

Environmental Science Major – Bachelor of Arts (B.A.) Degree

The interdisciplinary B.A. in Environmental Science requires year-long core classes in Geography, Biology, and Chemistry, in addition to one statistics class and eight elective classes.

| 1. University Common Curriculum (48 quarter hours) | | Quarter offered |
|---|------------|------------------------|
| First Year Seminar | 4 qtr hrs | Fall |
| First Year Writing and Rhetoric | 8 qtr hrs | Winter, Spring |
| Foreign Language | 12 qtr hrs | Fall, Winter, Spring |
| Analytical Inquiry-Natural/Physical World (MATH 1200 or 1951) | 4 qtr hrs | Variable |
| Analytical Inquiry-Society and Culture | 8 qtr hrs | Variable |
| Scientific Inquiry-Society and Culture | 8 qtr hrs | Variable |
| Advanced Seminar | 4 qtr hrs | Variable |
| 2. Environmental Science Core (43 quarter hours) | | |
| GEOG 1201, 1202, 1203: Environmental Systems | 12 qtr hrs | Fall, Winter, Spring |
| BIOL 1011/1021: Evolution Heredity & Biodiversity (+lab) | 5 qtr hrs | Winter |
| BIOL 1010/1020: Physiological Systems (+lab) | 5 qtr hrs | Spring |
| BIOL 2010/2011: General Ecology (+lab) | 5 qtr hrs | Fall |
| CHEM 1010/1240: General Chemistry I (+ lab) | 4 qtr hrs | Fall |
| CHEM 1020/1250: General Chemistry II (+lab) | 4 qtr hrs | Winter |
| CHEM 2240: Introduction to Environmental Chemistry | 4 qtr hrs | Spring |
| Statistics (GEOG 2000, BIOL 2090, or PSYC 2300) | 4 qtr hrs | Spring |
| GEOG 2990: Prof. Development for Envi Sci Majors (Seniors only) | 0 qtr hrs | Spring |

3. Environmental Science Electives (32+ quarter hours). A minimum of 32 quarter hours from the following list of courses, including at least 8 hours in BIOL AND 8 hours in GEOG, GEOL, or ENVI. Other BIOL, GEOG, GEOL, ENVI classes not listed here may count for elective credit. No more than 5 quarter hours taken as Independent Study or Independent Research will be counted toward the minimum hours required in the major.

| BIOL 2510 | General Genetics | BIOL 3055 | Ecology of the Rockies |
|------------------|-------------------------------------|------------------|--|
| BIOL 3030 | Alpine Ecology | BIOL 3095 | Global Change Ecology |
| BIOL 3035 | Invasive Species Ecology | BIOL 3700 | Advanced Topics in Ecology |
| BIOL 3044 | Coral Reef Ecology | BIOL 3707 | Topics in Conservation Biology |
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| GEOG 2020 | Computer Assisted Cartography # | GEOG 3420 | Urban & Regional Planning # |
| GEOG 2100 | Introduction to GIS # | GEOG 3425 | Urban Sustainability * |
| GEOG 2401 | The Human Population * | GEOG 3440 | Urban Transportation Planning * |
| GEOG 2410 | Economic Geography * | GEOG 3445 | Sustainability and Transportation * |
| GEOG 2420 | Geography of Tourism * | GEOG 3500 | Reconstructing Quaternary Environments * |
| GEOG 2500 | Sustainability and Human Society # | GEOG 3510 | Biogeography * |
| GEOG 2550 | Current Issues in Sustainability # | GEOG 3520 | Geography of Soils * |
| GEOG 2700 | Contemporary Environmental Issues # | GEOG 3560 | Fluvial Geomorphology * |
| GEOG 3000 | Advanced Geographic Statistics # | GEOG 3600 | Meteorology * |
| GEOG 3010 | Geographic Information Analysis # | GEOG 3610 | Climatology * |
| GEOG 3100 | Geospatial Data * | GEOG 3630 | Dendroclimatology * |
| GEOG 3130 | GIS Programming with Python# | GEOG 3720 | Mountain Environments and Sustainability * |
| GEOG 3140 | GIS Database Design # | GEOG 3755 | Geographies of Health * |
| GEOG 3200 | Remote Sensing # | GEOG 3800 | Geography of Colorado * |
| GEOG 3230 | Advanced Remote Sensing * | GEOG 3870 | Water Resources and Sustainability * |
| GEOG 3310 | Cult/Nature/Econ/Human Ecology # | GEOG 3890 | Ecological Economics * |
| GEOG 3400 | Urban Landscapes # | GEOG 3940 | Urban Geography Seminar + |
| GEOG 3410 | Urban Applications of GIS * | GEOG 3955 | Pollen Analysis Seminar * |
| | | | - |

= offered every year * = offered every other year
Over for GEOL, ENVI, and CHEM elective classes

+ = offered occasionally

| GEOL 2020 | Historical Geology | GEOL 3100 | Environmental Geology |
|-----------|---------------------------------------|-----------|---|
| GEOL 2400 | Geology and Ecology of the SW | GEOL 3520 | Erosion Process and Management |
| GEOL 2800 | Geology of National Parks | GEOL 3540 | Groundwater Hydrology (aka GEOG 3530) |
| GEOL 3010 | Process Geomorphology (aka GEOG 3910) | | |
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| ENVI 2660 | Natural History – Sonora & Baja | ENVI 2801 | Water Quality of Western Rivers and Streams |
| ENVI 3000 | Environmental Law | ENVI 3550 | Environmental Issues – Colorado |
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| CHEM 3410 | Environmental Chemistry I Atmospheric | CHEM 3411 | Environmental Chemistry II: Aquatic |
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- **4. Minor.** Completion of at least 20-quarter hours in a minor field of study. (NOTE: Because of the 60-hour rule it may be impossible to minor in Geography, Geology, GISci, or Sustainability)
- **5. Minimum total quarter hours for degree:** 183 (75 hours must be upper-level: 2000 or 3000).
- 6. Suggested Academic Plan (Environmental Science Core Requirements are bolded)

| Year 1: Fall Quarter | Year 1: Winter Quarter | Year 1: Spring Quarter |
|---------------------------|------------------------------------|------------------------------------|
| Environmental Systems I | Environmental Systems II | Environmental Systems III |
| First Year Seminar (FSEM) | First Year Writing/Rhetoric (WRIT) | First Year Writing/Rhetoric (WRIT) |
| Common Curriculum Class | Foreign Language 2 | Foreign Language 3 |
| Foreign Language 1 | Evolution Heredity & Biodiversity | Physiological Systems |
| | | |
| Year 2: Fall Quarter | Year 2: Winter Quarter | Year 2: Spring Quarter |
| General Ecology | Common Curriculum Class | Common Curriculum Class |
| General Chemistry I | General Chemistry II | Environmental Chemistry |
| Major course | Major course or MATH | Statistics |
| Common Curriculum Class | Common Curriculum Class | Major course or MATH |
| | | |
| Year 3: Fall Quarter | Year 3: Winter Quarter | Year 3: Spring Quarter |
| Study Abroad | Major courses | Major courses |
| | Minor/elective courses | Minor/elective course |
| | | |
| Year 4: Fall Quarter | Year 4: Winter Quarter | Year 4: Spring Quarter |
| Field Quarter | Major courses | Major courses |
| | Minor/elective courses | Minor/elective courses |
| | Advanced Seminar/Common Curriculum | Advanced Seminar/Common Curriculum |
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