Environmental Studies

Faculty

Kelly Grey Carlisle, Ph.D., Associate Professor, English
Greg Hazleton, Ph.D., Visiting Assistant Professor
Glenn Kroeger, Ph.D., Associate Professor, Geosciences
Kelly Lyons, Ph.D., Professor, Biology
Jennifer P. Mathews, Ph.D., Professor, Sociology and Anthropology
Shana McDermott, Ph.D., Assistant Professor, Economics
Troy Murphy, Ph.D., Associate Professor, Biology
Judith Norman, Ph.D., Professor, Philosophy
Richard K. Reed, Ph.D., Professor, Sociology and Anthropology
David Ribble, Ph.D., Professor, Biology; Director
Heather Sullivan, Ph.D., Professor, Modern Languages and Literatures
Benjamin Surpless, Ph.D., Associate Professor, Geosciences
Elizabeth Ward, M.F.A., Professor, Art and Art History

Overview

Environmental Studies is an interdisciplinary major that focuses on the environment and humans’ relationship with it. The program incorporates a variety of approaches in the arts and humanities, the natural sciences, social analysis, and social policy. Students may choose an Environmental Studies major to explore the environment from a scientific perspective or to prepare for a career in one of the many fields that seek to monitor, shape, or interpret our relationship with it. Environmental Studies majors have extensive interaction with the natural world in research, class projects, and internships.

Requirements

- The Major
- The Minor
- Honors in Environmental Studies
The Major

The requirements for the degree of Bachelor of Arts with a major in Environmental Studies are at least 42 credit hours, including at least 18 upper division credit hours, as follows:

I. The Introductory Course (3 credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ENVI 1301</td>
<td>Introduction to Environmental Studies</td>
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II. Fundamentals (13-15 credit hours)

In addition to the Introductory Course, the Fundamentals provide foundational knowledge and skills for students engaged in Environmental Studies. Students must take at least one course from each of the categories below.

A. Environmental Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOL 1311</td>
<td>Integrative Biology (with BIOL 1111 Introductory Biology Lab) or</td>
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<tr>
<td>GEOS 1409</td>
<td>Earth's Environmental Systems</td>
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B. Environmental Policy

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ANTH 2357</td>
<td>Humans and the Environment or</td>
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<tr>
<td>ECON 1311</td>
<td>Principles of Microeconomics</td>
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C. Environmental Arts and Humanities

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>PHIL 1350</td>
<td>Environmental Ethics or</td>
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<tr>
<td>CMLT 2350</td>
<td>Science Fiction and the Environment</td>
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D. Quantative Skills

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>MATH 1320</td>
<td>Statistical Methods or</td>
</tr>
<tr>
<td>GEOS 3408</td>
<td>GIS and Remote Sensing or</td>
</tr>
<tr>
<td>URBS/SOCI 3465</td>
<td>Research Methods: GIS</td>
</tr>
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III. Environmental Science core (11-12 credit hours)

Take at least 3 of the following:

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BIOL 2312</td>
<td>Cells and Cell Systems (with BIOL 2112 Cells and Cell Systems Lab)</td>
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</tbody>
</table>
BIOL 3413  Genes, Phenotypes, and Evolutionary Dynamics
BIOL 3434  Ecology
BIOL 3435  Evolution
BIOL 4351  Conservation Biology
CHEM 2319  Organic Chemistry I (with CHEM 2119 Laboratory Methods in Organic Chemistry)
GEOS 2400  Solid Earth Processes
GEOS 2402  Earth Surface Processes
GEOS 3310  Global Climate Change
GEOS 3411  Hydrogeology
GEOS 3421  Environmental Geochemistry

IV. Environmental Policy core (6 credit hours)

Take at least 2 of the following:

ANTH/SOCI 3345  International Issues in Health and the Environment
BUSN 3314  Sustainability and Corporate Social Responsibility: A Global Concern
ECON/URBS 3330  Economics and the Environment
ECON/URBS 3334  Urban Economics
PLSI 3413  Policy Analysis and the Policymaking Process
SOCI 3340  Urban Geography

V. Environmental Humanities and Arts core (6 credit hours)

Take at least 2 of the following:

ART 2495  Outdoor Studio
CMLT 2301  World Literature and the Environment
COMM 3323  Environmental Communication in Asia
ENVI 3301  Environmental Literature

VI. Beyond Trinity

Although not required for the major, students are encouraged to engage in off-campus internship opportunities or to gain experience writing grants and fundraising to support environmental not-for-profit organizations.
ALE 3301  Grant Writing and Fundraising
ENVI 4395  Environmental Studies Internship

VI. Senior Seminar in Environmental Studies (3 credit hours)

ENVI 4301  Senior Seminar in Environmental Studies

VIII. University requirements:

Completion of all other required elements of the Pathways curriculum and at least 120 credit hours.

The Minor

The Environmental Studies minor is an interdisciplinary study of the Earth's environment and human interaction with that environment. The required courses address environmental issues from natural science, economic, and sociocultural perspectives. At least nine hours need to be upper-division courses. In addition, it is recommended that Environmental Studies Minors complete ENVI 4301, Senior Seminar in Environmental Studies.

Given the breadth of this minor, a significant overlap with a student’s choice of Pathways courses is both expected and encouraged. To that end, courses that fulfill an understanding are indicated (*) in the following lists.

Requirements for the minor are listed below, including at least 12 hours of lower division and 9 hours of upper division courses.

