

## ENVIRONMENTAL STUDIES IN THE COLLEGE OF ARTS AND 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 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.

### CAS 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 four different colleges, including the College of Agriculture and Life Sciences, the College of Arts and Sciences, the College of Education and Social Services 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 concentration in their focus area(s) of choice. This learning plan culminates in a final capstone project or thesis, usually carried out in the senior year.

### MAJORS

#### ENVIRONMENTAL STUDIES MAJOR

Environmental Studies B.A.

### MINORS

#### ENVIRONMENTAL STUDIES MINOR

Environmental Studies

#### 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: International Env Stdies. 0 or 4 Credits.**

Multidisciplinary analysis of the interaction of global and local variables in understanding and solving pervasive environmental problems. Prerequisite: First-Year/Sophomore standing.

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

An 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 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 107. SU: Human Health & Envrnmt. 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 137. Landscape Design Fundamentals. 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: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001. 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 040; GEOG 050 or GEOG 070. 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 151. Intermed Environmental Studies. 3 Credits.**

Individual investigation of interdisciplinary areas of environmental studies with emphasis on academic and career choices and preparation for senior thesis/project. Prerequisites: ENVS 001 or ENVS 002; Environmental Studies major.

**ENVS 153. D2: Ethnobotany. 3 Credits.**

Human interactions with plants used for food, medicine, material culture, ritual and symbol, examined from both cultural and biological perspectives, using global and local examples. Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001.

**ENVS 154. D2: Trad Ecological Knowledge. 3 Credits.**

Examines how specific peoples of the world live in their environments and how their knowledge, practices and beliefs are created, passed on, or lost. Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001.

**ENVS 156. Permaculture. 3 Credits.**

Cross-listed with: PSS 156. 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.

**ENVS 166. Env History of N America. 3 Credits.**

Examination of human-environmental interaction on the North American continent over the past five hundred years. Prerequisite: ENVS 001 or NR 002. Cross-listed with: HST 166.

**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. Prerequisite: ENVS 002 or NR 002. May not be taken concurrently with or following receipt of credit for HST 067 since course requirements partially overlap.

**ENVS 170. Environmental Art Practice. 3 Credits.**

Explorations in environmental perception and aesthetics, using field and studio methods in the creative process and drawing on interdisciplinary approaches to the environmental humanities. Repeatable up to 4 times with different content. Prerequisite: ENVS 001, ENVS 002, or NR 002.

**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 174. Nat Areas Conservation&Steward. 3 Credits.**

Examines land protection and stewardship efforts of conservation organizations and public agencies. Builds on principles of conservation biology to understand issues in conserving and managing natural areas. Prerequisite: ENVS 001 or NR 001.

**ENVS 177. Intro to Landscape Restoration. 3 Credits.**

Introduction to the history, philosophical foundations, and approaches to restoration of natural landscapes damaged by human activity and neglect. Case studies of selected local sites. 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: Prerequisite: ENVS 001, ENVS 002, or NR 002.

**ENVS 181. D1: Race, Class and Garbage. 3 Credits.**

Examining environmental waste through social justice analysis of pollution patterns that reflect racism, sexism, classism, including responsive strategies of the environmental justice movement. Prerequisite: ENVS 001, ENVS 002, or NR 002.

**ENVS 182. D2: Religion and Ecology. 3 Credits.**

Exploration of the greening of major world religious traditions in both practice and philosophy. Includes institutional, activist, and lifestyle initiatives in ecological spirituality. Prerequisite: ENVS 001, ENVS 002, or NR 002.

**ENVS 183. Env Impacts of Consumerism. 3 Credits.**

Ecological footprint assessment for human use of energy, housing, water, waster, food. Review of regulatory strategies, economic options, and consumer awareness to reduce environmental impact. Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001.

**ENVS 184. SU: Sust Transpo Planning. 3 Credits.**

Environmental and social impacts of auto-dependence and future-oriented solutions to reduce auto-dependence and impacts and create sustainable transportation solutions. Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001.

**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 187. SU: Campus Sustainability. 3 Credits.**

Sustainability methods, policies, and frameworks applied in the campus setting using UVM as a case study and field site for the study of campus greening. Prerequisite: One Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001.

**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 189. SU: Intro to Systems Thinking. 3 Credits.**

The use of systems theory and models to synthesize information, develop long-term approaches, and implement sustainable solutions to complex environmental problems. Prerequisite: One of the following: ENVS 001, ENVS 002, NR 001, NR 002, ENSC 001.

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

An 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; Junior/Senior 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; Junior/Senior standing.

**ENVS 212. 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 238. Ecological Landscape Design. 4 Credits.**

Studio course synthesizing work from fields of landscape ecology and landscape design, exploring ecological design alternatives at multiple scales, and developing multifunctional landscape solutions. Pre/co-requisites: Minimum Junior standing, PSS 137 or one course in ecology plus one course in design or drawing. Cross-listed with: CDAE 238, PSS 238, NR 238.

**ENVS 250. Adv Env Field Studies. 3 Credits.**

Advanced travel study courses examining environmental issues from local ecological, political, and socioeconomic perspectives using experiential learning methods in diverse sites. Prerequisite: Junior standing.

**ENVS 267. Environmental History Seminar. 3 Credits.**

Advanced reading and research on the role and influence of nature on human history and how people and cultures have influenced the natural world. Prerequisites: ENVS 151; six credits in History. Cross-listed with: HST 267.

**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.**

An 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 292. Env Conflict Resolution. 3 Credits.**

Explores the causes of conflicts involving environmental concerns and the role of environment as a factor in conflict development and mediation. Prerequisites: 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.