and how grieving is affected by an intersection of characteristics of the person grieving and societal norms. Various types of loss will be discussed alongside implications for social work practice at micro, mezzo, and macro levels.

### **SWK 3560 - Teaching in Social Work**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021; Approval of the BSSW Program Director

**Description:** Teaching, public speaking, group dynamics, and program development are key components of social work practice. To cultivate students' skills in these areas, students may apply to work with a faculty mentor as a teaching assistant in supporting the teaching activities. This course supplements and supports the activities that students will perform with support from their faculty mentor. This course examines topics related to teaching in social work, such as ethical and legal considerations, theories of pedagogy, classroom and institutional policies, teaching technologies, assessment of student learning, lesson planning, and classroom dynamics.

### **SWK 3570 - Social Work Practice with Immigrants and Refugees**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** In this course students examine the experiences of immigrants and refugees from a social work perspective. This course provides an overview of social, historical, legal, cultural and other environmental factors that shape contemporary experiences of immigrants and refugees within the United States. The course will focus on issues pertinent to these communities, including health, mental health, legal issues, family issues, and intersectional issues of race, class, gender, sexual orientation, ability status, and age. Students will examine micro, mezzo, and macro interventions for supporting immigrants and refugees in the United States.

### **SWK 3580 - Military Social Work Practice**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** Members of the military, veterans, and their families face unique challenges in contemporary U.S. society. This course examines the social and historical contexts of military service in the U.S., with particular focus on the issues germane to service members and their families, including issues such as health, mental health, substance abuse, violence, and intersectional issues of race, class, gender, sexual orientation, ability status, and age. A substantial focus of this course involves examining micro, mezzo, and macro interventions for improving the well-being of military members and their families.

### **SWK 3590 - Centering Black Experiences in Social Work Practice**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** While Black social workers and clients are often included in content on social work theory, practice, or in conversations about diversity, equity, and inclusion, Black experiences are rarely at the center of these conversations. This course centers Black experiences in social work history, theory, and practice. In this course, students will learn more about our disciplinary and social-historical contexts, including prominent Black social work leaders, Afrocentric social work theories, and Black-led social justice movements (e.g., civil rights, Black Lives Matter). The course will examine how race (and Blackness specifically) shapes Black social workers' experiences in practice settings, as well as the experiences of Black clients and communities.

### **SWK 3600 - Gender in Social Work Practice**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG

1021

**Description:** This course examines social work practice from a feminist theoretical perspective. It examines issues of equality, social justice, policy and practice within a patriarchal society. This course examines how gender is produced and reproduced in contemporary society, and how gender matters for social work practice. Multiple levels of practice issues are explored, including individual, group, family, policy, and community. Concepts of oppression and privilege are explored as they relate to people's gendered experiences.

*Note:* Credit will be granted for only one prefix: GWS or SWK.

**Cross Listed Course(s):** GWS 3600

### SWK 3610 - Social Work and Addiction

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021

**Description:** Throughout history, substances have been used for ceremony and healing. We have lost our connection to communal use and face a massive addiction epidemic. The way through involves anti-oppressive, culturally-responsive, and trauma-informed interventions, which are essential to social work. This course covers foundational information about substances, models of care, interventions, and systemic factors from a social work perspective. The intersection of trauma, identity, and addiction are woven throughout the course. With the appropriate tools, we can face the multilayered challenges of addiction.

### SWK 3660 - Poverty, Race and Gender

**Credits:** 3

**Prerequisite(s):** SWK 1010 or permission of instructor

**Description:** This course introduces the student to the relationship between race, gender and poverty and examines the underlying causes of the "feminization of poverty" in the United States. Social, economic, age-based and ethnic factors are explored in detail. The differences between prevailing stereotypes and current realities are highlighted.

*Note:* Credit will be granted for only one prefix: CHS, GWS, SOC, or SWK.

**Cross Listed Course(s):** CHS 3660, GWS 3660, SOC 3660

### SWK 3780 - Social Work Policy Practice

**Credits:** 3

**Prerequisite(s):** SWK 1010, SWK 1600, PSC 1010, Written Communication General Studies requirements

**Description:** In this course, you will learn why policy change is an important tool in a social worker's toolbox when striving to impact change at the macro level. Social work policy practice is the practice of impacting policy change at the local, state, and federal levels. Policy practice will be investigated as a dimension of generalist social work practice, including how social workers engage in political advocacy and policy analysis to achieve needed social and political change in our society. You will explore how social policies impact diverse, vulnerable, and at-risk populations, including how policies can cause harm and how policies can be used to advance social and

economic justice. This course focuses on a variety of topical areas of social welfare policy such as: child well-being; aging; healthcare; mental healthcare; poverty and income inequality; immigration; and policies that impact racial justice, gender equality, and LGBTQ+ rights.

*Note:* If a student has completed their Written Communication general studies through a different combination of courses, please contact the Department of Social Work for a registration override.

### SWK 4160 - Human Trafficking

**Credits:** 3

**Prerequisite(s):** GWS 1001, or AAS 1010, or CJC 1010, or HSP 1010, or SWK 1010; upper-division standing; or permission of instructor

**Description:** This course explores human trafficking on international and local levels. A review of multidisciplinary perspectives on labor and sex trafficking provides comprehensive understanding of this human rights issue. Students examine the tactics used by traffickers to recruit and control victims and the effects of abuse on victims. This course provides an overview of U.S. federal and local laws to curb trafficking, including federal Trafficking Victims Protection Act. Finally, students evaluate global and local efforts of the current anti-trafficking movement, including ways to be involved.

*Note:* Credit will be granted for only one prefix.

**Cross Listed Course(s):** AAS 4160, CJC 4160, GWS 4160, HSP 4160

### SWK 4300 - Introduction to Social Work Research Methods

**Credits:** 3

**Prerequisite(s):** SWK 3050, SWK 3410, SWK 3090, SWK 3350, Quantitative Literacy general studies requirement

**Description:** This course introduces you to the vital role that research plays within the social work profession. A major goal of this course is to help you develop an introductory understanding of the research process to prepare you to be a good consumer of research, to conduct evidence-informed research, and to evaluate your own practice. To do this, you will become acquainted with the steps of the research process, qualitative and quantitative research designs, and various methods of data collection. Finally, you will learn about the social and political context of research as well as important ethical and cultural considerations that are necessary for respecting the humanity of research subjects and to avoid causing harm to vulnerable and historically marginalized populations.

*Note:* If a student completed their Quantitative Literacy general studies through a different course, please contact the Department of Social Work for a registration override.

### SWK 4310 - Research Applications and Data Analysis

**Credits:** 3

**Prerequisite(s):** SWK 4300

**Description:** In the dynamic landscape of social work, evidence-

informed practice is essential to competent generalist practice. This course serves as a gateway to the requisite knowledge, skills, and tools for harnessing data to inform effective interventions and policies. Social work values evaluation as an ongoing component to the interactive process of working with and on behalf of diverse individuals, families, groups, organizations, and communities. You will begin to understand the nuances of both quantitative and qualitative research paradigms and statistical techniques. You will gain a toolkit for the unique challenges and opportunities encountered in social work research and evaluation.

### **SWK 4400 - Macro Magic: Co-Creating Change in Communities and Organizations**

**Credits:** 3

**Corequisite(s):** SWK 4500

**Description:** Dive into the dynamic world of mezzo and macro social work practice and unlock your potential as a catalyst for community and organizational transformation. This course equips you with theoretical foundations and real-world practice skills to effectively engage diverse clients and constituencies. You will gain knowledge and skills in organizational and community assessments and analysis, program design and evaluation, financial management, policy analysis, and community organizing. In this course, you will explore the impact of historical trauma, collaboration, and emerging trends like technology, globalization, and environmental justice. Through case studies and hands-on projects, you will develop the leadership and advocacy skills to drive meaningful and sustainable change.

### **SWK 4410 - Generalist Practice IV**

**Credits:** 3

**Prerequisite(s):** SWK 4400

**Corequisite(s):** SWK 4510

**Description:** This course emphasizes the empowerment of individuals, families, groups, organizations, and communities who have experienced social and economic injustice. Students will apply principles, perspectives, and skills essential to helping populations-at-risk. Students develop a framework for culturally inclusive practice.

### **SWK 4430 - Partnering with Families for Change**

**Credits:** 3

**Prerequisite(s):** SWK 3050, SWK 3410, admitted to major

**Description:** This course offers an in-depth exploration of families through an ecological systems-based lens. You will examine the strengths and challenges faced by families today. Emphasizing various levels of intervention, including direct engagement with families and indirect advocacy, you will develop skills to support family resilience and change, guided by socially just intervention models. Interactive class activities will facilitate the application of these skills, while critical reflection will deepen understanding of familial contexts within US societal and cultural frameworks. Additionally, you will engage in self-reflection to draw insights from

their own family experiences, nurturing their growth as future practitioners.

### **SWK 4500 - Field Experience I**

**Credits:** 3

**Prerequisite(s):** SWK 3050, SWK 3090, SWK 3120, SWK 3350, SWK 3410, SWK 3780, Senior Standing

**Corequisite(s):** SWK 4400

**Prerequisite(s) or Corequisite(s):** SWK 4300

**Description:** The field experience course and concurrent field internship will help you develop generalist practice skills with individuals, families, groups, communities, and organizations. You will have the opportunity to integrate theory and practice while demonstrating social work knowledge, skills, values, and ethics in a community, social service agency. As part of this foundational course, you will complete a set number of agency fieldwork hours (at least 200 hours per semester is required by CSWE accreditation standards). The total number of hours will be determined by the Office of Field Education and informed by agency, programmatic, societal, environmental, and/or policy-related factors. You will complete agency fieldwork serving diverse client populations while supervised by a professional social worker. This course is part one of a two-semester field internship.

**University Requirement(s):** Senior Experience

### **SWK 4510 - Field Experience II**

**Credits:** 3

**Prerequisite(s):** SWK 4500, Senior Standing

**Prerequisite(s) or Corequisite(s):** SWK 3420, SWK 3430

**Description:** The field experience course and concurrent field internship will help you develop generalist practice skills with individuals, families, groups, communities and organizations. In part two, you will continue integrating theory and practice while demonstrating social work knowledge, skills, values and ethics in a community, social service agency. As this is part two of a two-semester field internship course, you will demonstrate growth and a better understanding of generalist social work practice. You will complete a set number of agency fieldwork hours (at least 200 hours per semester is required by CSWE accreditation standards). The total number of hours will be determined by the Office of Field Education and informed by agency, programmatic, societal, environmental, and/or policy-related factors. You will complete agency fieldwork serving diverse client populations while supervised by a professional social worker.

**University Requirement(s):** Senior Experience

## **Sociology**

### **SOC 1010 - People, Power, and Progress**

**Credits:** 3

**Description:** This course is an introduction to the discipline of sociology. It analyzes power, progress, and social change to better understand the forces that shape people's lives, interests, and

personalities. Focus is on how we learn to "fit in" to society, the social rules we follow, and areas of social life that generate conflict and inequality. It also examines how major social institutions like the family, education, religion, politics, and the economy shape and affect us as members of society.

*Note:* Some sections of this course may be taught as Service Learning.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

## **SOC 1020 - Globalization--The Transformation of Social Worlds**

**Credits:** 3

**Description:** This course focuses on the causes and consequences of globalization from a sociological perspective. Students learn the main theoretical perspectives in sociology (e.g., functionalism, conflict theory, symbolic interactionism) and explore how these theories explain various aspects of globalization. Students learn how to use their sociological imagination, which allows people to look at private experience and link it to broader social forces. This course emphasizes the ways in which globalization affects various societal bodies such as economic, political, medical, and religious institutions. The course also explores how globalization relates to social processes such as culture, migration, technology, social movements, crime, and war.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Guaranteed Transfer:** GT-SS3

## **SOC 1040 - Introduction to Social Gerontology**

**Credits:** 3

**Description:** Students in this course are offered an in-depth examination of the aging process through a social justice lens, centering the culturally unique norms, coping strategies, and lived experiences of older adults from diverse racial and ethnic communities. Students critically analyze how systemic inequities, environmental factors, and intersectional identities shape the behaviors, social roles, and well-being of aging individuals. Special emphasis is placed on the challenges and opportunities faced by marginalized groups, including but not limited to Native American, African American, Asian American, Native Hawaiian and Pacific Islander, and Hispanic communities. Key issues such as health disparities, economic inequality, and social isolation are explored, with a commitment to fostering equitable solutions and empowerment.

**University Requirement(s):** Ethnic Studies & Social Justice

## **SOC 1080 - Love and Family in East Asia**

**Credits:** 3

**Prerequisite(s):** Minimum performance standards on the reading, writing and mathematics preassessment placement tests.

**Corequisite(s):** ENG 1010

**Description:** This course explores love, marriage, and family life in some East Asian societies (China, Japan, and South Korea). Topics

include: socio-cultural construction of love and romance, sexuality, marriage, parenting, race and ethnicity, aging, and social inequality in East Asian families. A final unit focuses on the impact of globalization and technological advancement on love, marriage, and family life in East Asia.

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Guaranteed Transfer:** GT-SS3

## **SOC 1300 - Asia in Global Perspective**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** This course is an overview of Asia's diverse geographies, peoples, histories, and contemporary developments from an interdisciplinary perspective. Throughout the course, students investigate the intersection between domestic and global factors in shaping contemporary Asian experiences. Topics include Asia's dynamic cultures, rich philosophical, religious, and linguistic traditions, vibrant economies, and various types of political systems. Students also reflect on how issues such as colonization, nation-building, gender, and migration shape contemporary Asia and its many representations.

*Note:* Credit will be granted for only one prefix (SOC, ANT, GWS, HIS, LANG, or PSC).

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Guaranteed Transfer:** GT-SS3

**Cross Listed Course(s):** ANT 1300, GWS 1300, HIS 1260, LANG 1260, PSC 1300

## **SOC 1600 - Tourism and Society**

**Credits:** 3

**Description:** Students examine tourism through a sociological lens enabling them to understand the way tourism is socially constructed, the social impacts of tourism development, the development of travel in modern society, and tourism as a global industry. Students focus on how tourism intersects with topics such as the environment, ethnicity, social-class, gender, and the role of technology.

**Guaranteed Transfer:** Social and Behavioral Sciences, Global Diversity

**Cross Listed Course(s):** TTM 1600

## **SOC 2000 - Social Movements and the Black Experience**

**Credits:** 3

**Prerequisite(s):** AAS 1010, SOC 1010, or Permission of instructor

**Description:** This course analyzes and interprets the nature, cause, and consequence of Black social movements in the United States, ranging from the slave period to the present. Particular attention is given to the Civil Rights movement of the 1950s and 1960s.

*Note:* Credit will be granted for only one prefix: SOC or AAS.

**Cross Listed Course(s):** AAS 2000

## SOC 2010 - Social Problems

**Credits:** 3

**Description:** Explore the causes and consequences of major social issues such as crime, family violence, group conflict, and poverty using historical, contemporary and cross-cultural data.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

## SOC 2090 - The Black Lives Matter Movement and the Origins of Modern Black Protest

**Credits:** 3

**Description:** This course applies sociological concepts and historical themes to an analysis of the origins and nature of the Black Lives Matter (BLM) movement. The course begins with brief coverage of black resistance in the colonial period to the Abolitionist Movement but provides an in-depth exploration of modern black protest in the post-World War II civil rights decades and continues into the late 20th century with high-profile instances of police brutality. The remainder of the course follows a chronology, beginning in 2013 with the creation of #BlackLivesMatter and the growth of a new era of black protest. In addition to high-profile incidences of police brutality, attention is given to movement dynamics as shaped by Internet social media platforms and cable news. The course also addresses the #SayHerName movement, which has highlighted police violence against black women. Issues concerning misogynoir are also covered, including black radical feminist critiques of black male patriarchy, and debates within the black community about the movement's focus. Finally, students will come away with a broad understanding of what systemic institutionalized racism is, as distinguished from incidences of racial violence by individual acts of terrorism or white supremacist terrorist organizations.

*Note:* The course is crosslisted. Credit will be granted for only one prefix.

**Cross Listed Course(s):** AAS 2090, HIS 2090, PSC 2090

## SOC 2500 - Deviant Behavior in Society

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** Study the types, sources and consequences of deviance in society through a sociological lens, including the way social structure and power affect the ability to define and redefine deviant behavior.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

## SOC 2600 - Art and Craft of Sociological Writing

**Credits:** 3

**Prerequisite(s):** SOC 1010 and completion of General Studies Written Communication requirement (ENG 1009 or ENG 1010 or equivalency and ENG 1020 or ENG 1021 or equivalent)

**Description:** This course offers instruction and practice in how to write literature reviews for sociological papers with careful attention

to the ASA style. Particular emphasis is placed on formats, sociological topics, locating sources, and analysis and synthesis of quantitative and qualitative information.

## SOC 3040 - Sociology of Aging

**Credits:** 3

**Prerequisite(s):** SOC 1010, SOC 1040 or permission of instructor

**Description:** Analyze the economic, social, political and cultural issues relevant to aging, including changes in social status, income, health care, housing, transportation and intergenerational relationships.

## SOC 3080 - Social Action Through Art

**Credits:** 3

**Prerequisite(s):** SOC 1010 or Permission of instructor

**Description:** This course examines the ways in which sociological concepts and theories relate to the visual arts in contemporary social life. The course emphasizes the various contexts in which visual arts are used to create social integration and social change in small and large groups. In addition, the content of the course provides insight about ways that practitioners may apply sociological principles to create art-related ventures for public and private industries.

