June 8, 2026

Environmental Studies Major
Requirements for students declaring the major fall 2017 or later

Philosophy of the degree

The BA in Environmental Studies emphasizes an applied, interdisciplinary approach to the human dimensions of environmental change. In the context of this degree: Applied refers to the emphasis of the degree on 'real-world' environmental challenges and the (proposed) solutions to those challenges. While the degree also teaches theory, it often does so with the objective of then applying that theory to real cases and problems. Interdisciplinary refers to the inclusion within the BA degree of classes that intentionally draw on and combine approaches, methods, frameworks, and lenses from more than one discipline (including communication, conservation biology, ecology, economics, environmental science, geography, philosophy, political science, public health, psychology, and sociology). The degree is positioned at the intersection of the natural sciences, social sciences, and humanities; students are exposed to and receive training in all three areas. Human dimensions of environmental change refers to the emphasis of the degree on the interconnectedness of, and feedback between, human- and environmental-systems**.**

Overview

The Environmental Studies (ENVS) Major requires a minimum of 63 credit hours and includes introductory course work in natural sciences, economics, and mathematics; intermediate (sophomore and junior level) coursework in policy, ethics, economics, and writing; and advanced coursework offered by several departments and programs at CU Boulder. Required courses taught by the ENVS program (introductory, cornerstone, advanced writing, and capstone) integrate the academic divisions of natural science, social science, and humanities, providing skills and knowledge applicable to the pursuit of solutions to environmental challenges faced at local to global scales.

Coursework in the ENVS major fulfills the following areas of the Arts and Sciences Core Curriculum: Natural Science, Contemporary Societies, Ideas and Values, and upper division Writing and Rhetoric. ENVS courses also may fulfill the Quantitative Reasoning and Mathematical Skills (QRMS) and Human Diversity requirements. All major coursework must be completed with a grade of C- or better and the cumulative GPA in all courses that apply to the ENVS major must be 2.00. A total of 45 credit hours with the ENVS prefix will apply toward the 120 credit hours required for the Bachelor of Arts degree from the College of Arts and Sciences. Students majoring in ENVS may have more than 15 credit hours available for upper division electives in addition to major coursework and A&S Core.

For information regarding plans of study within the ENVS major please refer to course description in the course catalog, the guidance documents posted on the ENVS undergraduate curriculum web pages, and, above all else, the ENVS faculty and academic advisors.
The ENVS major requirements and the courses that fulfill them are listed below and in the Degree Audit, found in MyCUInfo. Semester course offerings are updated frequently on the undergraduate curriculum pages of the ENVS Program Website.

Students are responsible for knowing and abiding by co- and prerequisites.
Read course descriptions.
*Contact host department to enroll.

NATURAL SCIENCE REQUIREMENTS

Purpose: Understand the scientific method in the natural sciences, how it generates knowledge, and be able to relate the results of scientific research to problems and questions as they relate to the environment, broadly defined.

Introductory Sequence in Environmental Studies

Complete both courses in the Environmental Studies sequence

- ENVS 1000 (4) Introduction to Environmental Studies
- ENVS 1001 (4) Introduction to Human Dimensions of Environmental Studies

Introductory Sequence in Biology or Earth Science

Complete one of the following options. All classes from this combination must be in the same department.

Biology option

Complete any two of these lecture/laboratory combinations

- EBIO 1100 (3) Biology and Society and EBIO 1110 Biology and Society Laboratory 1
- EBIO 1210 (3) General Biology 1 and EBIO 1230 (1) General Biology Laboratory 1
- EBIO 1220 (3) General Biology 2 and EBIO 1240 (1) General Biology Laboratory 2
- EBIO 1250 (4) Introduction to Ecology and Evolutionary Biology Research

ERTHogy option

Complete this course:

- ERTH 1030 (1) Introduction to ERTHogy Laboratory 1

and any two of the following introductory ERTHogy courses:

- ERTH 1010 (3) Exploring Earth or ERTH 1012 (3) Exploring Earth for Scientists
- ERTH 1020 (3) History of a Habitable Planet
- ERTH 1040 (3) ERTHogy of Colorado
- ERTH 1060 (3) Global Change: An Earth Science Perspective
- ERTH 1150 (3) Water, Energy and Environment: An Introduction to Earth Resources
- ERTH 1170 (3) Our Deadly Planet
- ERTH 2001 (4) Planet Earth

