

## ENVIRONMENTAL STUDIES IN THE COLLEGE OF AGRICULTURE AND LIFE SCIENCES

<http://www.uvm.edu/~envprog/>

The environment is a common theme in the courses offered at UVM. The College of Agriculture and Life Sciences (CALs) partners with the Rubenstein School of the Environment and Natural Resources and the College of Arts and Sciences to offer two interdisciplinary majors: Environmental Sciences and Environmental Studies.

### CALS ENVIRONMENTAL STUDIES MAJOR

The Environmental Studies Program at University of Vermont was established in 1972 to meet the need for greater understanding of the ecological and cultural systems supporting all life on earth. This broadly interdisciplinary program is a campus-wide program serving students in four colleges across the university. The faculty are committed interdisciplinary thinkers drawing on the sciences, social sciences, and humanities to create a lively hub, addressing local and global issues with equal concern. We believe in collaborative problem-solving and the power of human imagination to create a more sustainable future.

The Environmental Program offers a major in Environmental Studies (ENVS) that can be pursued in three different colleges, including the College of Agriculture and Life Sciences, the College of Arts and Sciences, and the Rubenstein School of Environment and Natural Resources. Students can choose which college best suits their broad educational needs and then pursue the Environmental Studies major from within that college. While major requirements differ slightly from college to college, the core curriculum is the same. Following the introductory courses and working closely with faculty advisors, each student creates a plan for an individually-designed major. The major culminates in a final capstone internship, thesis, or advanced courses, usually carried out in the senior year.

### MAJORS

#### ENVIRONMENTAL STUDIES MAJOR

Environmental Studies B.S. (<http://catalogue.uvm.edu/undergraduate/agricultureandlifesciences/environmentalstudies/environmentalstudiesbs/>)

### MINORS

#### ENVIRONMENTAL STUDIES MINOR

Environmental Studies (<http://catalogue.uvm.edu/undergraduate/agricultureandlifesciences/environmentalstudies/environmentalstudiesminor/>)

### Courses

#### ENVS 001. SU: Intro to Envrnmtl Studies. 0 or 4 Credits.

Survey of environmental studies examining ecological, socioeconomic, aesthetic, and technological influences determining quality of life on earth. Prerequisite: First-year/Sophomore standing.

#### ENVS 002. D2:SU:Solutions in Env Studies. 0 or 4 Credits.

Analysis and critique of grand challenges in environmental studies with an emphasis on understanding and solving pervasive global and local environmental problems such as global climate change.

#### ENVS 091. Internship. 1-3 Credits.

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

#### ENVS 092. Independent Study. 1-18 Credits.

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### ENVS 095. Special Topics. 1-18 Credits.

Introductory courses of current areas of interest which vary each semester. Topics have included environmental health, energy, regional planning, international studies, literature, ethics, and natural areas management.

#### ENVS 096. Special Topics. 1-18 Credits.

Introductory courses of current areas of interest which vary each semester. Topics have included environmental health, energy, regional planning, international studies, literature, ethics, and natural areas management.

#### ENVS 101. Academic Planning Workshop. 1 Credit.

Individual investigation and design of major plan in Environmental Studies with emphasis on academic and career choices. Prerequisites: ENVS 001, ENVS 002; Environmental Studies major.

#### ENVS 105. Applied Ecology. 3 Credits.

Provides a knowledge base of some of the key concepts, ideas, relationships, and tensions in ecology. Demonstrates how to apply an ecological perspective to identifying, framing, and addressing a variety of contemporary environmental and conservation problems and challenges. Prerequisites: ENVS 001 and ENVS 002.

#### ENVS 107. SU: Human Health & Envirnmnt. 3 Credits.

Offers an introduction to "environmental health." Topics include: methods (toxicology, epidemiology) environmental health hazards (physical, biological, chemical) and supports (nature contact), risk analysis, communication and management, health and climate change, food production and access, energy production, and water. Prerequisite: Sophomore standing. Cross-listed with: HLTH 107, NR 107.

**ENVS 121. Ecosystems' Nonmaterial Values. 3 Credits.**

Explores the nonmaterial ways ecosystems benefit people (e.g., spiritually, psychologically), and how those benefits might be incorporated into decision-making. In addressing these Cultural Ecosystem Services, its approach is both appreciative and critical. Ethical implications figure prominently. Prerequisites: ENVS 001 and ENVS 002.