## SOC 3090 - Urban Sociology

**Credits:** 3

**Prerequisite(s):** SOC 1010

**Description:** Trace the history and development of modern urban centers, and explore the dynamic ways power structures, social organization, and social and cultural change affect urban life.

## SOC 3100 - Death and Dying

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** Examine the attitudes, customs and institutions related to death, dying, and bereavement from the perspective of the individual, cultural norms and values, and established social institutions.

## SOC 3140 - The Black Community

**Credits:** 3

**Prerequisite(s):** AAS 1010 or AAS/SOC 2000, or permission of instructor, and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This course relates fundamental concepts and theories of sociology and African American studies to the study of the Black community through an analysis of the educational, political, religious, economic and family dimensions. It emphasizes local, national and international Black communities. Classic and contemporary Black community studies are examined.

*Note:* Credit will be granted for only one prefix: AAS, SOC, or

SWK.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** AAS 3300, SWK 3140

## **SOC 3200 - Asian American Experiences**

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010

**Description:** This course critically reviews Asian American history and examines its relevance to contemporary issues in the U.S. It employs an interdisciplinary approach to examine the intersectionality of power, race, class, gender, and internal marginalization in shaping Asian American experiences. Topics include: racial formation of Asian American ethnic identities; historical roots of discrimination and anti-Asian violence (with special topics on Asian American women and Asian Americans in Colorado); negotiation of Asian American identities and culturally distinctive coping strategies; the myth and consequences of "Model Minority"; the relevance of the "Sojourner Hypothesis" in the 21st century; and generations of Asian American social movements aiming at achieving equality and justice for all.

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** ANT 3335

## **SOC 3220 - Prejudice and Discrimination**

**Credits:** 3

**Prerequisite(s):** SOC 1010, GWS 1001, AAS 1010 or permission of instructor, and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy

**Description:** Explore the origins and characteristics of bias, prejudice and discrimination in society; social constructions of race, ethnicity, and gender; and the impact of social forces on social structure, institutions, and access to life opportunities.

*Note:* Credit will be granted for only one prefix: AAS or SOC

**University Requirement(s):** Ethnic Studies & Social Justice

**Cross Listed Course(s):** AAS 3220

## **SOC 3230 - Bodies and Embodiment**

**Credits:** 3

**Description:** Students in this course examine multiple interdisciplinary discourses about gendered, sexed, raced, classed, and able bodies, beginning with Simone de Beauvoir's *The Second Sex*. Through discussion, lecture and critical evaluation of key theories in Body and Embodiment Studies (by Michel Foucault, Judith Butler, Susan Bordo, bell hooks, and Iris M. Young) students in this course explore the inscribed, as well as the lived, body--bodies that are gazed at, desired, fashioned, heard, and eroticized. In order to historically situate these discourses, the body is presented as a social construct that is controlled and manipulated but that also has unique experiences which cannot be verbalized and/or managed.

*Note:* Credit will be granted for only one prefix: ITP, SOC, or GWS.

**Cross Listed Course(s):** ITP 3230, GWS 3230

## **SOC 3240 - Poverty and Inequality**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** Examine political, economic and social factors that contribute to and perpetuate urban and rural poverty in America and globally. Analyze poverty programs and their outcomes for the poor.

## **SOC 3250 - Hip-Hop Culture and Rap Music**

**Credits:** 3

**Prerequisite(s):** AAS 1010 or ENG 1020

**Description:** This course seeks to examine the long-standing cultural warfare that exists among core elements of Hip-Hop culture and the impact such challenges have on gender and social identities. Students will think critically about Hip-Hop music beyond the scope of entertainment through the examination of literature, films, and music that provide interdisciplinary discourse on Hip-Hop in our society.

**Cross Listed Course(s):** AAS 3920, HIS 3920, MUS 3895

## **SOC 3280 - Queer Theory**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or GWS 1200

**Description:** This course surveys a broad array of scholarship in queer theory, as well as applications of queer theory in a variety of academic fields to explore practices, identities, and communities as well as the cultural construction of gender and sexuality.

*Note:* Credit will be granted for only one prefix: SOC or GWS.

**Cross Listed Course(s):** GWS 3280

## **SOC 3320 - Sociological Theory: Past and Present**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** This course consists of an analysis of the major sociological theories ranging from classical theories, to more contemporary, modern, and postmodern theories. It takes a comparative approach, emphasizing a critical understanding of the ever-changing historical, social, and cultural context in which each theoretical perspective developed.

## **SOC 3350 - Self and Society**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** This course focuses on the relationship between self and society. It emphasizes how social structure, social process, and elements of culture have shaped and continue to shape our identity, perception, ideas, interaction, and behavior.

## **SOC 3360 - Analyzing Talk and Interaction**

**Credits:** 3

**Description:** Face-to-face interaction is a defining feature of human

behavior. It is where language, bodily movement, and other modalities of expression become socially enacted as talk. Through this course, students collect and prepare data to examine this special site of human existence, focusing on how people coordinate and situate their language and bodies within a richly structured social, cultural, and material world.

**Cross Listed Course(s):** ANT 3520, COMM 3120

### **SOC 3400 - Child and Adolescent Socialization**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** Explore how social structures and social institutions influence the way we define, raise, and educate children and adolescents in the United States and other global cultures.

### **SOC 3410 - The Family and Society**

**Credits:** 3

**Prerequisite(s):** SOC 1010

**Description:** A sociological analysis of the changing nature of the family within the broader context of a rapidly-changing society.

### **SOC 3420 - Education and Society**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** Analyze education as a social institution, including its goals, structure, staffing, funding and outcomes. Investigate the relationship among education, other social institutions and social change, as well as issues regarding education in the U.S.

### **SOC 3430 - Gender and Society**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or GWS 1001; or Permission of instructor

**Description:** Explore what it means to live gendered lives in a gender-conscious society in which cultural, political and economic forces intersect with race, ethnicity, class, age, sexuality and other social positions to affect the self, our opportunities and our life chances.

*Note:* Credit will be granted for only one prefix: SOC or GWS.

**Cross Listed Course(s):** GWS 3350

### **SOC 3440 - The Black Family**

**Credits:** 3

**Prerequisite(s):** AAS 1010 or SOC 1010 and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This course provides an in-depth exploration of the Black family as a social institution. It emphasizes the historical roots of the Black family and how the African influence is still enmeshed in the functioning of the family in modern society. It examines the factors responsible for the ability of the Black family to meet the

challenge of a changing society.

*Note:* Credit will be granted for only one prefix: AAS or SOC.

**Cross Listed Course(s):** AAS 3550

### **SOC 3460 - Sociology of Sexuality**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** This course is a survey of historical, cultural, and social aspects of human sexuality. The interplay between sex and society will be the major focus. Cross-cultural and historical analysis of sexual values and behavior will be examined. Competing and conflicting sexual value systems in contemporary societies will be analyzed. Other topics include: sexual scripts, sexual deviance and social control, sexual socialization processes, and the social bases of sexual dysfunction.

*Note:* Credit will be granted for only one prefix: GWS or SOC.

**Cross Listed Course(s):** GWS 3560

### **SOC 3470 - The Chicano Family**

**Credits:** 3

**Prerequisite(s):** CHS 1000, SOC 1010, or permission of instructor; and completion of General Studies requirements in Written Communication, Oral Communication, and Quantitative Literacy.

**Description:** This course provides an in-depth analysis of the Chicano family as a social institution. The course covers the social and economic history of the Chicano family in the Southwest and examines contemporary patterns of urban Chicano family life in a changing society.

*Note:* Credit will be granted for only one prefix: CHS or SOC.

**Cross Listed Course(s):** CHS 3210

### **SOC 3490 - Queer Identities**

**Credits:** 3

**Prerequisite(s):** GWS 1200, GWS 1550, or SOC 1010; or permission of instructor

**Description:** Students explore the various ways queer, trans and other sexual and gender minoritarian subjects construct, embody and express identity. Students analyze the behaviors, strategies and practices queer and trans, individuals (and their communities) utilize to self-identify. This course covers queer self-presentation and embodiment in relation to the intersections with capital, nation and race.

*Note:* Credit will be granted under one prefix only: GWS or SOC.

**Cross Listed Course(s):** GWS 3490

### **SOC 3500 - Criminology**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** Analyze the nature, causes and treatment of crime and delinquency from a sociological perspective.

### **SOC 3510 - Juvenile Delinquency**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** Examine the universality and variability of youth misconduct and delinquency, including youth subcultures, gangs, substance abuse, the juvenile justice system, and the effects of child abuse.

### **SOC 3520 - Drugs and Society**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** Examine the socio-historical factors that affect trends in drug, use, abuse, and policy, and explore the social and physiological causes and consequences of legal and illegal drug use.

### **SOC 3550 - Sociology of Law**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** Examine the interplay between social forces and law, and explore how socio-cultural factors affect legislative and enforcement processes.

### **SOC 3560 - Sociology of Social Control**

**Credits:** 3

**Prerequisite(s):** SOC 1010

**Description:** A sociological study of social control investigates how we prevent people from breaking societal rules or norms. This course examines how norm-breaking behavior is labeled as good or bad, how these definitions vary at different times and in different places, and how they are reinforced or challenged. How some groups of people have the power to shape definitions of deviance and control others with those definitions is also assessed. Additionally, students in this course both examine and evaluate the consequences of this labeling process, how people come to develop a deviant identity, and what that means to them in the course of their daily lives.

### **SOC 3590 - Social Statistics**

**Credits:** 3

**Prerequisite(s):** MTH 1210 or permission of instructor

**Description:** This course covers descriptive and inferential statistics and their application to social phenomena. It focuses on statistical significance, measures of association, and the use of SPSS to analyze data.

### **SOC 3600 - Research in the Social Sciences**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** This course is an introduction to research in the social and behavioral sciences. It emphasizes student experience in the actual application of a variety of modern social scientific data-gathering, interpretation and reporting techniques.

### **SOC 3650 - Contemporary Social Trends: Variable Topics**

**Credits:** 3

**Prerequisite(s):** SOC 1010

**Description:** An examination of trends and/or issues in contemporary society, using the sociological perspective. Each section addresses a separate issue or development.

*Note:* This course may be repeated for credit under different topics.

### **SOC 3660 - Poverty, Race and Gender**

**Credits:** 3

**Prerequisite(s):** SWK 1010 or permission of instructor

**Description:** This course introduces the student to the relationship between race, gender and poverty and examines the underlying causes of the "feminization of poverty" in the United States. Social, economic, age-based and ethnic factors are explored in detail. The differences between prevailing stereotypes and current realities are highlighted.

*Note:* Credit will be granted for only one prefix: CHS, GWS, SOC, or SWK.

**Cross Listed Course(s):** CHS 3660, GWS 3660, SWK 3660

### **SOC 3710 - Politics and Power**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** Analyze power structures, decision-making, and interrelationships among political and other social institutions locally and globally; and examine the social consequences of various political structures.

### **SOC 3730 - Media and Society**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** Analyze media as a dynamic force in social, political and economic life that influences both personal and collective behavior.

### **SOC 3740 - Artificial Intelligence and Society**

**Credits:** 3

**Description:** Students in this course explore the dynamic relationship between Artificial Intelligence (AI) and society through a sociological lens. Students critically analyze the social impact of AI technologies, explore their ethical implications, and examine how they shape various aspects of society, including culture, politics, economy, interpersonal relationships, and social inequality.

### **SOC 3750 - Social Change**

**Credits:** 3

**Prerequisite(s):** SOC 1010



**Description:** This course is an analysis of the alterations in patterns of culture, social systems and social behavior over time. A variety of theoretical perspectives will be used as a basis for understanding these changes. Factors that contribute to as well as those that inhibit change will be analyzed.

### **SOC 3770 - Society and the Environment**

**Credits:** 3

**Prerequisite(s):** SOC 1010

**Description:** This course explores the relationship between humans in social groups and their effect on the natural environment. A variety of social theories are used to analyze these effects. Proposals for implementing change are evaluated from a sociological perspective.

### **SOC 3780 - Gender and Disaster**

**Credits:** 3

**Description:** This course analyzes gender's shaping global development and disaster vulnerability by focusing on the experiences of girls and women before, during, and after disastrous events. It examines intersecting patterns of vulnerability and response based on gender, class, race/ethnicity, age, nationality and other factors. Students examine gender-focused case studies from developed and developing societies and investigate the practical implications of gender-sensitive sociology of disaster.

*Note:* Credit will be granted for only one prefix: ANT, GWS, or SOC

**Cross Listed Course(s):** ANT 3361, GWS 3780

### **SOC 3790 - The Political Economy of Immigration**

**Credits:** 3

**Description:** This course studies the fundamentals of the political economy of immigration, with a focus on immigration's effects on global wealth creation, and the parallels between international trade in goods and international trade in labor. The course also explores immigration's net fiscal effects, cultural effects, and political effects, and explores a wide range of possibilities for immigration reform.

**Cross Listed Course(s):** ECO 3790, PSC 3790

### **SOC 3800 - Health and Healers**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** Analyze health care systems and their effects on individuals and societies, using multiple models and perspectives.

### **SOC 3810 - Population Issues: Life, Death and Migration**

**Credits:** 3

**Prerequisite(s):** SOC 1010

**Description:** This course is designed to introduce students to the study of population change and its consequences. The intention of the course is to examine population trends, issues and policies with an

emphasis on the United States. Topics include fertility, mortality, migration, urbanization, family, gender, ethnicity, aging, and social change as well as the practical use of demography.

### **SOC 3830 - Sociology of Mental Disorders**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or permission of instructor

**Description:** Examine the ways in which social definitions and demographic characteristics intersect to produce variations in the diagnosis and treatment of mental illness.

### **SOC 3910 - Sociology of Religion**

**Credits:** 3

**Prerequisite(s):** SOC 1010 or Permission of instructor

**Description:** Explore religion through a sociological perspective and examine its meaning for individuals as well as its connections to social status, political and economic power, and social change.

### **SOC 3920 - Gender Politics of Health**

**Credits:** 3

**Prerequisite(s):** GWS 1001 or SOC 1010 or PSY 1001

**Description:** This course focuses on health issues specific to women and the challenges historically faced by women in the health care arena. Students will learn about the role of patriarchal medical mythologies that exist throughout various cultures in the oppression of women, especially minority women, and how women have reclaimed healing, health, and communities of medical knowledge production. This course specifically explores feminist, physiological, psychological, and sociological factors in women's health within a global context.

*Note:* Credit will be granted for only prefix: PSY, SOC, GWS, or ITP.

**Cross Listed Course(s):** PSY 3920, GWS 3920, ITP 3920

### **SOC 4160 - Work and Career Planning**

**Credits:** 3

**Description:** Students in this course examine the evolving social trends surrounding work in contemporary society (e.g. demographics, technology, industry growth, etc). Student biographies' are linked to their career choices as they examine factors associated with gaining employment in a variety of industries, occupations, and professions.

### **SOC 4200 - Social Stratification**

**Credits:** 3

**Prerequisite(s):** SOC 1010 and 6 hours of upper division sociology or permission of instructor

**Description:** Examine the relationships within and among stratification systems, the distribution of scarce resources, and the consequent effects on social identity and social mobility.

## SOC 4240 - Gender and Violence

**Credits:** 3

**Prerequisite(s):** GWS 1001 or GWS 1200 or GWS 1550 or CJC 1010 or PSC 1020 or SOC 1010 or permission of instructor

**Description:** Students analyze key patterns and structures of gender and sexual violence, with a special focus on the diverse experiences of women, queers and gender-variant people. Students draw from disciplines such as queer/trans theory and transnational feminism to illuminate iterations of and resistance to gender-based violence, including how 'safety' and 'precarity' are distributed unevenly across groups due to various social formations. Topics in this course include sexual violence, interpersonal violence, family violence, trafficking, state violence (including carceral, medical and military violence), among others.

*Note:* Credit will be granted for only one prefix: CJC, GWS, PSC, or SOC.

**Cross Listed Course(s):** CJC 4240, GWS 4240, PSC 4240

## SOC 4350 - Advanced Seminar in Sociological Theory: Variable Topics

**Credits:** 3

**Prerequisite(s):** Permission of instructor

**Description:** Content varies, but each course involves intensive study and critical analysis of major sociological theories, such as those of Weber, Durkheim, Marx, Simmel, Mannheim, C. Wright Mills, and Parsons; or of selected theoretical systems in contemporary or classical sociology.

*Note:* This course may be repeated for credit under different topics.

## SOC 4600 - Advanced Survey Research

**Credits:** 3

**Prerequisite(s):** SOC 1010, SOC 2600, SOC 3320, SOC 3600

**Prerequisite(s) or Corequisite(s):** SOC 3590

**Description:** This course is a continuation of SOC 3600 - Research in the Social Sciences. It focuses on the application of advanced quantitative research techniques, including individual and task-group assignments intended to develop students' skills in designing, organizing, computer coding, and doing computer-assisted analysis of selected research projects.

**University Requirement(s):** Senior Experience

## SOC 4700 - Advanced Field Internship

**Credits:** 3

**Prerequisite(s):** SOC 2010 and upper-division standing

**Description:** An advanced level supervised in-service field experience in the broad area of social concern and the "urban scene," conducted with the cooperation of participating agencies and institutions.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

## SOC 4710 - Advanced Qualitative Methods

**Credits:** 3

**Prerequisite(s):** SOC 1010, SOC 2600, SOC 3320, SOC 3600

**Prerequisite(s) or Corequisite(s):** SOC 3590

**Description:** This capstone course is a continuation of SOC 3600 - Research in the Social Sciences. It focuses on the application of advanced qualitative research techniques, such as ethnography, participant-observation, unobtrusive research, unstructured interviews, and content analysis. Students gain hands-on experience in various qualitative methods and analysis techniques while carrying out a research project related to their area of interest.