Atmospheric and Oceanic Sciences option

Complete all courses

- ATOC 1050 (3) Weather and the Atmosphere
- ATOC 1070 (1) Weather and the Atmosphere Laboratory
- ATOC 1060 (3) Our Changing Environment

Physical Geography option

Complete both courses

- GEOG 1001 (4) Our Changing Planet: Climate and Vegetation (with lab)
- GEOG 1011 (4) Our Changing Planet: Landscapes and Water (with lab)

Introductory Course in Chemistry or Physics

Choose one course (and the lab, if required) from the following:

- CHEM 1011 (3) Environmental Chemistry 1
- CHEM 1113 (4) General Chemistry 1 and CHEM 1114 (1) Laboratory in General Chemistry 1
- PHYS 1110 (4) General Physics 1 (calculus based)
- PHYS 2010 (5) General Physics 1 (algebra based) (with lab)

Intermediate Natural Science

Choose one course (and the lab, if required) from the following:

- ENVS 2000 (4) Applied Ecology for Environmental Studies
- ENVS/CVEN 3434 (3) Introduction to Applied Ecology*
- ENVS/ATOC 3600/GEOG 3601 (3) Principles of Climate
- EBIO 2040 (4) Principles of Ecology
- GEOG 3511 (4) The Water Cycle
- ERTH 2001 (4) Planet Earth
- ERTH 2005 (4) Introduction to Earth Materials

SOCIAL SCIENCE REQUIREMENTS

Intermediate Policy

Purpose: Gain a basic knowledge of existing environmental laws and policies and the processes through which they are developed and implemented. Learn to analyze environmental problems and critically assess the ways in which public policies may help to address them.

Choose one course from the following:

- PSCI 2106 (3) Introduction to Public Policy Analysis
- PSCI 2116 (3) Introduction to Environmental Policy and Policy Analysis
- PSCI 3206 (3) The Environment & Public Policy

Intermediate Social Science

Purpose: Intermediate Social Science courses aim to teach students how social science can be used to understand the human dimensions of environmental change. In these courses, students will gain familiarity with social science research methods and how they can be used to characterize and address environmental challenges. Students will learn to use social science research methods to frame a problem, to collect and analyze data, and/or develop conclusions about the human dimensions of environmental change.

Choose one course from the following:

- ENVS/GEOG 3022 (3) Climate Politics and Policy
- ENVS 3030 (3) Topics in Environnemental Social Sciences
- ENVS 3031 (3) Environnemental Psychology
- ENVS 3032 (3) Environment, Media and Society
- ENVS 3033 (3) Governing the Environment
- ENVS 3034 (3) Environmental Justice

VALUES REQUIREMENTS

Purpose: Examine the economic drivers and underlying moral beliefs, personal and social ethics, principles, and theoretical commitments that often inform environmental discourse and also drive decision-making.

Economics

Complete this course:

- ECON 2010 (4) Principles of Microeconomics

and choose one course from the following:

- ECON 3535 (3) Natural Resource Economics or
- ECON 3545 (3) Environmental Economics

Students are responsible for knowing and abiding by co- and prerequisites.
Read course descriptions.
*Contact host department to enroll.

Ethics

Choose one course from the following:

- ENVS/PHIL 3140 (3) Environnemental Ethiasgeog 3023
- ENVS/PSCI 3064 (3) Environnemental Political Theory

SKILLS REQUIREMENTS

Statistics or Calculus

Purpose: Learn to use mathematical approaches to quantify, understand, and develop solutions to complex issues.

Choose one course from the following (not all courses fulfill the Gen. Ed. QRMS requirement):

- APPM 1350 (4) Calculus 1 for Engineers
- EBIO 1010 (3) Introduction to Statistics and Quantitative Thinking for Biologists
- EBIO 4410 (4) Biological Statistics
- ENVS 2010 (4) Introduction to Statistics for Environmental Studies+
- GEOG/ERTH 3023 (4) Statistics and Geographic Data
- MATH 1300 (5) Calculus 1
- MATH 1310 (5) Calculus for Life Sciences
- MATH 2510 (3) Introduction to Statistics
- PSCI 2075 (3) Quantitative Research Methods
- PSYC 2111 (4) Psychological Science 1: Statistics (this course does *not* fulfill the Gen. Ed. QRMS requirement)
- SOCY 2061 (3) Introduction to Social Statistics

Writing

Purpose: Develop an understanding of rhetorical situations in professional writing and be able to apply critical thinking skills when communicating. Learn to frame a problem and develop an idea from knowledge based on evidence.