**ENVS 137. Landscape Design Fundamentals. 0 or 4 Credits.**

Studio course to learn techniques of landscape design and analysis, develop graphic communication skills for representing the landscape, and apply sustainable design principles to a site. Pre/co-requisites: Junior standing; at least one course in drawing, design, or mapping, or permission of the Instructor. Cross-listed with: CDAE 137, PSS 137, NR 137.

**ENVS 141. Intro to Ecological Economics. 3 Credits.**

Introduction to the study of economics as dependent on social and environmental systems and to transdisciplinary problem-solving using ecological economics. Prerequisite: Minimum Sophomore standing. Cross-listed with: NR 141.

**ENVS 142. Intro to Environmental Policy. 3 Credits.**

Introduction to policy aspects of environment and natural resources including policy processes, public governance, and citizen participation with applications to environmental issues. Prerequisite: NR 104 or POLS 021. Cross-listed with: NR 153.

**ENVS 143. Political Ecology. 3 Credits.**

Human-environment interactions under globalization. Social and economic causes of global and local environmental problems. Environmental movements and sustainable livelihoods in First and Third Worlds. Prerequisites: GEOG 050 or GEOG 070 or ENVS 002; and ENSC 001 or ENVS 001 or GEOG 040 or GEOL 007 or GEOL 055 or NR 103. Cross listed with: GEOG 173.

**ENVS 150. Environmental Field Studies. 3 Credits.**

Travel study courses examining environmental issues from a local ecological, political, and socioeconomic perspective using experiential learning methods in diverse sites. Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001.

**ENVS 156. Permaculture. 0 or 3 Credits.**

Design of agriculturally productive environments that have the diversity, stability, and resilience of the natural biosphere to harmoniously integrate landscape and people. Prerequisite: Three hours basic biological or ecological science, or permission. Cross-listed with: PSS 156.

**ENVS 165. Enviro Literature, Arts, Media. 3 Credits.**

Introduction to the environmental humanities exploring the role of the literary, visual, musical, performative, and media arts in shaping cultural attitudes and responses to nature and contemporary environmental problems. Prerequisite: ENVS 001 or ENVS 002.

**ENVS 167. D2: Global Env History. 3 Credits.**

The role and influence of nature on global human history and how people and cultures have influenced the natural world around them. Cross-listed with: HST 067.

**ENVS 168. SU:Sustainability Cultural Hst. 3 Credits.**

Through selected readings spanning over two thousand years traces the trajectory of modern notions of ecological and socio-economic sustainability back through time. Includes experiential component at the Instructor's sheep farm. Prerequisites: Three hours in Classics, Environmental Studies, or a related discipline. Cross-listed with: CLAS 150.

**ENVS 173. Landscape Natural History. 3 Credits.**

This field-based course examines patterns and processes on local landscapes from an interdisciplinary perspective, with an emphasis on geology, soil science, plant ecology, and ecosystem geography. Prerequisite: ENVS 001 or NR 001.

**ENVS 178. Environmental Ethics. 0-3 Credits.**

Current approaches and problems in environmental ethics drawing on philosophy and case studies in animal rights, land ethics, deep ecology, wilderness protection, and human rights. Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001.

**ENVS 179. D2: Ecofeminism. 3 Credits.**

Investigation of the parallel dominations of women and nature, through analysis and reflection on ecofeminist theory, activism, and spirituality. Prerequisite: ENVS 001, ENVS 002, NR 002, or GSWS 001. Cross-listed with: GSWS 179.

**ENVS 180. Radical Environmentalism. 3 Credits.**

Survey of radical environmental philosophy and activism from a liberation ethics perspective. Includes deep ecology, ecofeminism, environmental justice, and ecological resistance movements around the world. Prerequisite: ENVS 001, ENVS 002, or NR 002.

**ENVS 181. D1:Environmental Justice. 3 Credits.**

Examines environmental inequalities among communities of race/ethnicity and economic class through a social justice lens: how racism, classism, prejudice, and power are intimately intertwined with environmental pollution, including implications for health. Prerequisite: ENVS 001, ENVS 002, or NR 002.

**ENVS 185. Topics in Enviro Activism. 3 Credits.**

Hands-on experience in and critical reflection on environmental activism; recent topics include "Climate Advocacy" and "Land & Food Justice. Prerequisite: ENVS 001 or ENVS 002 or NR 001 or NR 002 or CDAE 002.

**ENVS 188. SU:Sustainability Science. 3 Credits.**

The study of sustainability integrating natural and social science perspectives. Topics include theories of ecological adaptation and resilience, sustainability assessment methods, emerging technologies and applications. Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001.

**ENVS 191. Internship. 1-18 Credits.**

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion. Prerequisite: Permission of course coordinator.