**University Requirement(s):** Senior Experience

## Spanish

### SPA 1000 - Conversational Spanish for Travel I

**Credits:** 3

**Description:** This course is designed for the student who wants to acquire a basic knowledge of conversational Spanish for personal travel.

*Note:* It does not fulfill the prerequisite requirements for any Spanish 2000-level course.

### SPA 1002 - Conversational Spanish for Law Enforcement I

**Credits:** 3

**Description:** This course is designed for the student who wants to acquire a basic knowledge of conversational Spanish for the law-enforcement professions.

*Note:* It does not fulfill the prerequisite requirements for any Spanish 2000-level course.

### SPA 1003 - Conversational Spanish for Law Enforcement II

**Credits:** 3

**Prerequisite(s):** SPA 1002

**Description:** This course is a continuation of SPA 1002 and is designed for the student who wants to acquire a basic knowledge of conversational Spanish for the law-enforcement professions.

*Note:* It does not fulfill the prerequisite requirements for any Spanish 2000-level course.

### SPA 1004 - Conversational Spanish for Medical Professions I

**Credits:** 3

**Description:** This course is designed for the student who wants to acquire a basic knowledge of conversational Spanish for the medical professions.

*Note:* It does not fulfill the prerequisite requirements for any Spanish 2000-level course.

## **SPA 1005 - Conversational Spanish for Medical Professions II**

**Credits:** 3

**Prerequisite(s):** SPA 1004

**Description:** This course is a continuation of SPA 1004 and is designed for the student who wants to acquire a basic knowledge of conversational Spanish for the medical professions.

*Note:* It does not fulfill the prerequisite requirements for any Spanish 2000-level course.

## **SPA 1006 - Conversational Spanish for School Personnel I**

**Credits:** 3

**Description:** This course is designed for the student who wants to acquire a basic knowledge of conversational Spanish for the school environment.

*Note:* It does not fulfill the prerequisite requirements for any Spanish 2000-level course.

## **SPA 1007 - Conversational Spanish for School Personnel II**

**Credits:** 3

**Prerequisite(s):** SPA 1006

**Description:** This course is a continuation of SPA 1006 and is designed for the student who wants to acquire a basic knowledge of conversational Spanish for the school environment.

*Note:* It does not fulfill the prerequisite requirements for any Spanish 2000-level course.

## **SPA 1009 - Culturas Vivas: Exploring the Vibrant Diversity of Spanish-Speaking Cultures**

**Credits:** 3

**Description:** In this course taught in English, students explore the vibrant Spanish-speaking cultures of Latin America, Spain, and the United States through an overview of history, geography, literatures, and artistic expressions with a focus on contemporary issues. Students analyze a variety of cultural artifacts, such as short stories, comics, animations, films, musical genres, architecture, cuisines, and sports. Through an interdisciplinary approach including gender perspectives, this course intends to go beyond the underrepresentation and the stereotypical characterization of Hispanic individuals on television, in films, and the news, as well as recent forms of Hispanophobia in the United States.

For an even richer experience, students are encouraged to take simultaneously a course in Spanish. (If the student has already taken classes of Spanish or speak Spanish at home, he/she/they contact an advisor at the department of World Languages to be placed in the appropriate level).

**General Studies:** Arts and Humanities, Global Diversity

## **SPA 1010 - Elementary Spanish I**

**Credits:** 5

**Description:** This is a basic course in Spanish, with emphasis primarily on pronunciation, speaking, and understanding supplemented by grammar, readings and writing.

**General Studies:** Oral Communication

## **SPA 1020 - Elementary Spanish II**

**Credits:** 5

**Prerequisite(s):** SPA 1010 or the equivalent high school or transfer experience

**Description:** SPA 1020 is a basic course in Spanish designed to further the mastery of the basic grammar of Spanish, to provide essential vocabulary, and to familiarize the student with the cultures of the Spanish-speaking world. These skills are studied through and applied to reading, writing, listening, and speaking.

**General Studies:** Arts and Humanities, Global Diversity

## **SPA 1021 - Bridging Cultures on the Job**

**Credits:** 1

**Prerequisite(s) or Corequisite(s):** SPA 1020 or with permission of the instructor

**Description:** This one-credit course complements the existing SPA 1020 - Elementary Spanish II or its equivalent. It adds a professional dimension to the study of Spanish, with two main objectives: enhancing students' ability to communicate in specific, career-relevant situations in the target language, and developing intercultural expertise for effective communication with individuals from diverse cultural backgrounds.

**General Studies:** Arts and Humanities

## **SPA 1800 - International Spanish Year I**

**Credits:** 1-15

**Description:** This variable credit course is designed for first-year students learning Spanish in a study abroad setting. The course will recognize an approved, study-abroad, educational experience in Spanish speaking, comprehension, reading, and writing.

## **SPA 2010 - Intermediate Spanish I**

**Credits:** 3

**Prerequisite(s):** SPA 1020 or placement or two years of high school Spanish or its equivalent with a grade of "C" or better

**Description:** This course continues the sequence of SPA 1010 and SPA 1020 and is the first of a two-semester, integrated, second-year

sequence. The course focuses on further skills development in listening, speaking, reading, and writing, with emphasis on the use of functional, communicative language for oral and written proficiency and on cultural competency. Class is conducted mostly in Spanish and will include a variety of interactive activities designed to help students develop their knowledge of Spanish and their ability to use it productively in situations of communication.

## **SPA 2020 - Intermediate Spanish II**

**Credits:** 3

**Prerequisite(s):** SPA 2010 or equivalent

**Description:** This course is a continuation of SPA 2010 and is the second of a two-semester, integrated, second-year sequence. The course focuses on further skills development in listening, speaking, reading, and writing, with emphasis on the use of functional, communicative language for oral and written proficiency and on cultural competency. Class is conducted mostly in Spanish and will include a variety of interactive activities designed to help students develop their knowledge of Spanish and their ability to use it productively in situations of communication.

## **SPA 2110 - Spanish Reading and Communication I**

**Credits:** 3

**Prerequisite(s):** SPA 1020 with a grade of "C" or better or placement or two years of high school Spanish or its equivalent

**Description:** This intermediate course introduces increasingly complex readings and promotes the development of oral and written proficiency. The course is designed to afford the student the necessary practice to communicate with ease in Spanish. Emphasis lies on vocabulary building, reading of cultural material, and communication skills.

## **SPA 2120 - Spanish Reading and Communication II**

**Credits:** 3

**Prerequisite(s):** SPA 2110 or equivalent, or permission of instructor

**Description:** This intermediate course is a continuation of SPA 2110. It is designed to review, widen, and strengthen the knowledge of language structures as a basis for more advanced work in speaking, understanding, reading, and writing in Spanish.

## **SPA 2340 - Intermediate Spanish for the Heritage Speaker**

**Credits:** 3

**Prerequisite(s):** SPA 2120 or equivalent or permission of instructor

**Description:** This is an intermediate-level course for the heritage and bilingual speaker of Spanish who has developed speaking ability outside of the classroom with little training in the formal components of the language. The course focuses on the practice and use of standard oral and written Spanish structures found in cultural, literary, journalistic and media platforms. Particular attention is given to the development of language skills necessary for communication in social or professional settings, and to discussions on specific

cultural issues faced by the Spanish speaker. This course may be taken by Spanish majors or minors, or non-majors or minors in lieu of SPA 2320.

## **SPA 2750 - Intensive Intermediate Spanish Grammar Review**

**Credits:** 3

**Prerequisite(s):** SPA 2110 with "C" or higher, or equivalent, or departmental permission

**Description:** SPA 2750 is an intensive transition course between the intermediate and advanced Spanish writing and grammar courses. It provides comprehensive grammar review and writing practice by building on topics covered in lower-level Spanish courses, and approaching them in a more detailed manner. The course introduces additional aspects of the Spanish language, not previously covered in preceding courses. The foundations of grammar and their expression in oral and written communication are especially emphasized. The course is designed for students who wish to pursue further studies in Spanish, and is especially useful to proficient speakers (native, heritage, and second-language learners) who have had limited exposure to the formal study of language structure.

## **SPA 2800 - International Spanish Year II**

**Credits:** 1-15

**Prerequisite(s):** One year of college Spanish or equivalent

**Description:** This variable credit course is designed to recognize second year study of Spanish language and culture in an approved study-abroad setting.

## **SPA 3050 - Cultural Crossroads: Heritage Languages and Cultures**

**Credits:** 3

**Prerequisite(s):** ENG 1020

**Description:** Cultural Crossroads focuses on heritage languages and cultures in the USA. Students gain the cultural background necessary for insightful interaction with the rich diversity of heritage languages and cultures present in the United States. Main topics include the variety of language families, the historical and geo-political reasons for emigration, the establishment and treatment of immigrant diasporas, the role of differing social etiquette in cultural exchanges, the contributions of immigrants to their new country, and the importance of heritage languages in shaping identities, communities, and society.

*Note:* Not repeatable for credit under a different prefix. The course is taught in English.

**Cross Listed Course(s):** FRE 3050, GER 3050, LANG 3050

## **SPA 3100 - Spanish Terminology for the Bilingual Classroom**

**Credits:** 3

**Prerequisite(s):** Two years of college Spanish, its equivalent, or

Permission of the instructor

**Description:** This is a practical course designed to help students with the Spanish structures and terminology used in the different areas of instruction.

### SPA 3110 - Advanced Conversation

**Credits:** 3

**Prerequisite(s):** SPA 2120 or equivalent, or permission of instructor

**Description:** This is an advanced course to broaden and strengthen the student's conversational skills, emphasizing current topics in the Hispanic world. There is a service-learning component where students apply the material from class in a real world setting and reflect on their service experiences.

*Note:* Some sections of this course may be taught as Service Learning.

### SPA 3140 - Advanced Composition

**Credits:** 3

**Prerequisite(s):** SPA 2120 or equivalent, or permission of instructor

**Description:** This course is designed to reinforce and develop further the student's abilities in composition tasks that reflect the kind of writing students are generally asked to perform as Spanish majors. Classes are conducted in Spanish.

### SPA 3150 - Spanish Phonetics: Theory and Practice

**Credits:** 3

**Prerequisite(s):** Two years of college Spanish or equivalent, or Permission of instructor

**Description:** This course in Spanish phonology is aimed at improving students' pronunciation and introducing them to the field of descriptive linguistics.

### SPA 3200 - Culture and Civilization of Spain

**Credits:** 3

**Prerequisite(s):** SPA 2120 or equivalent, or permission of instructor

**Description:** This course is an advanced Spanish conversational approach to the understanding of the traditions and history of Spain and the national character as expressed in everyday life. It is based on a reading-lecture discussion format. Oral presentations and a term paper are required. This class is conducted in Spanish.

### SPA 3210 - Spanish-American Culture and Civilization

**Credits:** 3

**Prerequisite(s):** SPA 2120 or permission of instructor

**Description:** This course is an advanced Spanish conversational approach to the chief cultural characteristics of the Hispanic-American world. It is based on a reading-lecture-discussion format. Oral presentations and a research paper are required. Conducted in Spanish.

### SPA 3220 - Folklore and Culture of the Mexican Southwest

**Credits:** 3

**Prerequisite(s):** SPA 2020, SPA 2120, or equivalent, ENG 1020 or permission of department

**Description:** Students explore numerous cultures and folkloric practices of Mexican-American communities in the Southwest United States through the lenses of race, ethnicity, inequity, and social justice. The focus is primarily on Mexican, Chicana/o, and indigenous peoples, with additional content on other minoritized groups, and begins with initial European contact in the Americas. Students use folklore to deepen their understanding of the histories and current lived experiences of Mexican-Americans to both question and appreciate the ideals of the U.S. in a course conducted in advanced-level Spanish.

### SPA 3250 - Introduction to Literary Studies in Spanish

**Credits:** 3

**Prerequisite(s):** SPA 2120 or equivalent, or permission of instructor

**Description:** This course is designed to introduce the students to the study of literature in the Spanish language. Emphasis is placed on reading and critical analysis of representative works, main literary trends and terminology. Conducted in Spanish.

### SPA 3340 - Advanced Spanish for the Heritage Speaker

**Credits:** 3

**Prerequisite(s):** SPA 2320 or SPA 2340 or permission of instructor

**Description:** This course is designed specifically for the heritage or bilingual learner of Spanish who brings strong proficiency and literacy skills in Spanish. The course focuses on the development of advanced communicative competence in reading, writing, speaking, listening, and viewing, as well as on understanding Hispanic cultures, issues of identity of the heritage speaker in the U.S., language variation, customs, geography, history, and current events. Students will gain linguistic and oral proficiency in order to develop, evaluate, compare and express ideas critically in both oral and written formats on varied topics and themes. This course is open to the heritage learner with, at least, two years of formal training in Spanish.

### SPA 3400 - Survey of Spanish Literature I

**Credits:** 3

**Prerequisite(s):** SPA 3250 or equivalent, or Permission of instructor

**Description:** This course is a general survey of the literature of Spain from the Middle Ages through the romantic era. Reading of representative works, lecture on biography, criticism and recitation will be included. Conducted in Spanish.

### SPA 3410 - Survey of Spanish Literature II

**Credits:** 3

**Prerequisite(s):** SPA 3250 or equivalent, or Permission of instructor

**Description:** This course presents Spanish literature since 1870, including post-romanticism, realism, naturalism, the generation of 1898, the genero chico, and more recent works. Conducted in Spanish.

## SPA 3510 - Survey of Latin American Literature

**Credits:** 3

**Prerequisite(s):** SPA 3250 or equivalent, or permission of instructor

**Description:** This course is designed to introduce the student to the most important works in Latin American literature from the late fifteenth century to the late nineteenth century. This course is conducted in Spanish.

## SPA 3600 - Culture through Film: Variable Topics

**Credits:** 3

**Prerequisite(s):** SPA 2120 or permission of instructor

**Description:** In this variable topics course, students explore advanced topics relevant to contemporary Spanish and Spanish American culture, as expressed through representative works of film and other visual media. Students watch, discuss, compare, and analyze a variety of films that may include full length feature films, documentaries, short films, or other mixed media. The topics vary from semester to semester, as do assignments and assessments. The course is conducted entirely in Spanish.

*Note:* Note: Variable topics course. This course may be taken up to 2 times under different individual topics for a maximum of six credit hours.

## SPA 3610 - Spain: Culture Through Film

**Credits:** 3

**Prerequisite(s):** SPA 2120, or permission of the department

**Description:** This course is an advanced, thematic seminar on topics relevant to contemporary Spanish culture, as expressed through representative works of film and other visual media. The course is to be conducted in Spanish.

## SPA 3800 - International Advanced Spanish

**Credits:** 1-15

**Prerequisite(s):** upper-division standing in Spanish or equivalent

**Description:** This course is designed to recognize upper-division study in language, culture and literature in a study-abroad setting. This advanced study in Spanish uses a variety of methods and includes reading, writing and discussion seminars in Spanish.

## SPA 3910 - Create in Spanish

**Credits:** 3

**Prerequisite(s):** SPA 2120 or permission of instructor

**Description:** In this course students approach Spanish as a craft: a means of expressing one's creativity through the written and spoken

word. Students use the genres of film and literature as gateways towards building both cultural and linguistic competence. More specifically, students use the target language to discuss and analyze Spanish-language films and works of literature. They compose (and revise) their own original works of creative writing through a rigorous, guided workshop process.

This course is best suited for students who can rely on an intermediate proficiency in the Spanish language. The course is taught in Spanish.

*Note:* This elective course may substitute one 2000-level class or one 3000-level class in the Spanish minor or major with department permission.

## SPA 4010 - Advanced Spanish Writing and Grammar I

**Credits:** 3

**Prerequisite(s):** SPA 3140 or equivalent, or Permission of instructor

**Description:** This course is designed to afford the student of Spanish an overall acquaintance with contemporary grammatical analysis and terminology, in order to promote and enhance the student's sensitivity regarding the syntactical structure of the Spanish oral and written modes of expression. Classes are conducted in Spanish.

## SPA 4015 - Introduction to Spanish Translation I

**Credits:** 3

**Prerequisite(s):** SPA 3140 with a grade of at least a "B" or Permission of instructor

**Description:** This course is an introduction to the principal topics in the discipline of translation. The student translates a variety of texts from Spanish to English and from English to Spanish, discusses and critiques translations in class, examines various historical and theoretical concepts of translation, and analyzes grammatical, lexical and cultural issues faced by translators. Student is expected to be fluent in both Spanish and English.

## SPA 4020 - Advanced Spanish Writing and Grammar II

**Credits:** 3

**Prerequisite(s):** SPA 4010 or equivalent, or Permission of instructor

**Description:** This course is an intensive study of Spanish idiomatic expressions and selected vocabulary to strengthen the student's language skills, with emphasis on written style and on the understanding of the Spanish syntax. The main purpose of this course is to enable the student to manipulate the target language with accuracy, elegance and assertiveness. Classes are conducted in Spanish.

## SPA 4025 - Introduction to Spanish Translation II

**Credits:** 3

**Prerequisite(s):** SPA 4010 and SPA 4015 with grades of "B" or better or permission of instructor

**Description:** This course further explores the principal topics in the

discipline of translation. Students translate (Spanish to English and English to Spanish) challenging "real-life" texts from such diverse fields as law, medicine, marketing, human resources, literature and poetry. Class sessions focus on discussion of assigned translations, examination of various historical and theoretical concepts of translation, and analysis of grammatical, lexical, and cultural issues faced by translators. Students are expected to be fluent in both Spanish and English.

*Note:* Some sections of this course may be taught as Service Learning.