Complete this course:

- ENVS 3020 (3) Advanced Writing in Environmental Studies

Application

Purpose: Application courses in ENVS aim to help students do one or more of the following: a) develop specific, practical skills, b) acquire practical, 'hands-on' experience, and/or c) apply their knowledge and skills in 'real-world' contexts. Many Application classes are taught outside of the classroom (e.g., as field courses, internships, or Education Abroad classes) but some Applications classes are taught in the classroom but engage in real-world projects with clients or stakeholders or teach practical skills.

Choose one course from the following:

- ENVS 2100 (3-4) Topics in Applied Environmental Studies
- ENVS 3001 (3) Sustainable Solutions Consulting
- ENVS 3005 (3) Environmental Education: From Theory to Practice
- ENVS 3100 (3-4) Topics in Applied Environmental Studies
- ENVS 3103 (3) Mining in Four Corners
- ENVS 3173/THTR 4173/ATLS 3173 (3) Creative Climate Communication
- ENVS/IAFS 3640 (3) Data Analysis for Global Environmental Affairs
- ENVS 3930 (3) Internship*
- ENVS 4050 (3) Field Methods in Ecosystem Sciences

Students are responsible for knowing and abiding by co- and prerequisites.
Read course descriptions.
*Contact host department to enroll.

- ENVS 4340 (4) Conservation Biology and Practice in Brazils Atlantic Forest*
- ENVS/ MUSM 4795 (3) Field Methods in Zoology and Botany
- EBIO 4320 (3) Conservation Planning and Structured Decision Making
- EBIO 4460 (2) Special Topics: Field Methods
- ARTS 4444 (6) Art and Environments Field School
- CVEN 3434 (3) Introduction to Applied Ecology*
- EBIO 4090 (4) Coral Reef Ecology*
- EBIO 4100 (3) Advanced Ecology *
- EDUC 4833 (3) Teaching and Learning Earth Systems*
- EVEN 4100 (3) Environmental Sampling and Analysis*
- ERTH 2700 (3) Introduction to Field ERTHogy*

CORNERSTONE REQUIREMENT

Purpose: Cornerstone courses in ENVS aim to synthesize knowledge and skills gained in lower-division environmental courses. These courses are all taught within the ENVS department and are one of the core opportunities in the ENVS curriculum for students to engage with environmental challenges and solutions from an applied, interdisciplinary approach to the human dimensions of environmental change that integrates the natural sciences, social sciences, and humanities. Cornerstone courses engage students in an in-depth study of a specific topic (e.g., climate change, energy, natural resources, or sustainability). Students become conversant with how science, policy, and values can be integrated into environmental problem solving and gain competencies in critically engaging with proposed solutions to environmental challenges. Cornerstone courses are intended for juniors and must be completed at CU Boulder. These courses help students to prepare for Specialization and Capstone courses.

Choose one course from the following:

- ENVS/ ERTH 3520 (3) Energy & Climate Change: An Interdisciplinary Approach
- ENVS 3525 (3) Intermediate Environmental Problem Analysis: Topical Cornerstone
- ENVS 3555 (3) Sustainable Economies
- ENVS 3621 (3) Energy, Policy & Society

CAPSTONE REQUIREMENT

Purpose: Capstone courses in ENVS aim to synthesize knowledge and skills gained throughout the ENVS curriculum. These courses are all taught within the ENVS department and are the culminating opportunity in the ENVS curriculum for students to engage with environmental challenges and solutions from an applied, interdisciplinary, approach to the human dimensions of environmental change that integrates the natural sciences, social sciences, and humanities. Capstone courses engage students in an in-depth study of a specific topic (e.g., climate change, energy, natural resources, or sustainability). These courses contain a project-based experience, whereby students work alone or in groups to develop a significant capstone project (i.e., a project that is undertaken over several weeks or the entire semester). This project can be more theoretical and scholarly, or more applied. Students become conversant with how science, policy, and values can be integrated into environmental problem solving and gain competencies in critically engaging with proposed solutions to environmental challenges. Capstone courses are intended for seniors and must be completed at CU Boulder.

Choose one course from the following:

- ENVS 4800 (3) Capstone: Critical Thinking in Environmental Studies (students may take only one ENVS 4800 class)
- ENVS 4850 (1-3) ENVS Honors Thesis Research
- ENVS 4950 (3) Seminar: ENVS Honors Thesis

Students are responsible for knowing and abiding by co- and prerequisites.
Read course descriptions.
*Contact host department to enroll.

