

ENVIRONMENTAL SCIENCES MINOR

Introduction

Please click here (<http://catalog.ucdenver.edu/cu-denver/undergraduate/schools-colleges-departments/college-liberal-arts-sciences/geography-environmental-sciences/>) to see Geography and Environmental Sciences department information.

The environmental sciences minor offers students exposure to the breadth of environmental issues. Students emphasize the natural/physical sciences, and may strategically incorporate the social sciences and humanities.

These program and degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Please see your advisor.
- Click here (<http://catalog.ucdenver.edu/cu-denver/undergraduate/records-registration/registration/declare-change-major-minor/>) to go to information about declaring a major/minor.

General Requirements

Students must satisfy all requirements as outlined below and by the department offering the minor.

- CU Denver General Graduation Requirements (<http://catalog.ucdenver.edu/cu-denver/undergraduate/graduation/general-graduation-requirements/>)
- Click here (<http://catalog.ucdenver.edu/cu-denver/undergraduate/academic-policies-procedures/>) for information about Academic Policies

Program Requirements

- Students must complete a minimum of 17 credit hours from the approved courses below.
- Students must complete a minimum of 9 upper-division (3000-level and above) credit hours in the minor chosen from the approved course list below.
- Students must earn a minimum grade of C- (1.7) in all minor courses taken at CU Denver and must achieve a minimum cumulative minor GPA of 2.0. All graded attempts in required and elective courses are calculated in the minor GPA. Students cannot complete minor or ancillary course requirements as pass/fail.
- Students must complete a minimum of 9 credit hours with CU Denver faculty from the list of courses below.

Program Restrictions, Allowances and Recommendations

- Many of the upper-division courses have prerequisites; the student must check the catalog for prerequisite requirements for these courses.
- The four upper-division elective courses for the Environmental Sciences minor cannot be from the student's major discipline, even if the particular course is not counted toward the major.
- Undergraduate students may count up to 3 credit hours of independent study (any combination of ENVS 4840 Independent Study: ENVS and ENVS 4880 Directed Research) towards elective credit in the minor as approved by the undergraduate coordinator.
- The lecture/laboratory sequence can be part of the requirements for the major, but not in the student's major department (i.e., a biology major cannot use the general biology sequence, but could use the general chemistry sequence, which is also required for the biology major).

Lecture/Laboratory Courses

Code	Title	Hours
<i>Take two of the following lecture/laboratory combinations (see Program 8-10 Requirement note 4, above):</i>		
BIOL 2020 & BIOL 2021	Molecules to Cells (Gen Bio) and Molecules to Cells Lab (Gen Bio)	4
BIOL 2010 & BIOL 2011	Organisms to Ecosystems (Gen Bio) and Organisms to Ecosystems Lab (Gen Bio)	4
CHEM 2031 & CHEM 2038	General Chemistry I and General Chemistry Laboratory I	4
CHEM 2061 & CHEM 2068	General Chemistry II and General Chemistry Laboratory II	5
ENVS 1044 & ENVS 1045	Introduction to Environmental Sciences and Introduction to Environmental Sciences Laboratory	4
GEOL 1073 & GEOL 1074	Physical Geology: Surface Processes and Physical Geology: Surface Processes Laboratory	4
GEOL 1083 & GEOL 1084	Physical Geology: Internal Processes and Physical Geology: Internal Processes Laboratory	4
PHYS 2010 & PHYS 2321	College Physics I and Intro Experimental Phys Lab I	5
PHYS 2020 & PHYS 2341	College Physics II and Intro Experimental Phys Lab II	5

Additional Courses

Code	Title	Hours
<i>Take three of the following courses outside of the student's major discipline (see Program Requirement note 2, above):</i>		
BIOL 3411	Principles of Ecology	3
CHEM 4700	Environmental Chemistry	3
ECON 4540	Environmental Economics	3
ENVS 4720	Climate Change: Causes, Impacts and Solutions	3
or GEOG 4720	Climate Change: Causes, Impacts and Solutions	
GEOG 3232	Weather and Climate	3
GEOG 3240	Colorado Climates	3

GEOG 4020	Earth Environments and Human Impacts	3
GEOG 4060	Remote Sensing I: Introduction to Environmental Remote Sensing	3
GEOG 4090	Environmental Modeling with Geographic Information Systems	3
GEOG 4230	Hazard Mitigation and Vulnerability Assessment	3
GEOG 4240	Applied Geomorphology	3
GEOG 4265	Sustainability in Resources Management	3
GEOG 4270	Glacial Geomorphology	3
GEOG 4280	Environmental Hydrology	4
GEOG 4335	Contemporary Environmental Issues	3
GEOG 4350	Environment and Society in the American Past	3
GEOG 4420	The Politics of Nature	3
GEOG 4440	Science, Policy and the Environment	3
GEOG 4731	Mountain Biogeography	4
GEOL 4030	Environmental Geology	3
PSCI 4354	Environmental Politics	3

To learn more about the Student Learning Outcomes for this program, please visit our website (<https://clas.ucdenver.edu/ges/programs/minors/minor-environmental-sciences/>).