### **SPA 4110 - Contemporary Spanish Literature**

**Credits:** 3

**Prerequisite(s):** SPA 3250

**Description:** This course involves reading and analysis, through discussion and writing, of representative works of contemporary Spanish literature. The course affords students an opportunity to explore changes in cultural development in Spain from the end of the Civil War until the present. This course is conducted in Spanish.

### **SPA 4120 - Contemporary Latin-American Literature**

**Credits:** 3

**Prerequisite(s):** SPA 3250 or equivalent, or permission of instructor

**Description:** This is a course in which the student will be critically reading and discussing the major works of contemporary Spanish American authors in order to appreciate their literary and cultural values and to participate in a meaningful language experience. Conducted in Spanish.

### **SPA 4130 - Contemporary Mexican Literature**

**Credits:** 3

**Prerequisite(s):** SPA 3250 or equivalent, or Permission of instructor

**Description:** This course offers a panoramic view of Mexican literature. It will examine the articulation of diverse social and cultural questions, as well as the ways in which Mexican writers represent themselves and their cultural heritage through literary texts. The student will read and discuss representative works of 20th century Mexican writers. Conducted in Spanish.

### **SPA 4200 - Spanish-American Essay: 19th and 20th Centuries**

**Credits:** 3

**Prerequisite(s):** SPA 3250 or Permission of instructor

**Description:** This course presents, discusses, and analyzes the most important literary work of representative 19th and 20th century Spanish-American essayists. The course exposes the student to the thought and stylistic modes found in the intellectual production of the selected prominent figures to be studied. Conducted in Spanish.

**University Requirement(s):** Senior Experience

### **SPA 4310 - History of the Spanish Language**

**Credits:** 3

**Prerequisite(s):** SPA 3140 and SPA 4010 or SPA 4020; completion of General Studies requirements; and senior standing.

**Description:** This is an introductory course in Spanish philology aimed at improving students' knowledge of Spanish sounds, forms and word order, with the focus on how the Spanish language began and has changed through the centuries.

**University Requirement(s):** Senior Experience

## **Special Education Courses**

### **SED 1009 - Academic Success**

**Credits:** 3

**Description:** This course couples learning strategies with executive functioning coaching to develop the study and executive functioning skills needed for academic and workplace success. Students and academic coaches will work together to discover and practice tools and strategies to reach each student's academic potential with individualized support.

### **SED 2200 - Social Justice and Disability Issues for Educators**

**Credits:** 3

**Description:** Students conceptualize social justice concepts related to the impact of institutional oppressions on culturally, racially, and linguistically diverse students with disabilities. Students engage in course activities and discussion on unequal power dynamics, privilege, and the presence of whiteness within educational institutions. Through readings, projects, case studies and discussions, students analyze the historical, legal, and socio-cultural context that perpetuates inequities. Students reflect on their role as changemakers in the context of schools, and critically analyze historic and current policies, laws, and societal deficit narratives related to different marginalized groups. Students prepare to be changemakers by applying social justice concepts of resistance, advocacy, and activism.

**University Requirement(s):** Ethnic Studies & Social Justice

### **SED 2700 - Social/Emotional Development and Disorders**

**Credits:** 3

**Description:** This course provides an overview of the major concepts and historical antecedents of special education services for children and youth with social, emotional, and behavioral difficulties. Teacher candidates will develop an understanding of basic concepts related to the social, emotional, and behavioral development of children and youth, and the concepts related to disordered behavior.

### **SED 3050 - Assessment and Instructional Planning**

**Credits:** 3

**Prerequisite(s):** SED 3600

**Description:** This course focuses on making informed decisions on the selection, use, and interpretation of formal and informal methods for the assessment of students with disabilities. Teacher candidates must complete a series of special education assessments and reports during this course.

### **SED 3100 - Communication Supports for Inclusive Classrooms**

**Credits:** 3

**Prerequisite(s):** SED 3600

**Description:** Communication is the foundation for all learning. In this course, participants will consider natural and meaningful communicative engagement in inclusive settings and will create communication plans for students with communication challenges. All modes of communication and all language levels will be addressed. There will be a focus on the communication needs of students with autism and significant support needs (SSN) because the communication plan for these students may require the most collaboration for successful inclusion.

### **SED 3250 - Effective Behavioral Support Systems**

**Credits:** 3

**Prerequisite(s):** SED 3600

**Description:** Students in this course are introduced to the principles of applied behavior analysis and behavior modification. The use of systematic behavioral assessments, functional behavior assessment plans, behavior intervention plans, and classroom intervention strategies are emphasized. Teacher candidates are prepared to apply Universal Design for Learning (UDL) principles in diverse contexts that include both general and special education classes. This course includes a 15-hour field experience.

**Cross Listed Course(s):** ALP 4250

### **SED 3300 - Introduction to Responsive Pedagogy**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** SED 3600

**Description:** In this course, pre-service teachers will work collaboratively to meet the diverse needs of all learners. Responsive pedagogy connects the learner and the content in meaningful, respectful and effective ways. Participants will examine the principles of collective efficacy and collaboration and practice using the skills necessary to create lessons and learning environments based on student-centered instruction and inclusive and trauma-informed practices.

### **SED 3550 - Introduction to Inclusive Supports and Services for Students with Significant Needs**

**Credits:** 3

**Prerequisite(s):** SED 3600

**Description:** This course introduces pre-service teachers to inclusive

education for students with significant and diverse needs. The focus is on collaboratively creating meaningful learning environments in schools and communities and providing supports for authentic engagement across people and settings.

### **SED 3600 - Exceptional Learners in the Classroom**

**Credits:** 3

**Description:** SED 3600 was designed to introduce students to exceptionality in the classroom from an educational decision-making perspective. Information regarding disabilities and giftedness is presented in a manner to familiarize students with the many instructional decisions they must be prepared to make on the basis of the diversity of the classroom population. The case study method is the approach that will be used in this course. Students will be expected to apply course content to solve various problems that are presented within the context of case studies. These case studies will be specific to the student's level of teacher licensure and will provide exposure to relevant issues pertaining to early childhood, elementary, or secondary education.

### **SED 3625 - Instructional Methods for Supporting Students with Disabilities**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** SED 3600

**Description:** This course will introduce the pre-service teacher to components of effective instructional methods and strategies related to supporting the academic, behavioral, and social needs of students with disabilities. Topics explored during the class will focus on the history of special education in schools and learning theories related to becoming a teacher, supporting the behavioral needs of students through setting up your classroom structure and management system, lesson planning, and creating inclusive environments within schools.

### **SED 3650 - Understanding Special Education Law and the IEP**

**Credits:** 3

**Prerequisite(s):** SED 3600

**Description:** This course provides an overview of special education law and the development of individualized education plans. The course includes a discussion of the history of special education law as well as current laws and policies that impact students with disabilities in the K-12 school system. The course reviews the process of special education including referral, assessment/evaluation, identification, IEP development, and procedural safeguards. Communication and collaboration in the development and implementation of the IEP will also be discussed. Using a case study, students will develop an Individual Education Plan (IEP) for a student with a disability in a K-12 setting.

### **SED 3675 - Transition Planning for Inclusive Adulthoods**



**Credits:** 3

**Prerequisite(s):** SED 3600; SED 3650

**Description:** This course provides an in-depth understanding of transition services for students with exceptionalities from childhood to adulthood. Course content focuses on an in-depth investigation of the provision of transition services in the context of comprehensive secondary education services and inclusive environments. Topics in this course include transition-focused Individual Education Program (IEP) development, self-determination and self-advocacy, social supports and relationship building, interagency collaboration, transition assessment, and independent living, vocational, and post-secondary education strategies. Teacher candidates gain the knowledge base and skills necessary to successfully manage the transition services of their future students that will lead them to become contributing members of society and valued members of their communities.

### **SED 3700 - Educational and Medical Aspects of Disabilities**

**Credits:** 3

**Prerequisite(s):** SED 3600

**Description:** This course provides an overview of the multidisciplinary needs of students with physical, communicative, cognitive, and sensory disabilities. Emphasis is placed on explaining the impact of medical needs on educational experiences. Principles of Universal Design for Learning (UDL) will be addressed. Teacher candidates must complete a 15-hour field experience in an assigned public school that provides services for students with severe disabilities.

### **SED 3750 - Assessment, Methods, and Assistive Technology for Severe Disabilities**

**Credits:** 3

**Description:** This course is designed to introduce pre-service teachers to assessment, curriculum and instruction for students with severe disabilities. Focus will be given to including students in their neighborhood schools, homework, and community. The course also emphasizes the selection and efficacy of assistive device technologies. A minimum 30-hour, field-based experience is required.

### **SED 3820 - Elementary Literacy: Intervention and Instruction for Students with Diverse Learning Needs**

**Credits:** 3

**Prerequisite(s):** SED 3600

**Corequisite(s):** SED 3821

**Prerequisite(s) or Corequisite(s):** SED 3650

**Description:** Within this course, students will learn about the components of literacy with a focus on phonemic awareness, phonics, fluency, vocabulary, and comprehension as taught in elementary classrooms. Assessment data is used to design lesson plans and apply scientifically-based interventions to address the needs of students with literacy challenges, including dyslexia. A direct-instruction

teaching approach based on best practices is a focus. The course has a co-requisite of a field-based class which will include a 45-hour field-based experience with elementary level students.

**Cross Listed Course(s):** ALP 3820

### **SED 3821 - Special Education Field Experience: Teaching Students with Mild/Moderate Disabilities**

**Credits:** 1

**Prerequisite(s):** SED 3600

**Corequisite(s):** SED 3820

**Prerequisite(s) or Corequisite(s):** SED 3050

**Description:** During the mild/moderate special education field experience, students will complete 45 hours of field experience in an elementary classroom setting in order to observe elements of literacy instruction, Response to Intervention (RtI), Multi-tiered Systems of Support (MTSS), assessment, and effective behavioral support systems.

### **SED 3950 - Mathematics Instruction for Students with Disabilities**

**Credits:** 3

**Prerequisite(s):** SED 3600

**Prerequisite(s) or Corequisite(s):** SED 3650

**Description:** This course is designed to introduce effective classroom methods and strategies for teaching, assessing, and monitoring the mathematical performance of students with disabilities within diverse classroom settings. An emphasis is placed on practical classroom techniques to facilitate, maintain, retain, and generalize skill acquisition. Computation and problem-solving techniques are studied and applied.

### **SED 4100 - Including Students with Significant Support Needs**

**Credits:** 3

**Prerequisite(s):** SED 3550, SED 3600, SED 3650

**Corequisite(s):** SED 4101

**Description:** Instruction, assessment, and progress monitoring for students with significant support needs are examined and practiced in this course. Preservice teachers create opportunities for students with diverse needs to be meaningfully engaged and included in general education classrooms. Students in this course focus on creating consistent and continual progress for learners by building on individual strengths and abilities. This course must be taken concurrently with the field experience course SED 4101 - Teaching Students with Significant Support Needs.

### **SED 4101 - Teaching Students with Significant Support Needs**

**Credits:** 1

**Prerequisite(s):** SED 3600

**Corequisite(s):** SED 4100

**Description:** This course, a corequisite of SED 4100 - Including Students with Significant Support Needs, requires 45 hours of field experience at an assigned school. Field experience work includes teaching individual intervention and small group lessons while implementing differentiated instructional practices and administering assessments/intervention related to behavior and communication for students with significant support needs.

## **SED 4200 - Reading Disabilities and Content Instruction**

**Credits:** 3

**Prerequisite(s):** SED 3820

**Description:** This course explores the nature of dyslexia and other reading/writing disabilities. Special emphasis is devoted to reading disabilities in reference to the demands of content area instruction at the secondary school level. Critical thinking, study skills, cooperative learning, and Universal Design for Learning (UDL) will be addressed within the context of improving reading and writing achievement of students with disabilities. This class has a co-requisite field course in which the students will complete a project related to literacy & study skills interventions at the secondary school level.

## **SED 4300 - Assessment and Methods for Emotional and Behavioral Disorders**

**Credits:** 3

**Prerequisite(s):** SED 3250

**Corequisite(s):** SED 4301

**Description:** This course is designed for teacher candidates to learn how to select, adapt, and use instructional interventions and strategies with students with emotional and behavioral disorders in a variety of settings. Theoretical approaches, identification, educational placement, and evaluation issues will be addressed. In addition, specific categories of disordered behavior, such as bipolar, depression, anxiety, oppositional defiant disorders, schizophrenia, and childhood psychosis, will be discussed. Teacher candidates implement these instructional practices in the co-requisite field experience.

## **SED 4301 - Special Education Field Experience: Teaching Students with Emotional/Behavioral Disabilities**

**Credits:** 1

**Prerequisite(s):** SED 3600

**Corequisite(s):** SED 4300

**Description:** This course, a corequisite of SED 4300 - Assessment and Methods for Emotional and Behavioral Disorders, requires 45 hours of field experience at an assigned secondary school. Field experience work focuses on methods for teaching instructional and behavioral strategies to learners with disabilities to promote success in their content area classes.

## **SED 4440 - K-12 Practicum in Special Education**

**Credits:** 3 or 6

**Prerequisite(s):** SED 4050 and SED 4200; or permission of instructor

**Corequisite(s):** SED 4250 and SED 4300

**Description:** This practicum is a culminating experience that provides teacher candidates with a structured, supervised elementary and/or secondary level practicum in a special education setting for children with disabilities. A strong emphasis is placed on the importance of decision-making in diverse contexts, including numerous assessment and instructional situations using a case-based approach that will encourage integration of theory and application. The seminars are designed to address assigned topics and activities that are linked to the teaching responsibilities of the practicum.

**University Requirement(s):** Senior Experience

## **SED 4490 - Special Education Student Teaching and Seminar**

**Credits:** 6 or 12

**Prerequisite(s):** SED 4440; Teacher candidates must have successfully completed all requirements of the Special Education Licensure Program.

**Description:** This course is a full-time, special education, student teaching experience in an accredited, public or private school that provides teacher candidates responsibility for teaching an identified group of learners with exceptionalities. A minimum of eight weeks is required for 6 credits, and a minimum of 16 weeks is required for 12 credits. University supervisors provide regularly scheduled observations and seminars, as well as guidance on the development of the teacher work sample.

**University Requirement(s):** Senior Experience

## **Speech, Language, Hearing Sciences**

### **SLHS 1500 - Introduction to Communication Sciences and Disorders**

**Credits:** 3

**Description:** The students in this course will be introduced to the science of communication across the lifespan, the relationship of culture to communication, and the impact of communication disorders on individuals and families. Intervention and assessment options for speech, language, and hearing are explored.

**General Studies:** Social and Behavioral Sciences

**Guaranteed Transfer:** GT-SS3

### **SLHS 1610 - American Sign Language I**

**Credits:** 3

**Prerequisite(s):** Minimum performance on the reading and writing preassessment placement test

**Description:** This course provides students with a basic understanding of American Sign Language including conversational skills and linguistic structures. Students are also introduced to Deaf culture.

*Note:* Credit will only be granted for one prefix: ASL or SLHS

**Cross Listed Course(s):** ASL 1010

## **SLHS 1620 - American Sign Language II**

**Credits:** 3

**Prerequisite(s):** ASL 1010 or SLHS 1610 or permission of instructor

**Description:** This course is a continuation of SLHS 1610 emphasizing expressive language as well as increasing competence with receptive language skills. The course continues to build vocabulary and familiarity with the complex grammar (morphology and syntax) of this visual language. The deaf experience and culture is integrated throughout.

*Note:* Credit will be granted for only one prefix: ASL or SLHS.

**General Studies:** Oral Communication

**Cross Listed Course(s):** ASL 1620

## **SLHS 2100 - Language Acquisition and Development**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** SLHS 1500 or PSY 1800 or permission of instructor

**Description:** Students in this course explore theories of language acquisition and describe communication and language development patterns in infants, toddlers, preschool-age and school-age children. Students are also introduced to early literacy development and the relationship between language and literacy. The interrelationship between linguistic, cognitive and social competencies in communicative development will be explored. Students gain knowledge on the diversity of communicative development within the context of a pluralistic society.

*Note:* Student must achieve a C or better to count towards the SLHS degree or certificate programs. Other programs may have different minimum-grade requirements.

## **SLHS 2530 - Speech Science**

**Credits:** 3

**Prerequisite(s):** MTH 1109 or MTH 1110 or MTH 1111 or MTH 1112 or MTH 1115 or permission of instructor

**Description:** Students are introduced to the nature and acoustic properties of sound and sound generation, propagation, and modification. Speech production and the characteristics of speech acoustics as they relate to typical and atypical speech production and perception are explored. Speech production subsystems of respiration, phonation, articulation, and resonance are examined through the analysis of acoustic data, using readily available instrumentation. Theories of speech production and perception are introduced and explored in relation to both typical and atypical speech and voice production.

*Note:* Students must achieve a C or better to count towards an SLHS degree or certificate.

## **SLHS 2990 - Introduction to Health Communication**

**Credits:** 3

**Prerequisite(s):** COMM 1010 or COMM 1100 or Permission of Instructor

**Description:** Students in this course explore the essential connections between communication processes and human health. Different modes of communication are considered in contexts that range from one-on-one conversations to information exchange with large groups. The importance of relationships, culture, technology, and media for health practices is also explored.

*Note:* Credit will be granted for only one prefix, COMM or SLHS.

**General Studies:** Social and Behavioral Sciences

**Cross Listed Course(s):** COMM 2020

## **SLHS 3000 - Foundations of Disability Studies through Media**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** Grade of C- in SLHS 1500 or permission of instructor

**Description:** This course provides a foundation in disability studies, establishing a framework of terminology for defining disability and understanding the disability experience. Issues related to accessibility of media will also be explored. Students will critically analyze how media represents and shapes perceptions of disability groups, which include members with communication disorders, autism, or deafness as well as other sensory, physical, or cognitive disabilities.