I. Required Courses

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ENVI 1301*</td>
<td>Introduction to Environmental Studies</td>
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<tr>
<td>BIOL 1311*</td>
<td>Integrative Biology</td>
</tr>
<tr>
<td>BIOL 1111</td>
<td>Introductory Biology Lab</td>
</tr>
<tr>
<td>ECON 1311*</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>GEOS 1409</td>
<td>Earth's Environmental Systems</td>
</tr>
<tr>
<td>GEOS 2400</td>
<td>Solid Earth Processes</td>
</tr>
<tr>
<td>ECON 3333*</td>
<td>Economics and the Environment (also listed as URBS 3333)</td>
</tr>
</tbody>
</table>

II. One course from the following list (check catalog for prerequisites)

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BIOL 3434</td>
<td>Ecology</td>
</tr>
</tbody>
</table>
BIOL 3420  Animal Behavior
CHEM 2319*  Organic Chemistry I
CHEM 2119*  Laboratory Methods in Organic Chemistry
ENGR 2311  Mass and Energy Balances
GEOS 2402  Earth Surface Processes
GEOS 3411  Hydrogeology
GEOS 3408  GIS and Remote Sensing
GEOS 3421  Environmental Geochemistry

III. One course from the following list (check catalog for prerequisites)

ANTH 2357  Humans and the Environment
ANTH 3464  Morality in the Marketplace
ANTH 4354  Seminar on Primatology
CMLT 2301  World Literature and the Environment
ECON 3318  The Global Economy
ECON 3334  Urban Economics (also listed as URBS 3334)
ENVI 3301  Environmental Literature
ENVI 4390  Topics in Environmental Policy
HIST 3382  The City in History (also listed as URBS 3305)
PLSI 3413  Policy Analysis and the Policymaking Process
URBS 3305  The City in History (also listed as HIST 3382)
URBS 3334  Urban Economics (also listed as ECON3334)
ENVI 4301  Recommended: Senior Seminar in Environmental Studies

The course is available to seniors and may be taken only once for credit.

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Honors in Environmental Studies

Environmental Studies majors are eligible to receive Honors if they have completed two semesters of Senior Thesis credit and presented a senior thesis or project, which has been evaluated and approved by Environmental Studies faculty. In addition, students must attain an overall 3.3 grade point average cumulatively and in the major. Prior to
registration for their senior year, Environmental Studies Honors candidates must meet with the Environmental Studies program Director and arrange for the faculty thesis director and two additional faculty members to act as an Honors Advisory Committee. Students must submit to the program Director a written request to graduate with Honors in Environmental Studies no later than the first full week of the student's final semester before graduation. The decision to confer or not to confer Honors will be made by the program Director, the Honors Committee and two additional faculty from the Environmental Studies Committee, based on the quality of the written thesis or art work and the oral presentation of that material.

Courses

ENVI-1301 Introduction to Environmental Studies
Students study an interdisciplinary approach to environmental inquiry and action, which spans three areas: the natural sciences, social policy, and the humanities. Students engage in readings, discussions, and field trips from biology, geosciences, economics, social justice, art, ethics, and literature. This approach introduces students to the broad field of Environmental Studies and to the specific tracks of the major. (Offered every year.)

ENVI-1305 Advanced Placement Credit in Environmental Science
Students earning 4 or 5 on the Advanced Placement Test in Environmental Science or earn at least a 5 in the International Baccalaureate Environmental Systems and Societies course will receive AP credit through this course.

ENVI-2-10 Environmental Studies Field School
Students will analyze the changing face of geological systems, flora and fauna, and human society over time and space. Particular attention will be paid to land use over time and space, using skills of the natural sciences and policy analysis, as well as perspectives of art and literature.

ENVI-3301 Environmental Literature
This course introduces students to environmental literature, including traditional nature writing from the nineteenth century to the present and more contemporary literary expressions about environment that reach beyond nature writing. Students will explore how literary works and critical theories help shape environmental understanding and how literary practices relate to other kinds of environmental discourses, such as those in the sciences and policy arenas. (Offered every Spring.)

ENVI-3-90 Environmental Studies Independent Study
Individual research in a selected area or of a selected topic. A student may repeat the course for a maximum of six semester hours. A project proposal must be submitted to and approved by the professor supervising the research prior to registration. Prerequisite: consent of instructor.

ENVI-4301 Senior Seminar in Environmental Studies
An in-depth synthesis of special topics from the Environmental Studies curriculum, with application to current
environmental problems. Student work will integrate the three primary areas of environmental studies: the natural sciences, policy analysis and arts and humanities. Prerequisites: Senior standing

ENVI-4390 Topics in Environmental Policy
The course examines environmental policy as applied to specific cases of environmental problems and natural resource management. Topics vary. A student may repeat the course for a maximum of six semester hours. Prerequisite: Consent of the program chair required

ENVI-4395 Environmental Studies Internship
Field work experience in a setting arranged and approved by the student, a faculty member of the Environmental Studies Advisory committee, and a non-University institution. Supervision and guidance will be provided by the host agency and contact with the professor must be maintained. A student may repeat the course for a maximum of six semester hours. This course is taken Pass/Fail.

ENVI-4398 Thesis Research
Independent scholarly, scientific, or artistic work conducted under the supervision of a faculty thesis director. Course enrollment requires that the student submit a proposal, with the approval of a thesis director, to the Environmental Studies program chair before classes commence in the semester of ENVI 4398 credit. That proposal will be considered for approval by the program chair in consultation with the thesis director before the end of the add-drop period. (Every semester)

ENVI-4399 Thesis Writing and Presentation
A continuation of student work begun in ENVI 4398. Students are required to complete the project and present their work to students and faculty, the latter including the Environmental Studies program chair, the faculty mentor, and at least two other faculty members. (Every Semester) Prerequisite: Senior status required and ENVI 4398