



ADVISING GUIDE

Biology Major with a Concentration in Secondary Education for Secondary Science Licensure (Fall 2018 catalog year and later)

Name: _____ 900# _____

All courses required for licensure must be passed with a grade of C- or better.

All licensure students must complete the School of Education admission process.

Please see your Secondary Education advisor and approved Biology advisor to plan your course of study.

GENERAL STUDIES COURSES

Course	Substitute Course # / Title / College	Credit Hours	When?	Grade	Advisor Initials
ENG 1010-3	Composing Arguments				
ENG 1020-3	Research and Argument Writing				
CAS 1010-3	Public Speaking				
MTH 1112-4*	College Algebra through Modeling				
HIS XXXX-3**	General Studies Historical				
Arts and Humanities - 6 credits**	General Studies Arts & Humanities				
Social & Behavioral Sciences - 6 credits***	(met by EDS 3130 and EDS 3150)				
Natural & Physical Sciences - 6 credits	(met by content area requirements)				
GENERAL STUDIES TOTAL		22			

* While MTH 1109, 1110, and 1112 are acceptable for this requirement, MTH 1112 is preferred for prospective science teachers.

** We recommend that you select at least one course that meets the Global Diversity requirement. Otherwise, you may have to satisfy the Global Diversity requirement by taking additional coursework.

***Undergraduate Science Licensure students do not declare a minor in Secondary Education. If you declare this minor, you will have to take additional courses to fulfill your Social Science General Studies requirements.

BIOLOGY MAJOR COURSEWORK

Biology Core

The following are the course requirements for your major. See your Biology advisor regularly. Your major should be declared with the secondary Education Concentration (BIO1). Your content area GPA must be a 2.75 or better to be accepted for student teaching. You will need a total of 40 hours, from the following list.

Based on my review, this student has completed all requirements for the Biology major for Secondary licensure.

SIGNATURE OF BIOLOGY MAJOR ADVISOR: _____ DATE: _____

Major GPA: _____ BIOLOGY MAJOR CREDIT HOURS: _____

Biology Course	Substitute Course # / Title / College	Credit Hours	When?	Grade	Advisor Initials
BIO 1080-3	General Biology I				
BIO 1090-1	General Biology I Laboratory				
BIO 1081-3	General Biology II				
BIO 1091-1	General Biology II Laboratory				
BIO 2400-5	General Microbiology				
BIO 3230-5	Principles of Anatomy and Physiology				
BIO 3520-3	General Ecology				
BIO 3600-4 or BIO 3610-4	General Genetics (no lab) Genetics: Principle and Analysis (lab)				
BIO 4850-3	Evolution				
BIO 3xxx or BIO 4xxx	Upper division Biology electives Totaling 8 credit hours				
SCI 3950-3	Teaching Science in Secondary Schools				
SCI 3960-1	Field Experience in Teaching Science in Secondary Schools (60 hours; must be taken concurrently with SCI 3950)				
BIOLOGY CORE TOTAL		40			

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ADDITIONAL COURSES REQUIRED FOR SCIENCE LICENSURE

Course	Substitute Course # / Title / College	Credit Hours	When?	Grade	Advisor Initials
Physics					
PHY 2010-4	College Physics I				
PHY 2020-4	College Physics II				
PHY 2030-1	College Physics I Laboratory				
PHY 2040-1	College Physics II Laboratory				
Chemistry					
CHE 1800-4	General Chemistry I				
CHE 1810-4	General Chemistry II				
CHE 1801-1	General Chemistry I Laboratory				
CHE 1811-1	General Chemistry II Laboratory				
Earth Space Science					
GEL 1010-4	Physical Geology				
MTR 1400-3	Weather and Climate				
Mathematics					
MTH 1120-3	College Trigonometry				
ADDITIONAL COURSES TOTAL		30			

TEACHER EDUCATION COURSES

Courses listed with heavy outlines must be taken together. This coursework should be completed in the last 4 semesters.

Course	Substitute Course # / Title / College	Credit Hours	When?	Grade	Advisor Initials
EDS 3130-4*	Foundations of Educational Psychology and Philosophy				
EDS 3140-1*	First Field Experience in Secondary Education (60-hour field experience)				
EDS 3150-3*	Issues in Multicultural Education in Urban Secondary Schools (Meets multicultural requirement for graduation. Must be taken concurrently with or after completion of EDS 3130 and EDS 3140)				
EDT 3010-3	Integrating Educational Technology into Teaching				
SED 3600-3	Exceptional Learners in the Classroom				
EDS 3210-3**	Classroom Management, Planning, and Assessment in Secondary Schools				
EDS 3240-1**	Field Experience: Classroom Management, Planning, and Assessment in Secondary Schools (60-hour field experience)				
RDG 3280-3**	Teaching Content Literacy Skills				
SCI 3950-3	Teaching Science in Secondary Schools	Completed as part of BIO Major			
SCI 3960-1**	Field Experience in Teaching Science in Secondary Schools (60-hour field experience)	Completed as part of BIO Major			
EDS 4290-12**	Student Teaching and Seminar: Secondary 7-12				
TEACHER EDUCATION COURSES TOTAL		33			

* Requires at least provisional admission to the School of Education.

** Requires formal admission to the School of Education.

GRAND TOTAL FOR PROGRAM

125 CREDIT HOURS

Before you begin student teaching, you will need your education advisor's initials for all courses (except the courses in your major area) and signature below.

Based on my review, this student is eligible to apply for student teaching.

SIGNATURE OF
EDUCATION ADVISOR: _____

DATE: _____

Please visit the School of Education website for updated licensure exam requirements for Secondary Science Education.

303-556-6228

www.msudenver.edu/education