*Note:* Students must achieve a C or better to count towards an SLHS degree or certificate.

**General Studies:** Arts and Humanities

## **SLHS 3200 - Clinical Phonetics**

**Credits:** 3

**Prerequisite(s) or Corequisite(s):** SLHS 2100 and SLHS 2530

**Description:** Students in this course gain an understanding of the science of speech sounds and the use of the International Phonetic Alphabet as a tool for assessing speech disorders/differences and monitoring progress in therapy. Skills developed include transcription using the IPA to transcribe both typical and atypical speech, for both single words and connected speech. The course also covers the clinical concepts of articulation and phonology and provides an overview of typical speech sound acquisition and error patterns.

*Note:* Students must achieve a C or better to count towards an SLHS degree or certificate.

## **SLHS 3300 - Principles of Assessment and Intervention**

**Credits:** 3

**Prerequisite(s):** SLHS 2100 and SLHS 2530 or instructor permission

**Prerequisite(s) or Corequisite(s):** SLHS 3200 or permission of instructor

**Description:** Students in this course explore professional issues and assessment and intervention principles and practices in speech-language pathology and audiology. Students apply their knowledge of assessment, intervention, and professional practice by engaging in

application-based clinical scenarios for clients with communication disorders or differences from a variety of cultural and linguistic backgrounds.

*Note:* Students must achieve a C or better to count towards an SLHS degree or certificate.

## **SLHS 3530 - Anatomy and Physiology of Speech and Hearing**

**Credits:** 3

**Prerequisite(s):** BIO 1080 and BIO 1090 or permission of instructor

**Prerequisite(s) or Corequisite(s):** SLHS 2530 or permission of instructor

**Description:** Students in this course will gain a foundational understanding in the structural and functional organization of the systems that support speech and hearing. The mechanisms of swallowing are also reviewed. Students explore how anatomical and physiological changes may impact sound perception and production.

*Note:* Credit will be granted for only one prefix: SLHS or BIO.

Students must achieve a C or better to count towards an SLHS degree or certificate. Other programs may have different minimum grade requirements.

**Cross Listed Course(s):** BIO 3511

## **SLHS 3600 - Diagnostic Audiology**

**Credits:** 3

**Prerequisite(s):** SLHS 2530

**Prerequisite(s) or Corequisite(s):** SLHS 3530

**Description:** Students in this course will review acoustics of the auditory system and perception of acoustic stimuli. The basic principles and techniques of hearing evaluation are presented including pure-tone, speech, immittance and advanced audiometry. Students explore audiological findings for various disorders of the auditory system.

*Note:* Students must achieve a C or better to count towards an SLHS degree or certificate.

## **SLHS 3980 - Internship in Speech, Language, and Hearing Sciences**

**Credits:** 1-15

**Prerequisite(s):** Major in Speech, Language, and Hearing Sciences; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## **SLHS 4100 - Language Disorders and Differences**

**Credits:** 3

**Prerequisite(s):** SLHS 2100

**Prerequisite(s) or Corequisite(s):** SLHS 3300 or permission of instructor

**Description:** Students in this course undertake advanced exploration into language disorders, delays, and differences, and the neurological, cognitive, environmental, and sociocultural factors that contribute to them. Students are introduced to language disorders that are common across the lifespan as well as intervention techniques and strategies to improve communication functioning.

*Note:* Students must achieve a C or better to count towards an SLHS degree or certificate.

**Field Trips:** Field based observations will be required.

## **SLHS 4200 - Speech Disorders and Differences**

**Credits:** 3

**Prerequisite(s):** SLHS 2100 and SLHS 3200

**Prerequisite(s) or Corequisite(s):** SLHS 3300

**Description:** Students in this course will explore speech acquisition and common speech disorders including speech sound disorders, voice disorders, and stuttering. There will be a focus on biological, neurological, environmental, and sociocultural factors that need to be considered to determine differences in speech compared to disorders or delays. Students will focus on intervention strategies, techniques, and tools that benefit these populations.

*Note:* Students must achieve a C or better to count towards an SLHS degree or certificate.

## **SLHS 4300 - Senior Experience in Speech, Language, Hearing Sciences**

**Credits:** 3

**Prerequisite(s):** SLHS 1500, SLHS 2100, SLHS 2530, SLHS 3200, SLHS 3300, SLHS 3530, and SLHS 3600

**Prerequisite(s) or Corequisite(s):** SLHS 4100, SLHS 4200, or SLHS 4610

**Description:** This course serves as a capstone experience for students majoring in Speech, Language, Hearing Sciences. Students engage in an applied-learning experience in conjunction with an SLHS faculty member. The capstone concludes with submission of an original scholarly work and/or delivery of a comprehensive oral presentation to the SLHS department.

*Note:* Need to be at senior status; permission of instructor or department chair required to enroll. Students must achieve a C or better to count towards the SLHS degree.

**University Requirement(s):** Senior Experience

## **SLHS 4350 - Speech-Language Pathology Assistant Methods**

**Credits:** 7

**Prerequisite(s):** SLHS 2100, SLHS 2530, SLHS 3200, SLHS 3530, SLHS 4100, and SLHS 4200 or permission of instructor

**Prerequisite(s) or Corequisite(s):** SLHS 4600

**Description:** This course allows students with an undergraduate major or equivalent coursework in speech-language-hearing sciences to gain the competencies required for employment as a speech-language pathology assistant (SLPA) in schools. The course is composed of a three-credit seminar and four-credit public school SLPA internship.

*Note:* Students must have no lower than a 2.5 GPA for all pre-requisite SLHS coursework to be eligible for the course and must apply to be considered. For the fall semester cohort, students must submit all required materials to the department by the first Friday in April. For the spring semester cohort, students must submit all required materials to the department by the last Friday in October. Only complete applications will be considered. Visit the department webpage for information on what the application includes:

<https://www.msudenver.edu/speech-language-hearing-sciences/undergraduateprogram/>

**University Requirement(s):** Senior Experience

## **SLHS 4530 - Neural Bases of Communication and Its Disorders**

**Credits:** 3

**Prerequisite(s):** SLHS 3530 or permission of instructor

**Description:** This course explores how the nervous system supports communication and how neurological impairments may disrupt communication. The role of the central and peripheral nervous systems in speech production and perception is reviewed along with the neurological organization of language and cognitive-communication abilities. Current research on brain-based communication disorders is considered.

*Note:* Students must achieve a C or better to count towards an SLHS degree or certificate.

## **SLHS 4610 - Aural Rehabilitation**

**Credits:** 3

**Prerequisite(s):** SLHS 2100 and SLHS 3600

**Description:** Students in this course explore the responsibilities of interventionists for children and adults with hearing loss. Students learn about components of aural rehabilitation such as counseling, hearing technology, and related therapy and training. Students explore the differences in aural rehabilitation across different age groups, as well as taking into account several individual variables.

*Note:* Student must achieve a C or better to count towards the SLHS major or leveling certificate.

## **Sport Management**

### **SM 2050 - Introduction to Sport Management**

**Credits:** 3

**Description:** This introductory course to the Sport Management Major provides an overview of the field of sport management and is designed for students seeking a career in the sport industry. A variety of topics will be explored including marketing, facilities, operations,

finance, legal and ethical issues, media and governance. The content focuses on sport management and business functions required within the sport industry while introducing professional development and career options.

### **SM 2070 - Sport Venue Management**

**Credits:** 3

**Description:** This course will expose students to the processes involved with the planning, designing, financing, selection and management of sport venues. Course content will include an in-depth look at sport facility and event management, risk management and legal considerations specific to sport venues.

### **SM 2300 - Sport Event Management**

**Credits:** 3

**Prerequisite(s):** SM 2050, SM 2070

**Description:** This course is designed to provide hands-on, practical involvement in a sport event(s). Students will be assigned to committees where they will plan, organize, publicize and manage many different aspects of event operations. All students must commit to attending/working the culminating event(s). Small group discussions, case studies, on-line collaboration, and staff meetings will be utilized in order to facilitate learning.

### **SM 2730 - Sport in Society**

**Credits:** 3

**Prerequisite(s):** SM 2050

**Prerequisite(s) or Corequisite(s):** ENG 1020 or ENG 1021

**Description:** This course will examine the relationship of sport to society, using social theory and historical perspectives. The course emphasizes the impact of sport on American culture.

*Note:* Credit will be granted for only one prefix: SM or RTM.

**Cross Listed Course(s):** RTM 2730

### **SM 3100 - Sport Media Operations**

**Credits:** 3

**Prerequisite(s):** SM 2050

**Description:** This course will provide an overview of electronic, broadcast and print media as they relate to the sport industry. The applied aspect of this course will focus on the writing and preparation of press releases, production of media brochures and programs, conducting press conferences, and effective use of technology.

### **SM 3200 - Sport Governance and Policy**

**Credits:** 3

**Prerequisite(s):** SM 2050, SM 2070

**Description:** This course examines governance and policy in sport and how policy development and strategic planning activities affect sport organizations, both amateur and professional. Students will learn the fundamentals of management in sport organizations relative to governance and policy development and implementation.

Governance structures in various sport industry segments will be explored. Current sport policy issues, debates, and ethical questions raised will be addressed.

### **SM 3300 - Leadership and Ethics in Sport**

**Credits:** 3

**Prerequisite(s):** SM 2050, SM 2070

**Description:** The purpose of this course is the study of leadership theory and application in order to promote critical examination of historical and contemporary ethical issues and moral dilemmas found in the sport industry. The course includes discussion of traditional and modern leadership theories from business and education which will be applied to the sport industry. Following the development of an understanding of foundational concepts, students will be challenged to examine personal philosophies, clarify values, and refine moral reasoning skills relative to issues found in the sport industry.

### **SM 3350 - Sport Literature and Film**

**Credits:** 3

**Prerequisite(s):** SM 3100

**Description:** In this class, students will study literature and film related to sport. Critical analysis of books and movies will guide in-depth discussions of historical, social, cultural, ethical, and diversity issues. The class will broaden students' intercultural reading experiences and enhance their written and oral communication skills.

*Note:* This class cannot count in a degree program outside of the College of Health and Applied Sciences.

### **SM 3400 - Global Sport**

**Credits:** 3

**Prerequisite(s):** SM 2050, SM 2070

**Description:** The main objective of this course is to make students aware of the enormity of the global expansion and development of sport. The course will also address ethics, marketing, sponsorship, event management, business, and financial topics as well as challenges and issues in international sport management. Students will also explore the history and impact of the Olympic Games.

### **SM 3500 - Collegiate Athletics Administration**

**Credits:** 3

**Prerequisite(s):** SM 2050

**Description:** In this course students will focus on issues of special importance to collegiate athletic administrators, including topics such as governance, compliance, budgeting, program policies, recruiting, public relations, fundraising, and effective leadership. Students will demonstrate problem solving related to athletic personnel and program issues.

### **SM 3600 - Sport Promotion**

**Credits:** 3

**Prerequisite(s):** SM 2050 and SM 2070, Junior Standing or

Permission of Instructor

**Description:** This course is designed to provide sport industry students with greater understanding of promotion, fundraising, and marketing within the sport industry and athletic administration. Students will explore the use of sport as a promotional vehicle and are provided an in-depth analysis of sport as a product and sport consumer markets. Students will plan and develop marketing, promotional, and public relations campaigns.

### **SM 3650 - Technology and Social Media in Sport**

**Credits:** 3

**Prerequisite(s):** SM 3100 and written communications with "C" or better

**Description:** This course is designed to assist students in developing knowledge of social media outlets and the growth and importance of technology in sport. It will explore the career opportunities in this field and the skills and abilities needed to succeed. The course will explore various areas of sport social media and technology, while building an understanding of how to properly use and apply them as a sport industry professional.

### **SM 4350 - Sport Analytics**

**Credits:** 3

**Prerequisite(s):** SM 2050, SM 2070

**Description:** The main objective of this course is to introduce students to the emerging field of analytics in the sport industry. The course will discuss the impact and challenges of analytics on team management, athlete performance, human resources, marketing, finance, law, manufacturing, event management, and facility management. Students will also learn how these analytical techniques are run and explore career options in sport analytics.

### **SM 4600 - Organization and Administration of Sports**

**Credits:** 3

**Prerequisite(s):** Senior Standing or Permission of Instructor

**Description:** This upper division course focuses on the organization, administration, and management of agencies within the sport industry. Students will examine and evaluate the varying attributes of sport organizations and common managerial functions. Emphasis will be placed on leadership, organizational effectiveness, and human resource management.

### **SM 4610 - The Sport Enterprise**

**Credits:** 3

**Prerequisite(s):** SM 2050, SM 2070, Junior Standing or Permission of Instructor

**Description:** This survey course explores principles of economics, budgeting, and finance as applied to the sport industry. Specific topics include sport venues and franchise financing along with events, professional sport, collegiate athletics, and industry finance, budgeting, and legal considerations.

## SM 4860 - Seminar in Sport Management

**Credits:** 3

**Prerequisite(s):** Senior standing or permission of instructor

**Description:** This capstone course for Sport Management students will draw upon and connect the concepts and analytical tools students have developed in all previous Sport Management courses. Students will be required to synthesize and apply theories, concepts, and practices when engaging in specific strategic planning situations and case studies. Emphasis will be placed on critical thinking and ethical decision-making skills. A formal White Paper, which will provide opportunities for in-depth analysis and explanation of a specific area within the sport industry, is also required. This paper is intended to provide students further insight into the sport industry and to offer additional practical application of knowledge and experience.

**University Requirement(s):** Senior Experience

## SM 4890 - Internship for Sport Management

**Credits:** 9

**Prerequisite(s):** Senior Standing, completion of General Studies requirements, completion of a minimum 36 credits within the major; 2.80 GPA in the major and approval of instructor

**Corequisite(s):** SM 4891

**Description:** The Sport Management internship is a culminating 9 credit/405 hour applied experience with a sport organization or agency. The course is planned with, and supervised by, faculty and site supervisors. The goal of the internship is to provide the student with the opportunity to utilize knowledge and skills developed throughout the Sport Management curriculum in a non-classroom setting.

## SM 4891 - Professional and Career Development in Sport Management

**Credits:** 3

**Prerequisite(s):** Senior Standing, completion of General Studies requirements, completion of a minimum 36 credits within the major, 2.80 GPA in the major

**Corequisite(s):** SM 4890

**Description:** This course is designed to provide Sport Management students multiple and varying opportunities to assess and improve their professional dispositions, business etiquette, and career development. In addition, academic assignments related to SM 4890 will be discussed and developed. A detailed internship and career goals report and professional portfolio related to the internship experiences are required.

## Surveying

### SUR 1000 - An Introduction to the Technical Aspects of Land Surveying

**Credits:** 2

**Prerequisite(s):** High School algebra or trigonometry

**Description:** This course addresses the basic legal, technical, and professional topics of land surveying. Students are introduced to the federal and state statutes and regulations governing professional practice. Technical subjects address daily professional practice of research, data collection, and data reduction.

*Note:* This course may not be used by Surveying and Mapping majors.

### SUR 1510 - Surveying I

**Credits:** 4

**Prerequisite(s):** CET 1100 and high school or college trigonometry or MTH 1400 with grades of "C" or better, or Permission of instructor

**Description:** This is an introductory course in elementary surveying. Students acquire a knowledge of the theory of measurements, methods of collecting and recording data, reduction of observations of angles, directions, distances and differences in elevation; the computation and adjustment of traverses; the use of data collectors and interfacing with CAD software; construction stakeout employing coordinate geometry and CAD output; and the methods of computing coordinate geometry and areas. Field work includes use of transits, total stations, electronic distance meters, surveyors' tapes, differential levels and data collectors.

### SUR 2520 - Surveying II

**Credits:** 4

**Prerequisite(s):** MTH 1410 and SUR 1510 with grades of "C" or better, or Permission of instructor

**Description:** This course is designed to cover the introduction to control surveying, state plane coordinate systems, construction surveying, legal and boundary surveying and large scale topographic mapping for engineering and architectural projects. The student is introduced to optical micrometer and electronic theodolites, precise levels, and electronic distancers. Laboratory assignments will cover astronomic azimuth observations, circular and parabolic curves, earthwork surveys, control surveying and topographic mapping.

### SUR 2530 - Route Surveying

**Credits:** 4

**Prerequisite(s):** SUR 1520 for CET majors, SUR 2520 and SUR 2620 for SUR majors, all with a grade of "C" or better, or Permission of instructor

**Description:** This course is designed to expand the concepts on circular and parabolic curves and earthwork introduced in SUR 2520. Included is the mathematics of spirals; unequal tangent vertical curves, mass diagram of earthwork quantities; alignment profile and slope staking; large scale site mapping; alignment and design; and other surveying techniques required for highways, pipelines, tunnels, transmission lines, water lines, sewers and canals, etc. This course will introduce terrain modeling for site development and environmental concerns.

**Cross Listed Course(s):** CET 2530

## **SUR 2550 - Surveying Computations**

**Credits:** 3

**Prerequisite(s):** SUR 2520 with a grade of "C" or better, or Permission of instructor

**Description:** This is an introductory course on converting survey field observations/data into a form suitable to the end user. Students apply principles and precepts learned in courses of mathematics and surveying to surveying problems, develop analysis techniques, and perform those computations required for plane surveying problems encountered by the surveyor, land developer and civil engineer. Traverse computations, subdivision computations, route surveying computations, etc., are addressed.

