Earth and the Environment

2022-2023 Exploratory Pathway Guide

The Earth and Environment pathway is a study of the geographical, physical and climatic features of the earth and the role of human interaction and habitation have on all three. Courses in this pathway use scientific inquiry to examine the dynamics of the earth and its environment. Students will investigate this pathway using historical, cultural, political, anthropological, and sociological lenses to support their scientific exploration of how humans have changed and influenced the environment.

Related Key Industries: Health and Wellness; Infrastructure Engineering; Information and Technology; Energy and Natural Resources

Pathway Majors and Concentrations

- Anthropology
- Applied Geology
- Biochemistry
- Biology (BA/BS)
- Environmental Engineering
- Environmental Science
- Geography
  - Geographic Information Science
  - Physical Geography
  - Political Economy Approaches to Sustainability
  - Urban and Regional Processes and Planning
- Individualized Degree Program
- Meteorology
  - Applied Meteorology
  - Professional Meteorology
- Political Science
- Sustainable Systems Engineering

Exercise: Identifying Interest Areas

Using the list of majors and concentrations above try to identify 3 to 5 majors you'd like to explore:
- Circle the majors in this pathway that (at first glance) sound the most appealing to you.
- Cross out the majors that you have no interest in at all.
- Are there any majors or concentrations that you haven't circled or crossed out? Are there any majors that you'd like to learn more about in order to make a decision? Put a star next to those and let your Exploratory Advisor know about these majors.
**General Studies in this Pathway**

**Earth and the Environment Exploratory Pathway Guide**

**Foundational Skills ...**
- Written Communication + .................................................. 6
  - CO 1 and CO 2 or
  - CO 2 and CO 3
- Oral Communication ..................................................... 3
  - COMM 1010 Presentational Speaking or
  - COMM 1100 Fundamentals of Oral Communication

Strongly recommended for students who are interested in majors in this pathway.

- Quantitative Literacy + ................................................... 3
  - MTH 1080 Math for Liberal Arts or
    - MTH 1081 & 1082 Math for Liberal Arts w/Lab
  - MTH 1110 College Algebra for Calculus or
    - MTH 1111 and 1101 College Algebra w/Lab or
    - MTH 1108 & MTH 1109 Stretch Algebra
  - MTH 1210 Introduction to Statistics

**Discover Ideas (breadth) ...**
- Historical ........................................................................... 3
- Arts and Humanities ......................................................... 6
- Social and Behavioral Sciences ......................................... 6
- Natural and Physical Sciences ........................................... 6

**Expand your Views ...**
- Global Diversity++ ......................................................... 0 - 3
- Multicultural Graduation Requirement++ .......................... 0 - 3

**Exercise: Understanding Requirements**

Using the University Catalog’s Academic Program outlines and the general studies outline above, identify any specific general studies requirements that might be required or recommended for the majors you are considering. Record your findings using the strategic planning matrix on page 4.

*Things to think about: Are there any commonalities? What are the major differences?*

---

**English and Math Placement +**

Math and English placement at MSU Denver depend on a variety of factors. Work with your Exploratory Advisor to determine which courses for the Written Communication and Quantitative Literacy requirements are appropriate for you or to determine if you will need additional assessments to place you in the right sequence of courses.

More information on our Math and English Placement policies can be found on the Office of Testing Services website.

**Using General Studies to Explore**

General studies coursework is one way (of many) to explore your options for a major (and even a minor!). In some cases, majors may have specific general studies “supporting” course requirements which limit the ability to fully explore your options using just general studies requirements. Working with an Exploratory Advisor can help you with developing a strategy for using these requirements to explore your options in a way that is meaningful to you while keeping you on track to graduate within a reasonable time frame.

Check out the General Studies website for a complete list of General Studies options. Be sure to consult with your advisor before registering for classes!

**Multicultural and Global Diversity Requirements++**

The Global Diversity (GD) and Multicultural (MC) Graduation requirements can be satisfied through the general studies breadth requirements. Courses listed on the General Studies sheet with a (GD) or (MC) notation next to the course title will satisfy one of these two requirements in addition to the general studies category the class is listed under.

Check out the General Studies website for a complete list of Global Diversity and Multicultural options.
Integrating General Studies and Exploratory Courses

Earth and the Environment Exploratory Pathway Guide

When planning your schedule for this pathway you should consider taking a mix of general studies courses and exploratory courses (commonly referred to as gateway courses). Below is a list of recommended exploratory courses to consider. We usually recommend taking 3 general studies classes and 2 exploratory courses with a 15+ credit schedule, 1 exploratory course if taking a 12-credit schedule. Circle the courses that sound most appealing to you. Detailed course descriptions are available in the online University Catalog.

Recommended Exploratory Pathway Courses

- **General Studies Courses**
  - ANT 1010 Biological Anthropology
  - BIO 1080 General Biology I
  - BIO 1090 General Biology I Lab
  - BIO 1081 General Biology II*
  - BIO 1091 General Biology II Lab*
  - ENV 1200 Introduction to Environmental Science
  - GEG 1000 World Regional Geography
  - GEG 1100 Introduction to Physical Geography
  - GEG 1300 Introduction to Human Geography
  - GEG 1700 Principles of Sustainability
  - GEG 1910 Global Water Concerns
  - GEG 2700 Geographies of Environmental Justice
  - GEL 1010 Physical Geology
  - GEL 1020 Geology of Colorado
  - MTH 1210 Introduction to Statistics*
  - MTR 1400 Weather and Climate
  - MTR 1600 Global Climate Change
  - PSC 1010 American National Government
  - PSC 2230 Introduction to International Relations
  - SWK 1050 How to Change the World
  - SWK 3070 Environmental Justice in Social Work*

- **Gateway Courses**
  - these are not general studies courses, but they are great exploratory options for programs in this pathway
  - BIO 3200 Invertebrate Zoology*
  - BIO 3360 Animal Physiology*
  - ECO 3450 Environmental Economics*
  - ENV 1540 Geologic and Environmental Hazards-Denver and the Vicinity*
  - GEG 3410 Biogeography*
  - GEL 1030 Historical Geology*
  - GEL 1550 Geology of the Great Sand Dunes National Monument*
  - GIS 1220 Introduction to Geospatial Sciences
  - GIS 2250 Geographic Information Systems*
  - GWS 490B Gender and Environments
  - HIS 3625 American Environmental History*
  - MTR 3200 Climate Change and Ecosystems*
  - PHY 3082 Energy and the Environment*
  - PSC 3230 Environmental Politics*
  - SWK 3070 Environmental Justice in Social Work*
  - SOC 3770 Society and the Environment

* Has a required prerequisite class. Check with your Exploratory Advisor for guidance on these courses.