**ENVS 192. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

**ENVS 193. Teaching Assistantship. 1-3 Credits.**

Undergraduate student service as a teaching assistant, usually in an introductory-level course in the discipline, Offered at department discretion.

**ENVS 195. Special Topics. 1-18 Credits.**

Intermediate courses of current areas of interest which vary each semester. Topics have included environmental health, energy, regional planning, international studies, literature, ethics, and natural area management. Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001.

**ENVS 196. Special Topics. 1-18 Credits.**

Intermediate courses of current areas of interest which vary each semester. Topics have included environmental health, energy, regional planning, international studies, literature, ethics, and natural area management. Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001.

**ENVS 197. Student Designed Course. 1-3 Credits.**

Student-taught courses beyond the scope of existing formal courses in environmental studies. Developed according to Program guidelines, with sponsorship by interested faculty. Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001.

**ENVS 198. Undergraduate Research. 1-18 Credits.**

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

**ENVS 201. Research Methods. 3 Credits.**

Planning, design, and methods for the senior capstone thesis or project. Includes literature review and proposal writing. Prerequisites: ENVS 151; Junior standing.

**ENVS 202. Senior Capstone. 1-9 Credits.**

Senior capstone thesis, project, creative arts project, or internship under faculty direction. Prerequisites: Environmental Studies major; minimum Junior standing.

**ENVS 203. Honors Thesis. 1-9 Credits.**

Undergraduates only.

**ENVS 204. Seminar Environmental Studies. 1-3 Credits.**

Review and discussion of current environmental research and literature. Prerequisites: ENVS 001 and ENVS 002; minimum Junior standing.

**ENVS 212. SU:Advanced Agroecology. 0-4 Credits.**

An in-depth overview of research and application in the field of agroecology, including ecological and social dynamics in agricultural landscapes in Vermont and abroad. Pre/co-requisites: PSS 021 and one semester of ecology at the 100-level or above or Instructor permission. Cross-listed with: PSS 212.

**ENVS 236. Women, Health & Environment. 3 Credits.**

Uses interdisciplinary approaches to study/analyze specific connections between human-environment interactions from the gender perspective, especially the women's and children's health perspectives. Explores historical and contemporary understandings of gender in science and society at large. Prerequisites: 3 credit hours of 100-level coursework in ENVS or 3 credit hours of 100-level coursework in a health-related field.

**ENVS 237. Human Ecology & Health-Arctic. 3 Credits.**

An unstable Arctic poses threats, not only to the future of the Arctic but to the world itself. Seminar provides an interdisciplinary overview of histories and approaches to human-environment interactions in the circumpolar Arctic, with a focus on the contexts of sustainability and justice. Prerequisite: 3 credit hours of 100-level coursework in ENVS or 3 credit hours of 100-level coursework in a health-related field.

**ENVS 275. D2:Birding to Change the World. 4 Credits.**

Place-based course and service learning lab that pairs UVM students as enviro-mentors with children in Burlington schools in an after-school birding and nature study club. Application and background check required of enrolled students. Prerequisite: Instructor permission.

**ENVS 284. Teaching Assistantship. 1-3 Credits.**

Undergraduate student service as a teaching assistant, usually in an introductory level course in the discipline, for which credit is awarded. Offered at department discretion. Prerequisite: Instructor permission. Variable credit. May be repeated.

**ENVS 291. Internship. 1-18 Credits.**

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion. Prerequisite: ENVS 002; Junior standing.

**ENVS 293. Environmental Law. 3 Credits.**

Principles of environmental law, including legal research methods, threshold issues, case law, trial procedure, and international comparisons in aspects of air, land, and water law. Prerequisites: ENVS 142 or NR 153; Junior standing.

**ENVS 294. Environmental Education. 3 Credits.**

Philosophy, concepts, and strategies of environmental education, emphasizing integration of environmental concerns into formal and nonformal educational programs for youth and adults. Prerequisite: Junior standing.

**ENVS 295. Advanced Special Topics. 1-18 Credits.**

Advanced courses of current areas of interest which may vary each semester. Topics have included environmental health, energy, regional planning, international studies, literature, ethics, and natural area management. Prerequisite: Junior standing.

**ENVS 296. Advanced Special Topics. 1-18 Credits.**

Advanced courses of current areas of interest which may vary each semester. Topics have included environmental health, energy, regional planning, international studies, literature, ethics, and natural area management. Prerequisite: Junior standing.

**ENVS 297. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

**ENVS 298. Undergraduate Research. 1-18 Credits.**

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.