## **SUR 3100 - Survey Data Adjustment and Analysis I**

**Credits:** 3

**Prerequisite(s):** MTH 2140, MTH 2410, MTH 3210, PHY 2331, PHY 2341 and SUR 2550 with grades of "C" or better, or Permission of instructor

**Description:** This course provides a foundation in the basic principles of computational methods used to adjust and analyze survey observations employing statistical principles and least squares theory. The problems include adjustment of triangulation, traverses, trilateration, and vertical networks by condition and/or observation equations.

## **SUR 3150 - Astronomy for Surveyors**

**Credits:** 2

**Prerequisite(s):** SUR 2520 with a grade of "C" or better, or Permission of instructor

**Description:** This is an introductory course on applying astronomical observations to surveying and mapping projects. Students acquire knowledge about positional determination by astronomical observations and determining the direction (azimuth, bearing) of lines on the earth's surface from astronomic observations. The students compute the azimuth of a line from actual survey observations.

## **SUR 3220 - Real Property Descriptions**

**Credits:** 2

**Prerequisite(s):** SUR 3540 with a grade of "C" or better, or Permission of instructor

**Description:** This course addresses writing real property legal descriptions for deeds, easements, and rights-of-way. Emphasis is placed on the structure and order of the elements in the description and on avoiding the common mistakes of language, construction, and terminology in order to avoid ambiguities in the intent of the instrument. A study of the interpretation of the rules to deal with conflicts and ambiguities in instruments is presented.

## **SUR 3300 - Photogrammetry**

**Credits:** 3

**Prerequisite(s):** PHY 2331 and SUR 2550 with grades of "C" or

better, or Permission of instructor

**Description:** This course introduces the science of photogrammetry. The geometry of the photographic camera, vertical photography, aerial-mapping camera, flight planning, project planning, supporting field surveys and field classification and targeting are emphasized. Photogrammetric plotters and comparators are discussed. An introduction to digital-image scanning and GPS synchronization is presented. The application of photogrammetry to engineering and surveying mapping programs is discussed.

## **SUR 3540 - Boundary Law I**

**Credits:** 3

**Prerequisite(s):** SUR 2520 with a grade of "C" or better, or Permission of instructor

**Description:** This course introduces the concepts of boundary control and legal principles. Subjects addressed include proportionate measurement, rights in land, junior/senior title rights, retracement of original surveys, deed first/survey first, common and case law, ranking/prioritizing evidence, controlling monuments and corners, errors in legal descriptions and plats, and case studies.

## **SUR 3700 - Geodesy I**

**Credits:** 3

**Prerequisite(s):** SUR 2550, PHY 2311, PHY 2321, PHY 2331 and PHY 2341 with grades of "C" or better, or Permission of instructor

**Description:** This is an introduction into the science of geodesy. The course presents an overview into the theory of surveying in which the size and shape of the earth must be addressed. The history of geodesy and the classical survey procedures to determine latitude, longitude, elevation, and the earth's gravity field are presented. The underlying theory of instrumentation and the application of physical theory are discussed.

## **SUR 3800 - Public Land Survey System**

**Credits:** 3

**Prerequisite(s):** SUR 2520 with a grade of "C" or better, or Permission of instructor

**Description:** This course describes the survey procedures contained in the current Manual of Surveying for the Public Lands of the United States (1973). The history, design, and planning of the rectangular survey system, original surveys, resurveys, independent and dependent surveys, protection of bona-fide rights, mineral surveys, special surveys, and riparian rights are addressed. The importance of the official plats and field notes are presented.

## **SUR 4500 - Construction Measurements**

**Credits:** 3

**Prerequisite(s):** SUR 2550 and SUR 2620 with grades of "C" or better, or Permission of instructor

**Description:** This course introduces the student to the methods of translating engineering and architectural plans into field surveys for construction work and post-construction mapping for payments. The



topics include engineering measurement tolerances, vertical and horizontal differential tolerances, terrestrial photography and control, deformation studies and analysis, safety and hazardous waste environment.

## **SUR 4510 - Map Projections and Coordinate Systems**

**Credits:** 3

**Prerequisite(s):** Senior standing; SUR 3700 with a grade of "C" or better, or Permission of instructor

**Description:** This is an in-depth course addressing the popular conformal map projections employed in surveying and mapping programs. The theories for the Lambert conformal conic, Mercator, transverse Mercator, oblique Mercator and stereographic, and Albers equal area projections are presented. Designing the projection system, transformation between plane coordinates and geodetic positions and the conversion of survey data to map projection data are emphasized. The use of local conformal map projections will be presented.

## **Sustainable Systems Engineering**

### **SSE 1040 - Life Cycle and Systems Engineering - An Introduction**

**Credits:** 3

**Description:** Students in this course are introduced to life cycle analysis and systems engineering using principles and applications of systems analysis, life cycle cost analysis and basic quantitative methods. Classical and modern decision analysis techniques are employed for evaluating case studies in sustainable systems of mechanical, civil and electrical engineering.

### **SSE 1215 - Engineering Graphics: Solid Modeling**

**Credits:** 3

**Description:** In this course students study solid modeling fundamentals, geometric constructions, multi-view projections, section views, and dimensioning using adequate CAD software.

**Cross Listed Course(s):** EVE 1215

### **SSE 2000 - Engineering Safety and Quality Assurance**

**Credits:** 3

**Description:** Students in this course are introduced to the fundamentals of engineering safety and quality assurance. In this course, students study the regulatory and professional aspects of occupational safety and focus on the fundamental engineering laws and ethics. Engineering practices are reinforced by requiring students to apply basic engineering principles to safety-related problems. Students are also introduced to the scope and function of quality assurance, including basic definitions, statistics, quality policy and objectives, manuals and procedures, concept of variation, inspection and sampling techniques, metrology process control, methods and the

elements of reliability. Current (TQM) and ISO 9000 standards are reviewed.

## **SSE 2100 - Basic Electronic Systems**

**Credits:** 3

**Prerequisite(s):** PHY 2331 and PHY 2341, with a grade of "C" or better, or permission of instructor

**Description:** In this course, students study DC and AC circuits, including electric components, classic network theorems, electric power and complex power, phasor, impedance, digital system, etc. The application and development of electronic systems is also discussed.

## **SSE 2150 - Mechanics of Static Systems**

**Credits:** 3

**Prerequisite(s):** PHY 2311 and MTH 2410 with "C" or better, or permission of instructor

**Description:** In this course, students study the principles of mechanics of static systems in two- and three-dimensions: static equilibrium of particles and rigid bodies; section properties; internal forces in statically determinate trusses and beams; friction; and virtual work.

**Cross Listed Course(s):** EVE 2150

## **SSE 2200 - Materials Science**

**Credits:** 3

**Prerequisite(s):** CHE 1100/1150 OR CHE 1800/1801 with "C" or better, OR permission of instructor

**Description:** In this lecture/laboratory course, students are introduced to basic properties of materials, including the properties and behavior that govern their selection and design with emphasis on sustainable practices. Students study materials including ferrous and non-ferrous metals, composites, plastics, ceramics, glass, wood, rubber and adhesives.

## **SSE 2350 - Engineering Programming**

**Credits:** 3

**Prerequisite(s):** SSE 2100 with a grade of "C" or better, or permission of instructor

**Description:** In this course, students study methods for solving engineering problems using the C programming language and the use of Lab View. Students apply the C programming language and National Instruments Lab View virtual instrumentation software.

## **SSE 3000 - Fundamentals of Systems Design**

**Credits:** 3

**Prerequisite(s):** SSE 2200, SSE 3135, and SSE 3160 with grades of "C" or better, or permission of instructor

**Description:** In this course, students are introduced to the engineering design process and skills through project-based learning. The course focuses on both systems and traditional design process

and application of those through team projects. Students learn both systems approach, as well as the fundamental engineering design process. The students apply the aforementioned methodology to a real-world project. Through this course, the students conceptualize, construct, test and present a deliverable project.

## **SSE 3070 - Machine Element and Mechanical Systems**

**Credits:** 3

**Prerequisite(s):** SSE 2200, SSE 3135, and SSE 3160 with grades of "C" or better, or permission of instructor

**Description:** The students are introduced to the fundamental principles required to design machine elements. The students study combined stresses, gearing, brakes, curved beams, etc., and undertake the design of a complete machine. The economics of design is stressed along with strength and safety considerations. The selected software is utilized to perform engineering analyses and to produce preferred designs.

## **SSE 3100 - Mathematical Modeling**

**Credits:** 1

**Prerequisite(s):** MTH 3420 with "C" or better, or permission of instructor

**Description:** In this course, students develop the ability to describe complex, real-world, engineering systems with mathematical concepts. Mathematical modeling is presented through engineering application problems that students tackle by working in teams and applying the theory they have learnt in other courses.

## **SSE 3135 - Strength of Materials with Laboratory**

**Credits:** 4

**Prerequisite(s):** SSE 2150 with a grade of "C" or better, or permission of instructor

**Description:** Students in this course are introduced to the fundamentals in the strength and deformation of engineering materials. Students focus on the development of constitutive relationships of materials under axial, torsion, transverse shear and bending loading conditions, and the engineering applications in the first part of the course. Students are introduced to beam-deflection and column-buckling theories and engineering solutions in the second part of the course. Students use laboratory time to enhance the knowledge and theories developed in the class and to use different equipment measuring engineering properties of various materials.

## **SSE 3160 - Mechanics of Dynamic Systems**

**Credits:** 3

**Prerequisite(s):** SSE 2150 OR EVE 2150 with grades of "C" or better, or permission of instructor

**Description:** In this course, students are introduced to dynamics systems, including kinematics, and kinetics of particles and rigid bodies with engineering applications. Students also study the

vibration systems in engineering applications.

**Cross Listed Course(s):** EVE 3160

## **SSE 3175 - Modeling Structural Systems**

**Credits:** 3

**Prerequisite(s):** SSE 3135 with "C" or better, or permission of instructor

**Description:** In this course, students study the modeling for structural analysis and design. It focuses on the interaction of the components and their behavior within a structural system. The basic concepts of structural modeling are introduced first, followed by the evolution of structural analysis, and then the analysis methods and types are presented, along with the discussion of interactions within structural systems.

## **SSE 3185 - Fundamental Fluid Mechanics with Laboratory**

**Credits:** 4

**Prerequisite(s):** SSE 3135 OR EVE 3135 with "C" or better, or permission of instructor

**Prerequisite(s) or Corequisite(s):** MTH 3420 and SSE 3160 OR EVE 3160; with "C" or better, or permission of instructor

**Description:** Students in this course are introduced to the basic principles of fluid mechanics and their use in hydraulic engineering. This course covers the properties of fluids and water, fluid statics, fluid kinematics, mass, energy, and momentum principles within fluid dynamics, dimensional analysis, and boundary layers. Students are introduced to the application of fluid mechanics principles to the analysis of flow in pipes and open channels, as well as forces on immersed bodies. This course contains a laboratory that reinforces fluid mechanics principles, such as hydrostatic forces and Bernoulli's equation, as well as introductory hydraulic engineering applications, including flow in pipes, head loss, and open channel flow.

**Cross Listed Course(s):** EVE 3185

## **SSE 3300 - Thermodynamics and Heat Transfer**

**Credits:** 3

**Prerequisite(s):** SSE 2200, SSE 3135, and SSE 3160 with grades of "C" or better, or permission of instructor

**Description:** In this course, students examine the fundamental laws of thermodynamics. Students are introduced to basic concepts of energy, thermodynamic systems, dimensions and units, and the ideal-gas equation of state. Students are introduced to concepts through the study of closed and open systems. Students analyze heat engines and reversible and irreversible processes. Additionally students learn and apply the three basic mechanisms of heat transmission. Conduction, convection (free and forced), plus radiant transmission are treated for both steady-state and transient conditions. Student learning is aided by computer solutions.

## **SSE 3500 - Humanitarian Engineering**

**Credits:** 3

**Description:** In this course, students are introduced to humanitarian engineering through hands-on instruction and project work in tandem with lectures. Students design and implement a sustainable community project that helps an underrepresented community to meet the population's basic engineering needs. This project is based on knowledge of relevant community development methodologies that students are introduced to through lecture. Students learn to apply Appropriate Design concepts, as well as development implementation strategy with respect to sustainability, and design for community. Students compare and contrast engineering for developing community systems strategies with the traditional design process.

## SSE 3730 - Control Systems

**Credits:** 2

**Prerequisite(s):** SSE 2100 with a grade of "C" or better, or permission of instructor

**Description:** In this course, students study the applications of Proportional, Integral, & Derivative (PID) controllers in the process control industry. Students also examine the structure of feedback, sensors, controllers, control valves, process dynamics, timing, piping and instrument drawing.

## SSE 3980 - Internship in Sustainable Systems Engineering

**Credits:** 3

**Prerequisite(s):** SSE major, permission of instructor, Junior or Senior standing

**Description:** Internships provide experiential learning opportunities through practical, hands-on experiences in a professional field related to sustainable systems engineering, and are supervised by a faculty member from the major's department, in conjunction with an industrial advisor. Internship placements must be established in consultation with university's internship office prior to enrollment in this course.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

## SSE 4000 - Sustainable Systems Engineering

**Credits:** 3

**Prerequisite(s):** SSE 1040 and CET 3120 with grades of "C" or better, or permission of instructor

**Description:** In this course, students study advanced theories and applications of sustainable systems engineering, life cycle analysis, quantitative methods and engineering economics, guided by sustainability principles. Classical and modern decision analysis methods are employed for evaluating case studies in terms of mechanical, civil and electrical engineering using content optimization techniques for detailed analysis and application.

## SSE 4160 - Geotechnical Engineering with Laboratory

**Credits:** 4

**Prerequisite(s):** SSE 3135 OR EVE 3135 with grade of "C" or better, or permission of instructor

**Prerequisite(s) or Corequisite(s):** SSE 3185 OR EVE 3185 with grade of "C" or better, or permission of instructor.

**Description:** Students in this course are introduced to the basic principles of soil behavior and their use in geotechnical and geoenvironmental engineering. This course covers soil formation, soil characterization and classification, engineering properties of soil, compaction, fluid flow in soil, stresses in soil, consolidation and settlement, shear strength, and lateral earth pressures. Students are introduced to soil improvement and remediation strategies and the design of earth retaining structures. This course contains a laboratory that covers common geotechnical tests such as sieve analysis, Atterberg limits, hydraulic conductivity, and soil shear strength.

## SSE 4200 - Sustainable Development Strategy

**Credits:** 3

**Prerequisite(s):** CET 3120 with C or better or permission of instructor

**Description:** In this course, students are introduced to the role of engineering in development, and they examine how actions lead to intended and unintended consequences. Emphasis is placed on sustainability principles with regards to planning and design, and the key components of development economics. Students study development strategy on large, modern world scale and also for communities where the social, political, and economic systems differ from those most commonly experienced by engineers in the developed world. The students are also introduced to a framework and guidelines for conducting both large- and small-scale development projects. The course addresses analysis of communities in medium- to high-risk and low-resilience environments. The framework combines concepts and tools that have been traditionally used by development agencies and other tools more specifically used in engineering project management. Finally, students are introduced to the various leadership skills necessary to make decisions in complex and uncertain environments.

## SSE 4280 - Energy and Power

**Credits:** 3

**Prerequisite(s):** SSE 3300, PHY 2310, and PHY 2320, with a grade of "C" or better, or permission of instructor

**Description:** In this course, students study global energy flow, sources and uses of energy. Students are introduced to biological energy and ecosystems from the viewpoint of the engineering practice. Students also deal with energy-related environment problems, including air and thermal pollution, plus radioactivity.

## SSE 4300 - Probabilistic Design Methodology

**Credits:** 3

**Prerequisite(s):** SSE 3135 with "C" or better, or permission of instructor

**Description:** In this course, students study engineering design methods that account for the stochastic nature of the design variables and provide means to quantify the inherent risk of a design. The students are introduced to basic concepts of stochastics, followed by the evolution of the probabilistic design, after which the design methods are discussed with emphasis on the Monte Carlo simulation and its applications to structural analysis and design.

## **SSE 4610 - Senior Design Project**

**Credits:** 3

**Prerequisite(s):** MTH 3210, senior standing and Departmental Permission

**Description:** This is a Senior Experience, capstone design course, focusing on a team design project that incorporates the application of fundamental engineering knowledge and design skills corresponding to the major. The selected project should include formulation of project problem design statements, specifications, planning, and engineering design in consultation with faculty advisors and industry contacts. Through this course students experience the engineering design process by addressing realistic open-ended design problems at the stage of conceptualization, research, construction and testing, analysis, synthesis, and presentation of a deliverable product incorporating sustainability and ethical considerations. The project should reflect the evolution of engineering, technology, and human society with respect to environmental, economic, and social sustainability to meet the needs of development of industry and the human community.

**University Requirement(s):** Senior Experience

## **SSE 4700 - Engineering Decision and Risk Analysis**

**Credits:** 3

**Prerequisite(s):** SSE 4000 with a grade of "C" or better, or permission of instructor

**Description:** Students learn the fundamental principles and practical techniques of risk and decision analysis in this course. The class is oriented toward project-level decisions where multiple variables and complex risks are present. The course introduces students to Monte Carlo analyses, and various types of multicriteria decision analyses. Students collaborate in a larger term project.

# **Theatre**

## **THE 0010 - BFA Music Theatre Coaching**

**Credits:** 0

**Description:** This course is required for all BFA Music Theatre (MT) concentration students until their final Senior Showcase/Jury Performance. This course covers individual instruction in performance studies for Musical Theatre. It requires weekly attendance at a one and one-half hour coaching class in which students perform for one another. At the end of the semester, the

student must successfully perform before a faculty jury committee in order to pass the course in addition to required attendance at twelve coaching sessions. Students must enroll during each semester of participation in the BFA (MT) concentration and must receive a "Satisfactory" grade in order to continue in the BFA (MT) concentration.