- ENVS 4990 (3) Senior Thesis*

SPECIALIZATION REQUIREMENT

Purpose: Specialization courses allow students to focus on one aspect of environmental studies and develop a greater depth of understanding on a topic. Specialization courses focus on one or more specific aspects of either a) the human dimensions of environmental change, or b) environmental science. Specialization courses are all upper-division (i.e., 3000- or 4000-level) courses. Students have extensive latitude in the Specialization courses they choose and can select Specialization classes that in aggregate help them to develop expertise in an area of focus that meets their interests and goals.

Complete a minimum of 12 credits from the following list.
Upper division courses that fulfill the Intermediate Natural Science, Intermediate Social Science, Policy, Application, Cornerstone and Capstone requirements may apply toward the specialization requirement if those areas are already fulfilled with another course. No course may apply to two areas in the ENVS major.

- ENVS 3001 (3) Sustainable Solutions Consulting
- ENVS 3005 (3) Environmental Education: From Theory to Practice
- ENVS 3007 (3) Animal Ethics and Policy
- ENVS/EBIO 3040 (4) Conservation Biology
- ENVS/PHYS 3070 (3) Energy & the Environment
- ENVS/ERTH 3520 (3) Energy & Climate Change
- ENVS/ATOC 3600/GEOG 3601 (3) Principles of Climate
- ENVS 3621 (3) Energy, Policy & Society
- ENVS/SOCY 4027 (3) Inequality, Democracy & the Environment
- ENVS/SOCY 4030 (3) Sociology of Climate Change
- ENVS 4100 (3) Special Topics in Environmental Studies
- ENVS 4120 (4) Special Topics in Environmental Studies
- ENVS 4135 (3) Dogs, Wolves and Humans
- ENVS/EBIO/ERTH 4160 (3) Introduction to Biogeochemistry
- ENVS/GEOG 4201 (3) Biometeorology
- ANTH 4020 (3) Explorations in Anthropology: Conservation/Indigenous Peoples
- ATOC 3050 (3) Principles of Weather
- ATOC 3070/ERTH 3070 (3) Introduction to Oceanography
- ATOC 3300/GEOG 3301 (3) Analysis of Climate & Weather Observations
- ATOC 3500/CHEM 3151 (3) Air Chemistry & Pollution
- ATOC 4200 (3) Biogeochemical Oceanography
- ATOC 4215 (3) Descriptive Physical Oceanography
- ATOC 4550 (3) Mountain Meteorology
- ATOC 4700 (3) Weather Analysis & Forecasting
- ATOC 4720 (3) Introduction to Atmospheric Dynamics
- ATOC 4730 (3) Physical Oceanography and Climate
- ATOC 4750 (3) Desert Meteorology
- ATOC 4770 (3) Renewable Energy Meteorology
- ATOC 4780 (3) Ice Sheets and Climate
- ATOC 4800 (3) Policy Implications of Climate Controversies
- ATOC 4840 (3) Field Observations and Measurements Laboratory

Students are responsible for knowing and abiding by co- and prerequisites.
Read course descriptions.
*Contact host department to enroll.

