

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 a breadth of contemporary environmental issues and the science that supports work on the environment. The curriculum emphasizes the natural and physical sciences but also includes coursework on 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, minor and CLAS advisors 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/schools-colleges-departments/college-liberal-arts-sciences/#policiestext>) 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.

- 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 GEOG, GEOL and ENVS courses.
- Students must complete a minimum of nine upper-division (3000-level and above) credit hours from GEOG, GEOL and ENVS courses.
- Students must earn a minimum grade of C- (1.7) in all courses applied to the minor and must achieve a minimum cumulative minor GPA of 2.0. Courses taken using P+/P/F or S/U grading cannot apply to minor requirements.
- Students must complete a minimum of nine credit hours with CU Denver faculty from GEOG, GEOL and ENVS courses.

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 three 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).

Code	Title	Hours
Complete two of the following lecture/laboratory combinations: ¹		8
Students can mix and match honors or majors specific lectures and labs as long as they are in the same sequence.		
BIOL 2010 & BIOL 2011	Organisms to Ecosystems (Gen Bio) and Organisms to Ecosystems Lab (Gen Bio)	
BIOL 2020 & BIOL 2021	Molecules to Cells (Gen Bio) and Molecules to Cells Lab (Gen Bio)	
BIOL 2030 & BIOL 2031	Honors Organisms to Ecosystems (Gen Bio) and Honors Organisms to Ecosystems Lab (Gen Bio)	
BIOL 2040 & BIOL 2041	Honors Molecules to Cells (Gen Bio) and Honors Molecules to Cells Lab (Gen Bio)	
CHEM 2031 & CHEM 2038	General Chemistry I and General Chemistry Laboratory I	
	or CHEM 2039 Majors General Chemistry I Laboratory	
	or CHEM 2088 Honors General Chemistry I Laboratory	
CHEM 2061 & CHEM 2068	General Chemistry II and General Chemistry Laboratory II	
	or CHEM 2069 Majors General Chemistry II Laboratory	
	or CHEM 2095 Honors General Chemistry II Laboratory	
CHEM 2081 & CHEM 2038	Honors General Chemistry I and General Chemistry Laboratory I	
	or CHEM 2039 Majors General Chemistry I Laboratory	
	or CHEM 2088 Honors General Chemistry I Laboratory	
CHEM 2091 & CHEM 2068	Honors General Chemistry II Lecture and General Chemistry Laboratory II	
	or CHEM 2069 Majors General Chemistry II Laboratory	
	or CHEM 2095 Honors General Chemistry II Laboratory	
ENVS 1044 & ENVS 1045	Introduction to Environmental Sciences and Introduction to Environmental Sciences Laboratory	
GEOL 1073 & GEOL 1074	Physical Geology: Surface Processes and Physical Geology: Surface Processes Laboratory	
GEOL 1083 & GEOL 1084	Physical Geology: Internal Processes and Physical Geology: Internal Processes Laboratory	
PHYS 2010 & PHYS 2321	College Physics I and Intro Experimental Phys Lab I	
PHYS 2020 & PHYS 2341	College Physics II and Intro Experimental Phys Lab II	
Take a minimum of nine additional elective credits from the following courses, outside of the student's major discipline ²		9

BIOL 3411	Principles of Ecology	
CHEM 4700	Environmental Chemistry	
ECON 4540	Environmental Economics	
ENVS/GEOG 4720	Climate Change: Causes, Impacts and Solutions	
GEOG/ENVS 3232	Weather and Climate	
GEOG 3240	Colorado Climates	
GEOG 4020	Earth Environments and Human Impacts	
GEOG 4060	Remote Sensing I: Introduction to Environmental Remote Sensing	
GEOG 4090	Environmental Modeling with Geographic Information Systems	
GEOG 4230	Hazard Mitigation and Vulnerability Assessment	
GEOG/GEOL 4240	Applied Geomorphology	
GEOG 4265	Sustainability in Resources Management	
GEOG/GEOL 4270	Glacial Geomorphology	
GEOG 4280	Environmental Hydrology	
GEOG 4335	Climate Change & Society	
GEOG 4350	Environment and Society in the American Past	
GEOG 4420	The Politics of Nature	
GEOG 4440	Science, Policy and the Environment	
GEOG 4731	Mountain Biogeography	
GEOG/ENVS 4740	Soil Science and Geography	
PSCI 4354	Environmental Politics	
Total Hours		17

¹ 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).

² 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.

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/>).