## **THE 0011 - BFA Applied Technology Coaching**

**Credits:** 0

**Description:** This course is required for all BFA Applied Theatre Technology and Design (ATTD) concentration students until their final Senior Portfolio Showcase. This course covers individual instruction in theatre portfolio development, resume development, and career development. It requires monthly attendance of at least one BFA group meeting and one individual meeting. At the end of each spring semester, students must successfully complete a BFA portfolio review before a jury committee of theatre department faculty and staff members. Students must enroll during each semester of participation in the BFA (ATTD) concentration from his or her initial acceptance into the program and must receive a "Satisfactory" grade in order to continue in the BFA (ATTD) concentration. This course is repeatable for all BFA Applied Theatre Technology and Design Majors.

## **THE 1210 - Theatre Appreciation**

**Credits:** 3

**Description:** In this course, students will explore the fascinating world of theatre, gaining a deeper understanding of the live stage, its performers, and the crafts behind each production. Together, we'll journey from ancient performances to today's modern theatre, discovering how theatre has shaped, and been shaped by, cultures around the world. Through discussions, analysis, and hands-on experiences, students will see how theatre brings stories to life, reflects societal values, and sparks powerful conversations across generations.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH1

## **THE 1240 - Stagecraft**

**Credits:** 3

**Description:** Students are introduced to the principles, methods, and materials of technical production, including scenic design and construction, lighting design and practices, and costuming and sound practices.

## **THE 2201 - Voice and Speech I**

**Credits:** 3

**Description:** This course teaches voice users how to develop and use their vocal instruments in public performance environments. This course emphasizes that voice work is for everybody.

## **THE 2215 - Self-Care in Theatre**

**Credits:** 3

**Description:** This course introduces the principles and strategies at one's disposal to live a fulfilling life in the arts. Students learn health and wellness techniques in physical fitness, intimacy, EDI sensitivity, and the collaborative skills of working with various people and personalities.

## THE 2218 - Prison Arts

**Credits:** 3

**Description:** The course provides a background into the culture and logic of the United States prison system, analyzing the prison as a complex set of social relations that both "reform" and "perform." Students investigate the compositional, ideological, and aesthetic dimensions of retributive, restorative, and transformative justice as manifest in the U.S. prison system. This examination has a particular focus on the role of the performing arts in each of these approaches to justice. Students reflect critically on their own intentions and interest in socially-based arts practice, with particular focus on "mutuality." We continue to interrogate the questions: *What happens when the prison encounters the artist? What happens when the artist encounters the prison?*

**General Studies:** Social and Behavioral Sciences

## THE 2220 - Acting I

**Credits:** 3

**Description:** This course provides an introduction to the basic principles of acting, including improvement of voice, body, and mind in the discipline of the theatre. Particular emphasis is placed on the principles of stage movement, improvisation, and beginning scene work.

## THE 2226 - Acting for Non-Majors: Communication in Performance

**Credits:** 3

**Description:** This course provides an introduction to the skill of communication through acting performance, including text interpretation, delivery of extemporaneous and written speeches, research and analysis, and techniques to enhance public performance and communication.

**General Studies:** Oral Communication

## THE 2230 - Acting II

**Credits:** 3

**Prerequisite(s):** THE 2220; or permission of department

**Description:** This course builds upon basic principles of acting, including improvisation, character development, stage movement, voice, and scene work. Study topics include development of audition techniques, basic acting, television acting techniques, and advanced scene work.

## THE 2241 - Costume Construction

**Credits:** 3

**Description:** This course provides a hands-on introduction to industry standard principles, methods, and materials of costume technology including hand sewing techniques, machine sewing techniques, cutting techniques, textile science, research methods, fitting protocol, basic patterning skills, and costume shop structure, organization, and etiquette.

## THE 2242 - Stage Makeup

**Credits:** 3

**Description:** This course provides an introduction to the principles, methods, and materials of stage makeup. Students learn to execute a variety of makeup techniques, including base makeup, aging, and special effects to create makeup designs for both realistic and stylized characters.

## THE 2243 - Graphics for Theatre

**Credits:** 3

**Prerequisite(s):** THE 1240; or permission of department

**Description:** This is an introductory course in graphics for theatre. The student will become familiar with hand drafting, perspective, freehand sketching and rendering techniques through theoretical and practical projects. These skills will prepare the student to incorporate the techniques into professional design and technology work within the theatre and entertainment industry.

## THE 2248 - Wardrobe Technology for Everyone

**Credits:** 3

**Description:** This course provides students with an introduction to the principles, methods, and materials of costume design, costume technology, hair and makeup application, and wardrobe management as it applies to both costume and non-costume focused majors. Emphasis is placed on practical knowledge and application.

## THE 2250 - Stage Management

**Credits:** 3

**Prerequisite(s):** THE 1240 or permission of instructor

**Description:** This course provides an introduction to theatre stage management methods and styles, including promptbook and blocking notations, actor management, the ongoing problem solving process involved in production, and the basics of the stage manager's union.

## THE 2255 - Dramaturgy

**Credits:** 3

**Description:** In this course, students learn the skills of dramaturgy in several distinct functions, including how to provide the cast and crew with vital knowledge, research, and historical context about the theatrical work. Students work with classic, contemporary, musical, and new plays, facilitating collaboration between theatre artists (i.e. designers, directors, actors, technicians, and audience). Students practice skills transferable to other theatre disciplines.

## THE 2270 - Production Analysis

**Credits:** 3

**Prerequisite(s):** THE 1240 or permission of department

**Description:** This course provides an introduction to the principles, methods, and materials of theatre production, including season selection, production roles, design processes, and the communication dynamics within the production team.

## THE 2280 - Theatre Career Development

**Credits:** 3

**Description:** This course provides an introduction to the principles and practice of entering into the professional field in the arts, including resume and cover letter writing, interviewing, websites, social media branding, personal finance management, becoming a member of a union, negotiating contracts, establishing a strong work ethic, and living a sustainable life in the arts field. Students practice and apply skills through course activities that provide a bridge to their professional career.

## THE 2290 - Stage Combat

**Credits:** 3

**Description:** This is an introductory class that addresses basic stage combat techniques and early historical weapons: unarmed, broadsword, and rapier and dagger. The class emphasizes safety first. It also address the challenges of making a fight believable and effective. The actor-combatant must not only act the scene but must also master the various techniques to create the illusion of real violence for the audience.

## THE 2295 - Comedy: In-Print and On-Stage

**Credits:** 3

**Description:** This course explores the cultural, historical, and literary aspects of comedy through the lens of the art of theatre. Students learn about societal inspirations for comedy, cultural factors that influence the development of comedy, and how comedy as an art form has developed into modern-day theatrical settings, including stage performance, stand-up comedy, sketch comedy, and others.

**General Studies:** Arts and Humanities

**Guaranteed Transfer:** GT-AH1

## THE 2299 - Broadway: The History of the American Musical

**Credits:** 3

**Description:** Students will be exposed to the most popular theatrical form: Musical Theatre. This exciting American theatrical revolution has transformed how the world views theatre, and how audiences have influenced and been influenced by this creation. Students study the history of this art form from 1888 to the present day. Students are not required to perform.

## THE 3201 - Voice and Speech II: Speech and Accents

**Credits:** 3

**Prerequisite(s):** THE 2201 and THE 1210; or permission of department

**Description:** This course continues the process of teaching speakers how to use the voice more effectively by beginning dialect exploration through learning and mastering the International Phonetic Alphabet (I.P.A.).

## THE 3202 - Voice-Over Techniques

**Credits:** 3

**Description:** This course teaches techniques used in the voice-over industry, including commercial, narration, and character recording. Students expand their vocal skill, explore further use of vocal variety and interpretation, in addition to learning microphone technique and recording technology.

*Note:* Students are expected to produce quality recordings for evaluation, as well as demonstrate knowledge of professional-quality work. Because of this, students are required to purchase a microphone and other recording tools as an assignment for the course. Required materials: a microphone. Recommended materials: Microphone stand, headphones, and sound dampening material (there are many cheap and free options outlined in the course lectures). The department is prepared to grant exceptions for students who cannot afford to purchase a microphone, but the department will also let the student know that, should they wish to parley their education into a voice-over career, that a microphone will be a necessary and essential investment. The microphone is to the vocal artist what tap shoes are to a dancer. Recording software is free, and the instructor of the course has a detailed assignment to help students find and learn this technology. Because of the investment of a basic entry-level microphone, which can run up to \$90 dollars, the course utilizes a very cheap textbook to mitigate student costs. We understand this is a departure from traditional course requirements, but just as a student taking guitar lessons must have a guitar, students learning voice-over technique should work with a microphone and have the technological capacity to record, edit, upload, and download audio files.

## THE 3210 - Scene Painting

**Credits:** 3

**Description:** The student will learn and develop basic and advanced theatrical scene painting skills. This course will focus on techniques of texture, color mixing, faux finishes and trompe l'oeil painting, and the painting of a variety of scenic pieces.

## THE 3211 - World Theatre History I

**Credits:** 3

**Prerequisite(s):** THE 1240; or permission of department

**Description:** As a part of a two semester sequence, this course provides detailed and intensive study of specific theatre contexts, practices, genres, and theories from its "origins" of theatre through 1636.

## THE 3212 - World Theatre History II

**Credits:** 3

**Prerequisite(s):** THE 1240; or permission of department

**Description:** As a part of a two semester sequence, this course provides detailed and intensive study of specific theatre contexts, practices, genres, and theories from the Neoclassicists to the present.

## THE 3213 - Staging Cultures: Theatre, Drama, and Multiculturalism

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 and ENG 1020 or ENG 1021 or permission of department

**Description:** In this course, students will dive into the stories and perspectives of marginalized communities, exploring the rich history and dramatic texts of African Americans, Hispanic and Asian Americans, women, and the LGBTQ+ community. Together, we'll examine how theatre has been a powerful platform for these groups to express their identities, share their experiences, and fight for representation. By engaging with these voices, students will gain a deeper understanding of their journeys and the impact they've made- and continue to make- in shaping society and the arts.

## THE 3220 - Stage Movement

**Credits:** 3

**Prerequisite(s):** THE 2220 or permission of department

**Description:** This course instructs students in the use and training of the human body for communication of artistic expression.

## THE 3222 - Devised Theatre

**Credits:** 3

**Prerequisite(s):** THE 2220 or permission of department

**Description:** In this course students learn about the history, process, and production involved with devising a theatrical performance. They learn valuable skills in collaboration, activism, and ensemble performance. This class culminates in a final presentation comprised of entirely original work.

## THE 3230 - Acting III: Styles of Acting

**Credits:** 3

**Prerequisite(s):** THE 2230; or permission of department

**Description:** This course is for advanced performers exploring basic "mask" acting techniques, as well as acting styles particular to Greek, Comedy of Manners, and Shakespeare.

## THE 3231 - Acting IV: Mask Characterization

**Credits:** 3

**Prerequisite(s):** THE 2230; or permission of department

**Description:** This course for advanced performers explores character mask, neutral mask, half-mask and clowning. Mask characterization

is the foundational tools in story-telling by communicating objectives, circumstances, and reactions through the body only.

## THE 3232 - Acting for the Camera

**Credits:** 3

**Prerequisite(s):** THE 2220 or permission of department

**Description:** The student is introduced to the fundamental tools of acting for the camera. Students learn basic film terminology, specific camera-acting techniques, auditioning techniques, and the demands placed on an actor when shooting a film. The course uses exercises, scenes, and readings to provide a solid understanding of how to create a character, analyze a text, utilize important vocabulary, and perform effectively on camera.

## THE 3233 - Acting V: Actor's Lab

**Credits:** 3

**Prerequisite(s):** THE 2220 and THE 2230; or permission of department

**Description:** This course is the culminating class in the actor's journey. Students utilize all of their technique from previous shows and classes to focus on specific and intense scene work throughout the course. The focus of this class is learning to live and behave truthfully in imaginary circumstances.

## THE 3234 - Audition Techniques

**Credits:** 3

**Prerequisite(s):** THE 2220

**Description:** This course is designed to cover the basics of audition techniques including film, realism, dance calls, cattle calls, cold reads, and various theatrical auditions. Students create an audition book with monologues (short speeches) and songs (16 bar music cuts) from various plays and time periods. Students also develop their audition wardrobe and supporting headshot/resume materials.

## THE 3240 - Theatre Improvisation Techniques

**Credits:** 3

**Prerequisite(s):** THE 2220; or permission of department

**Description:** In this advanced performance course, students will explore basic improvisation acting techniques that enable the actor to develop concentration and spontaneity, build characterization, discover relationships and status, establish mood and feeling, sense shape and rhythm of scene and character, establish language and imagery, and build a play.

## THE 3241 - Computer Aided Drafting for Theatre

**Credits:** 3

**Prerequisite(s):** THE 1240 and THE 2243; or permission of department

**Description:** This is an introductory course for computer aided drafting for theatre. Students will become familiar with computer aided drafting software through theoretical and practical

projects. Computer aided drafting software will prepare the student to incorporate the techniques and technology into professional design and technology work within the theatre and entertainment industry.

### THE 3250 - Scene Design

**Credits:** 3

**Prerequisite(s):** THE 1240, THE 2243, THE 2270; or permission of department

**Description:** This course teaches an introduction to basic elements of design and production processes. Emphasis is placed on the role of the scenic designer in theatre productions, the development of a scenic design, period styles, drafting, model building and utilization of facilities.

### THE 3265 - Teaching General Theatre

**Credits:** 2

**Prerequisite(s):** Permission of Department

**Description:** Students develop competencies for teaching general theatre in both elementary and secondary school settings. Course content includes experience with traditional elementary methodologies, application of technology to theatre, and theatrical performance opportunities. Additional instruction includes classroom management, assessment strategies, and the role of general theatre in education.

### THE 3271 - Stage Lighting Technology

**Credits:** 3

**Prerequisite(s):** THE 1240 or permission of department

**Description:** This course is for lighting technology in the theatre. Students become familiar with lighting equipment theoretically and practically. Lighting Technologies prepare students to operate various lighting equipment with an emphasis on theatre specific practices and their applied techniques.

### THE 3272 - Stage Sound Technology

**Credits:** 3

**Prerequisite(s):** THE 1240; or permission of department

**Description:** This course is for Sound Technology in the theatre. Students become familiar with sound equipment theoretically and practically. Sound technologies prepare students to operate sound equipment with an emphasis on theatre specific practices and their applied technologies.

### THE 3273 - Costume Design

**Credits:** 3

**Prerequisite(s):** THE 1240 and THE 2241; or permission of department

**Description:** This course teaches an introduction to the principles and practice of theatrical costume design, including script and character analysis, ethical research techniques, costume rendering,

fabric ID and application, current industry issues, and an overview of how costume designs are realized in production.

### THE 3290 - Advanced Stage Combat

**Credits:** 3

**Prerequisite(s):** THE 2210 and THE 2290; or permission of department

**Description:** This course will provide continued fight training for students in the art of Stage Combat. Students will complete fights of 30+ moves utilizing Shakespearean acting scenes. Students will be provided the opportunity to work towards a Level II certification through dueling arts in three weapon styles.

### THE 3523 - Drama Writing Workshop

**Credits:** 4

**Prerequisite(s):** ENG 2500 or THE 2210 or permission of the instructor

**Description:** In this course, students are introduced to the basics of playwriting style and structure. Students complete writing assignments focused on crafting dialogue, developing characters, and structuring effective plots, with emphasis placed on the collaborative nature of playwriting, with its ultimate goal of public performance.

*Note:* Credit will be granted for only one prefix: ENG or THE.

**Cross Listed Course(s):** ENG 3523

### THE 3980 - Professional Internship: Theatre

**Credits:** 1-15

**Prerequisite(s):** Permission of department

**Description:** This internship requires specialized skills that students may apply in educational, amateur, community, or professional theatre arts and entertainment venues. A written learning contract between student, faculty supervisor, site supervisor, agency, and department chair is required. Activities include performance, various applied theatre technologies, and management.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

### THE 4201 - Voice and Speech III: Advanced Accents and Dialect Coaching

**Credits:** 3

**Prerequisite(s):** THE 2201 and THE 3201

**Description:** This course is designed to teach students with a background in speech and dialects more advanced skills to better analyze and perform all varieties of accents. In addition to this advanced training utilizing the International Phonetic Alphabet and the skills taught in Knight-Thompson Speechwork, students will also learn the pedagogy and skills required to be a dialect coach.



## THE 4210 - Variable Topics in Theatre

**Credits:** 1-3

**Prerequisite(s):** THE 2210, THE 2220, and THE 2240; or permission of department

**Description:** This course provides detailed and intensive study of specific theatre genres and practices.

*Note:* This course may be repeated under different topics for up to 9 credits total.

## THE 4230 - Stage Directing

**Credits:** 3

**Prerequisite(s):** THE 2220, THE 2240, and THE 2270; or permission of department

**Description:** This course introduces the principles and techniques of directing for theatre, including the selecting, rehearsing, and performance of plays, and the presentation of student-directed projects.

**University Requirement(s):** Senior Experience

## THE 4240 - Stagecraft II Methods

**Credits:** 3

**Prerequisite(s):** THE 1240 or permission of department

**Description:** This course examines the fundamentals of rigging, stage machinery and mechanics, metal working, fabrication with thermoplastics and foams, setting up a sound system, "soft" sculpture construction, first echelon power tools maintenance, and industry-standard safety requirements and practices, and advanced lighting technology.