- COMM 3370 (3) Environmental Communication
- COMM 3380 (3) Advanced Topics in Storytelling, Culture, & Climate Justice
- CVEN 4404 (3) Water Chemistry
- CVEN 4414 (1) Water Chemistry Laboratory
- EBIO 3180 (3) Global Ecology
- EBIO 3190 (3) Tropical Marine Ecology
- EBIO 3270 (3) Ecosystem Ecology
- EBIO/APRD 3523 (3) The Art and Strategy of Science Communication: Branding Climate Change
- EBIO 3590 (3) Plants and Society
- EBIO 4020 (3) Stream Biology
- EBIO 4030 (3) Limnology
- EBIO 4060 (3) Landscape Ecology
- EBIO 4140 (3) Plant Ecology
- EBIO 4145 (3) Restoration Ecology
- EBIO 4155 (3) Ecosystem Ecology
- EBIO 4460 (3) Global Land Degredation and Restoration
- EBIO 4800 (3) Critical Thinking in Biology:
    - Novel Ecosystems Soil Ecology
    - Ecosystem Management
    - Intervention Ecology
    - Land Use Sustainability
    - Microbial Ecology
- ECON 3403 (3) International Economics & Policy
- ECON 3784 (3) Economic Development & Policy
- ENVD 4023 (3) Environmental Impact Assessment
- FILM 3041 (3) Environmental Cinema
- GEOG 3053 (4) GIS: Mapping
- GEOG 3251 (3) Mountain Geography
- GEOG 3351 (3) Biogeography
- GEOG 3402 (3) Natural Hazards
- GEOG 3412 (3) Conservation Practice
- GEOG 3422 (3) Political Ecology
- GEOG 3612 (3) Geography of American Cities
- GEOG 3622 (3) Cities of the Global South
- GEOG 3682 (3) Geography of International Development
- GEOG 3692 (3) Introduction to Global Public Health
- GEOG 3812 (3) Mexico, Central America & the Caribbean
- GEOG 3822 (3) Geography of China
- GEOG 3832 (3) Geographies of South Asia
- GEOG 3862 (3) Geography of Africa
- GEOG 3882 (3) Geography of the Former Soviet Union
- GEOG/ERTH 4093 (4) Remote Sensing of the Environment
- GEOG/ERTH 4241 (4) Principles of Geomorphology
- GEOG 4271 (3) The Arctic Climate System
- GEOG 4321 (3-4) Snow Hydrology

Students are responsible for knowing and abiding by co- and prerequisites.
Read course descriptions.
*Contact host department to enroll.

- GEOG 4371 (3) Forest Geography: Principles & Dynamics
- GEOG 4401 (3) Soils Geography
- GEOG 4430 (3) Conservation Trends
- GEOG 4501 (3) Water Resources & Water Management of Western US
- GEOG 4632 (3) Development Geography
- GEOG 4712 (3) Political Geography
- GEOG 4732 (3) Population Geography
- GEOG 4742 (3) Topics in Environment and Society:
    - Hazard & Risk Assessment
    - Landscape, Society & Meaning
- GEOG 4772 (3) Geography of Food and Agriculture
- GEOG 4812 (3) Environment and Development in South America
- GEOG 4852 (3) Health and Medical Geography
- ERTH 3030 (3) Introduction to HydroERTHogy
- ERTH 3040 (3) Global Change: The Recent ERTHogical Record
- ERTH 3130 (3) Global Warming, Understanding the Forecast
- ERTH 3320 (3) Introduction to Geochemistry
- ERTH 3820 (3) The Fluid Earth
- ERTH 3950 (3) Natural Catastrophes and ERTHogic Hazards
- ERTH 4060 (4) Oceanography
- HIST 4416 (3) Environmental History of North America
- JPNS 3881 (3) Environment, Nature and Disaster in Japanese Literature and Culture
- PACS 3860 (3) Environmental Conflict and Conflict Resolution
- PHIL 2140 (3) Environmental Justice
- PSCI 4012 (3) Global Development
- PSCI 4732 (3) Critical Thinking in Development
- RUSS/SCAN 3251 (3) Arctic Noir: Environment, Landscape and Literature of the Far North
- SOCY 3002 (3) Population and Society*
- SOCY 3012 (3) Women and Development*
- SOCY 4007 (3) Global Human Ecology*
- SOCY 4037 (3) Hazards, Disasters & Society*
- SOCY 4047 (3) Topics in Environment and Society
- SOCY 4052 (3) Social Inequalities in Health
- SOCY 4117 (3) Food and Society

Additional Notes

1. Many CU Study Abroad programs have courses approved for Application and Specialization requirements.
2. If you took a course not listed as a specialization and would like to see if it can be applied to the major, please consult your academic advisor.
3. Topics courses may apply to the ENVS specialization requirement, although offerings will vary semester by semester. For current semester course lists, which include topics classes, refer to the ENVS undergraduate curriculum web pages.
4. Topics course numbers that may apply to the ENVS major, depending upon course content, include:
    - ANTH 4020 - Explorations in Anthropology
    - ATOC 4500 - Special Topics in Atmospheric and Oceanic Sciences

Students are responsible for knowing and abiding by co- and prerequisites.
Read course descriptions.
*Contact host department to enroll.

- EBIO 4460 - Special Topics
- ENVD 4363 – Special Topics: Physical Factors in Environmental Design
- GEOG 4001 - Special Topics in Geography
- GEOG 4002 - Special Topics in Geography
- GEOG 4003 - Special Topics in Geography

Students are responsible for knowing and abiding by co- and prerequisites.
Read course descriptions.
*Contact host department to enroll.