## THE 4241 - Costume Draping and Pattern Drafting

**Credits:** 3

**Prerequisite(s):** THE 2241 or permission of department

**Description:** This course provides hands-on experience in theatre industry standard draping, flat patterning, and digital pattern drafting methods. Students will learn how to interpret designer sketches and research to create patterns for dresses, shirts, sleeves, collars, pants, and skirts.

## THE 4260 - Theatre: Practicum I

**Credits:** 1

**Prerequisite(s):** THE 1240 and THE 2220 or permission of department

**Description:** This course provides the student with practical experience in theatrical productions, thus augmenting the theoretical aspects of other theatre courses.

*Note:* Course may be repeated for credit up to three times.

## THE 4270 - Theatre: Practicum II

**Credits:** 2

**Prerequisite(s):** THE 1240 and THE 2220 or permission of department

**Description:** This is an advanced course in practical supervision and administration of theatrical production processes. Students will be responsible for a major production activity. This class is open primarily to sophomore, junior, and senior level students.

*Note:* Course may be repeated for credit up to three times.

## THE 4271 - BFA Project: Applied Technology

**Credits:** 2

**Prerequisite(s):** Permission of department

**Description:** This course consists of an on-campus or off-campus official BFA project. BFA projects consist of a "design of a fully realized production presented before an audience in the area of the student's specialty." For students with a non-design emphasis, a comparable technical or management project will be completed. All internships and BFA projects must be approved by the BFA Coordinator, Theatre Department, and the Internship Office in advance of the BFA project start date.

## THE 4272 - BFA Project: Music Theatre

**Credits:** 2

**Prerequisite(s):** Permission of department

**Description:** This course consists of an on-campus or off-campus official BFA project. BFA projects consist of a "significant role in a full production during advanced study." All internships and BFA projects must be approved by the BFA Coordinator, Theatre Department, and the Internship Office in advance of the BFA project start date.

## THE 4275 - Theatre: Practicum III

**Credits:** 3

**Prerequisite(s):** THE 1240 and THE 2220 or permission of department

**Description:** This is an advanced course in practical supervision and administration of theatrical production processes. Students will be responsible for a major production activity. This class is open primarily to sophomore, junior, and senior level students.

## THE 4280 - Stage Lighting Design

**Credits:** 3

**Prerequisite(s):** THE 2270, THE 3271

**Description:** This course fully prepares the student to analyze theatrical scripts or concepts for lighting design, research and create lighting systems in CAD, and realize those concepts in a theatrical environment.

## THE 4290 - Stage Sound Design

**Credits:** 3

**Prerequisite(s):** THE 2270, THE 3272

**Description:** This course fully prepares the student to analyze theatrical scripts or concepts for sound design, research and create sound systems in CAD, and realize those concepts in a theatrical environment.

## Travel and Tourism Management

### TTM 1000 - Travel and Tourism

**Credits:** 3

**Description:** This course introduces students to the multidimensional travel and tourism industry through an examination of its major segments, including hotels, travel agencies, transportation companies, destination management companies and tourist offices.

### TTM 1600 - Tourism and Society

**Credits:** 3

**Description:** Students examine tourism through a sociological lens enabling them to understand the way tourism is socially constructed, the social impacts of tourism development, the development of travel in modern society, and tourism as a global industry. Students focus on how tourism intersects with topics such as the environment, ethnicity, social-class, gender, and the role of technology.

**General Studies:** Social and Behavioral Sciences, Global Diversity  
**Cross Listed Course(s):** SOC 1600

### TTM 1800 - Travel Technology

**Credits:** 3

**Description:** In this lab course, students will gain basic proficiency in the use of a global distribution system (GDS) and other travel and tourism technologies along with their role in travel planning. Proficiency includes checking availability of flights, hotels and cars; booking reservations; quoting prices; and creating a passenger name record (PNR). The course includes US geography as it relates to air travel.

### TTM 3200 - Itinerary Design

**Credits:** 3

**Description:** This course provides students with the skills of designing a high-quality and customized travel itinerary and personalized life-enhancing travel experience. Students develop the comprehensive expertise of qualifying travelers to a specific destination based on key tourism theories.

### TTM 3400 - Corporate Travel

**Credits:** 3

**Description:** This course provides a comprehensive study and analysis of the business travel industry with a detailed investigation of corporate travel duties, roles, and responsibilities. Students examine accounting management systems, requests for information

and proposal, vendor relationships, and Duty of Care concept. Theoretical and practical issues are examined with case studies that include strategies on how to design a corporate travel program with sustainable value.

### TTM 3700 - Global Tourism

**Credits:** 3

**Prerequisite(s):** 2.5 GPA, ENG 1009 or LING 2010

**Description:** In this course, students examine cultural diversity by exploring world characteristics and behaviors through the lens of travel and tourism. The course includes 9-14 days studying abroad where students spend time in a remote area, enabling students to compare and contrast popular perceptions of culture with their observed and historically correct versions. Students will identify an ancient cultural pattern that influences current culture and attracts the global tourist. Students will examine their perspectives of the power of global tourism as a promoter of multicultural understandings. This study abroad trip includes several pre-trip and/or post-trip class sessions.

### TTM 3800 - Cruise Tourism

**Credits:** 3

**Description:** In this course, students examine the cruise industry from a variety of perspectives, including business, cultural, environmental, political and economic issues. Students identify the challenges and relationships among the cruise product, cruise geography, maritime law, port destinations, and tourism activities.

### TTM 4200 - Ecotourism

**Credits:** 3

**Description:** This course prepares the students to evaluate the intersection of the socio-cultural, environmental, and economic impacts of ecotourism enterprises. A theoretical and applied analysis of ecotourism is explored covering topics such as the practice of ecotourism, concepts and challenges, ethics and responsible practice, and business operations.

### TTM 4800 - Inbound Tourism

**Credits:** 3

**Corequisite(s):** Complete twelve hours in major concentration and Senior Standing

**Description:** Tourism is all about stories. The art of creating and telling enlightening stories that reveal hidden and little known cultural treasures is the focus of this course. Students apply the theories and techniques of planning, leading, and managing a narrated walking tour for inbound tourists through a practical and hands-on learning experience. Students work in teams to organize a half-day narrated tour in the Denver metropolitan area on a weekend at the end of the semester. A team simulates being professional tour guides while the rest of the students simulate being the inbound tourists. Walking tours include audience participation and dining

experiences.

**University Requirement(s):** Senior Experience

## University Course

### UC 3450 - Prior Learning Credit

**Credits:** 6

**Prerequisite(s):** Permission of the Department

**Description:** Students are eligible for six upper division credits based on their personal work experience. Emphasis is placed on skills developed in leadership, management, communication, and teamwork. Students must demonstrate at least five years of work experience to qualify for this credit and show evidence for at least seven of the Student Learning Outcomes. Students may seek this credit at any point in their academic journey prior to graduation from the university.

### UC 3980 - Internship

**Credits:** 1-15

**Prerequisite(s):** Permission of instructor

**Description:** Internships provide experiential learning opportunities to students through practical, hands-on experiences in a professional field related to the student's academic program(s) of study, and are supervised by a faculty member, in conjunction with an internship-site supervisor. Internships must be established following university procedures for credit.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

## Urban Agriculture

### UA 2735 - Urban Vegetable Farming

**Credits:** 3

**Description:** This course is an introduction to growing urban vegetable crops indicative to the Rocky Mountain region, and the theoretical knowledge and hands-on experience required for successfully producing them. This introductory course is intended for students who have no prior course work in gardening or vegetables, although participation by those with food backgrounds is encouraged.

### UA 3605 - Agribusiness Operations

**Credits:** 3

**Description:** This course examines the role of a manager from a food growing operation, with particular emphasis on identifying revenue streams, understanding common fixed and variable costs in urban agriculture, and how to maintain a profitable business.

## UA 3765 - Greenhouse Operations

**Credits:** 3

**Description:** Greenhouse Operations is a class that covers all aspects of small and large greenhouse operations. The course reviews decision-making concerns for a person entering the greenhouse business. This course will review all aspects of the business, from the physical facilities, to the day-to-day operations, to business management and marketing.

## World Languages

### LANG 1260 - Asia in Global Perspective

**Credits:** 3

**Prerequisite(s):** ENG 1009 or ENG 1010 or ENG 1020 or ENG 1021

**Description:** This course is an overview of Asia's diverse geographies, peoples, histories, and contemporary developments from an interdisciplinary perspective. Throughout the course, students investigate the intersection between domestic and global factors in shaping contemporary Asian experiences. Topics include Asia's dynamic cultures, rich philosophical, religious, and linguistic traditions, vibrant economies, and various types of political systems. Students also reflect on how issues such as colonization, nation-building, gender, and migration shape contemporary Asia and its many representations.

*Note:* Credit will be granted for only one prefix (SOC, ANT, GWS, HIS, LANG, or PSC).

**General Studies:** Social and Behavioral Sciences, Global Diversity

**Guaranteed Transfer:** GT-SS3

**Cross Listed Course(s):** ANT 1300, GWS 1300, HIS 1260, PSC 1300, SOC 1300

### LANG 1300 - Languages for the Professionals: Variable Topics

**Credits:** 3

**Description:** In this course, students develop cultural awareness and learn how to navigate certain aspects of professions as they are practiced in other countries. The course is intended for beginner adult learners, specifically for professionals who plan to pursue careers in a multilingual setting. Students engage in a Language for Specific Purposes (LSP) approach, which includes in-class interactions, case studies, grammar, and vocabulary for professionals in a variety of fields (such as public health, information technology, real estate, human resources, customer service, business, banking, etc.). Coursework is rooted in concrete practices built around essential words, phrases, and structures that support basic yet effective communication in the workplace.

### LANG 2400 - Fundamentals of Translation and Interpreting

**Credits:** 3

**Prerequisite(s):** ASL 1020 or CHI 1020 or GER 1020 or FRE 1020 or ITA 1020 or JPS 1020 or SPA 1020 or permission of instructor

**Description:** This course introduces new and advanced language learners alike to the professional fields of Translation and Interpreting within the broader language services industry. Basic concepts from the area of Translation Studies are introduced in a format that aligns with a culturally oriented approach in translation. Examples are drawn from a variety of source languages, including French, German, Italian, Korean, Russian, and Spanish among others. The analyzed texts represent a broad spectrum, and include excerpts from sacred scriptures, world literature, policy documents, marketing materials, lifestyle publications, and the translations of Harry Potter. The course is taught in English.

## **LANG 3050 - Cultural Crossroads: Heritage Languages and Cultures**

**Credits:** 3

**Prerequisite(s):** ENG 1020

**Description:** Cultural Crossroads focuses on heritage languages and cultures in the USA. Students gain the cultural background necessary for insightful interaction with the rich diversity of heritage languages and cultures present in the United States. Main topics include the variety of language families, the historical and geo-political reasons for emigration, the establishment and treatment of immigrant diasporas, the role of differing social etiquette in cultural exchanges, the contributions of immigrants to their new country, and the importance of heritage languages in shaping identities, communities, and society.

*Note:* Not repeatable for credit under a different prefix. The course is taught in English.

**Cross Listed Course(s):** FRE 3050, GER 3050, SPA 3050

## **LANG 3950 - Variable Topics: Understanding Self and Europe Through the Camino De Santiago Pilgrimage**

**Credits:** 6

**Prerequisite(s):** Permission of instructor

**Description:** This course is the foundational curriculum for a five-week study abroad experience in Spain. It is meant to be taught as part of an official MSU Denver faculty-led study abroad, and is not meant to be offered as regular curriculum during a normal semester on campus.

This course may be taught in either English or Spanish (variable topic).

In this course, students take an interdisciplinary approach to the study of European history. Students contribute to the joint experience of all students in the course by sharing the unique perspective that each individual brings to the examination of the material due to disciplinary formation and personal life experience.

Course material examines the art, architecture, politics, economics, anthropology, literature, sociology, religion and historical events that led to the shaping of the Camino de Santiago itself and of Europe as a

continent with many expressions of national identity. Field trips and excursions demonstrate how historical artifacts that were borne of intercultural interaction along the route have been preserved and integrated into the contemporary lives of Spaniards and all Europeans. Students then walk the ancient route themselves with the goal of undergoing and analyzing a personal transformation that offers new perspective into individual identity and the understanding of one's place in the larger historical world.

## **LANG 3980 - Internship in Modern Languages**

**Credits:** 1-15

**Prerequisite(s):** Major within the Modern Languages Department; junior or senior status; permission of instructor

**Description:** Supervised by a faculty member within the major department, internships provide practical, hands-on experience in a professional field related to the major. Internship placements must be established prior to enrollment in this course in consultation with the Classroom to Career (C2) Hub.

*Internship requirements vary by department. For information and instructions on finding and enrolling in an internship, contact the Classroom to Career (C2) Hub at [c2hub@msudenver.edu](mailto:c2hub@msudenver.edu).*

*Note:* Variable Credit

## **LANG 4960 - Teaching World Languages in K-12**

**Credits:** 3

**Prerequisite(s):** EDS 3210 AND EDS 3240 AND EDU 3444 AND EDU 3445

**Corequisite(s):** LANG 4961

**Description:** Students develop competencies for teaching world languages. Course content includes methods and materials of standards-based instruction, classroom and instructional management, assessment strategies, designing lessons using multiple intelligences and differentiated instruction, using technology in instruction, and integration of other content areas in the teaching of world languages. Students are required to complete a minimum of 12 hours of observation in a variety of world language classrooms.

## **LANG 4961 - Field Experience in Teaching World Languages in K-12**

**Credits:** 1

**Prerequisite(s):** EDS 3210 AND EDS 3240 AND EDU 3444 AND EDU 3445

**Corequisite(s):** LANG 4960

**Description:** Students in this field-based course engage in opportunities to develop professional and pedagogical skills in a world language classroom. In coordination with the classroom teacher, teacher candidates design and implement content lessons and use content literacy strategies to improve both language acquisition and literacy skills. Students' field placement in schools is arranged by MSU Denver faculty, the Office of Clinical Experiences and Partnerships, and partner schools. Students must complete EDS 3140 and EDS 3240. This course is NOT intended as a beginning field

experience. Students should take this course concurrently with LANG 4960.

## **LANG 4980 - Teaching Assistantship for Career Exploration in World Languages**

**Credits:** 3

**Prerequisite(s):** Permission of instructor

**Description:** This course is organized around the concepts of teaching world languages and surveying teaching methods that

enhance student learning and promote successful outcomes. The student learns and applies strategies for teaching world languages in order to assist the professor of record with the design and delivery of world languages courses. The student plays an active role in delivering course content and applying best-practice methodologies to the organization of in-class sessions. The student also participates in teaching-related projects that the professor of record is working on during a particular semester. The student may assist with data collection, literature review, etc. This course promotes the acquisition of transferable skills that prepare the student for future professional opportunities in world languages teaching.

# Administration

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# Faculty

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## A

### **Abell, Marin**

Associate Professor-Art  
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### **Abendroth, Lisa Marie**

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B.F.A., Virginia Commonwealth University; M.F.A., Rhode Island School of Design

### **Adibifar, Karam**

Professor-Sociology  
B.S., Metropolitan State University of Denver; M.A., University of Northern Colorado; M.S., University of Colorado-Denver; Ph.D., South Dakota State University

### **Aguilar, Carla Elise**

Professor-Music  
B.S., Ball State University; M.M.E., Ph.D., Indiana University

### **Ahrendt, Susan Fewer**

Professor-Elementary Education  
B.A., St. Olaf College; B.S., Ph.D., University of Minnesota-Minneapolis; M.A., University of St. Thomas, St. Paul, Minnesota

### **Ahsan, Shamim**

Professor-Environmental Science  
B.S., M.S., University of Dhaka; M.S., International Institute for Hydraulic and Environmental Engineering; Ph.D., University of Michigan

### **Akacem, Mohammed**

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B.A., Portsmouth Polytechnic-Portsmouth, UK; M.A., Ph.D., University of Colorado

### **Akrabova, Maria**

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### **Allen, Rosemarie**

Professor-Early Childhood Education  
B.A., California State University; M.Ed., Lesley University; Ed.D., University of Colorado-Denver

### **Allert, Jenny**

Chair and Associate Professor-Nursing  
B.S., Pacific Lutheran University; M.S., Grand Canyon University

### **Alvarez, Wilfredo**

Assistant Professor-Communication Studies  
B.S., Rochester Institute of Technology; M.S., Florida State University; Ph.D., University of Colorado-Boulder

### **Ambre, Shailesh**

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B.S., Sadar Patel University; M.S., Maharaja Sayajiro University of Baroda; Ph.D., University of Georgia

### **Anastasia-Cartwright, Desiré J.M.**

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B.A., Michigan State University; M.L.A., Eastern Michigan University; Ph.D., Wayne State University

### **Ansburg, Pamela**

Professor-Psychological Sciences  
B.A., University of California-Riverside; M.A., University of Nevada-Reno; Ph.D., University of Illinois- Chicago

### **Atkinson, Kristen**

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MSW, San Francisco State University, Ph.D., University of Illinois, Chicago, Illinois

### **Avery, Azure Dee**

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## B

### **Baalbaki-Yassine, Sally**

Chair and Professor-Marketing  
B.B.A., American University of Beirut; M.B.A., University of North Alabama; Ph.D., University of North Texas

### **Bachelder, Tyler Jon**

Associate Professor-Aviation & Aerospace Science  
B.S., M.S., University of North Dakota

### **Bachik, Maria Alexis Karris**

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### **Badanes, Lisa**

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### **Bagwell, Brian L.**

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**Baker, Biff**

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