

# Environmental Studies Courses

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## Courses

### ENVS 196. Field Studies: [Topic]. 1-5 Credits.

Repeatable three times for a maximum of 20 credits.

### ENVS 198. Laboratory Projects: [Topic]. 1-12 Credits.

Repeatable.

### ENVS 199. Special Studies: [Topic]. 1-5 Credits.

Repeatable.

### ENVS 201. Introduction to Environmental Studies: Social Sciences. 4 Credits.

Contributions of the social sciences to analysis of environmental problems. Topics include human population, the relationship between social institutions and environmental problems, and appropriate political, policy, and economic processes.

### ENVS 202. Introduction to Environmental Studies: Natural Sciences. 4 Credits.

Contributions of the natural sciences to analysis of environmental problems. Topics include biological processes, ecological principles, chemical cycling, ecosystem characteristics, and natural system vulnerability and recovery.

### ENVS 203. Introduction to Environmental Studies: Humanities. 4 Credits.

Contributions of the humanities and arts to understandings of the environment. Emphasis on diverse ways of thinking, writing, creating, and engaging in environmental discourse.

### ENVS 225. Introduction to Food Studies. 4 Credits.

An exploration of the field of "food studies" and examination of the role of food in historical and contemporary life in the US and around the world.

### ENVS 335. Allocating Scarce Environmental Resources. 4 Credits.

Considerations for the design of environmental and natural resources policies and regulations: balancing society's preferences and the costs of environmental protection and resource conservation.

Prereq: MATH 105Z or higher.

### ENVS 345. Environmental Ethics. 4 Credits.

Key concepts and various moral views surveyed; includes anthropocentrism, individualism, ecocentrism, deep ecology, and ecofeminism. Exploration includes case studies and theory.

### ENVS 350. Ecological Footprint of Energy Generation. 4 Credits.

Detailed study of the ecological consequences of all forms of energy generation including fossil fuels and alternative energy sources. Open to environmental science, environmental studies, and planning, public policy and management majors only.

Prereq: ENVS 201, MATH 112Z.

### ENVS 399. Special Studies: [Topic]. 1-5 Credits.

Repeatable.

### ENVS 400M. Temporary Multilisted Course. 1-5 Credits.

Repeatable.

### ENVS 401. Research: [Topic]. 1-12 Credits.

Repeatable.

### ENVS 403. Thesis. 1-8 Credits.

Repeatable up to 5 times.

### ENVS 404. Internship: [Topic]. 1-12 Credits.

Repeatable.

Prereq: Instructor's approval.

### ENVS 405. Reading and Conference: [Topic]. 1-18 Credits.

Repeatable.

### ENVS 406. Practicum: [Topic]. 1-12 Credits.

Repeatable.

### ENVS 407. Seminar: [Topic]. 1-5 Credits.

Repeatable.

### ENVS 408. Workshop: [Topic]. 1-8 Credits.

Repeatable.

### ENVS 409. Terminal Project. 1-12 Credits.

Repeatable.

### ENVS 410. Experimental Course: [Topic]. 1-5 Credits.

Repeatable.

### ENVS 411. Environmental Issues: [Topic]. 4 Credits.

In depth examination of a particular environmental topic such as global warming, ecosystem restoration, energy alternatives, geothermal development, public lands management, or environmental literature.

Repeatable twice when topic changes for maximum of 12 credits.

Prereq: junior or senior standing.

### ENVS 425. Environmental Education Theory and Practice. 4 Credits.

Learning theories, environmental literacy, and the planning, implementation, and evaluation of environmental education programs.

Development of teaching materials in collaboration with a community partner for group project.

Prereq: instructor's approval.

### ENVS 427. Environmental and Ecological Monitoring. 4 Credits.

Theory, design, and practice of monitoring sampling mapping, field techniques, data collection, management, analysis and presentation methods, local case studies.

### ENVS 429. Environmental Leadership: [Topic]. 1-4 Credits.

Partnering with governmental agencies, nonprofit organizations, public schools and local businesses, students develop service learning projects.

Repeatable twice for a maximum of 12 credits when topic changes.

Prereq: instructor's approval.

### ENVS 429L. Environmental Leadership: [Topic]. 4 Credits.

Partnering with governmental agencies, nonprofit organizations, public schools and local businesses, students develop service learning projects.

Repeatable twice for a maximum of 12 credits when topic changes.

### ENVS 435. Environmental Justice. 4 Credits.

Environmental justice and its impact on current decisions. Focus on civil rights law, perception of risk, and relation of sustainability and equity.

Prereq: ENVS 201.

### ENVS 450. Political Ecology. 4 Credits.

Examines how social relations and economic, social, and cultural control of natural resources shape human interactions with the environment.

Theory and case studies.

Prereq: ENVS 201.

### ENVS 455. Sustainability. 4 Credits.

Examines the evolution of the concept of sustainability and its complex and sometimes problematic uses among scholars, policymakers, environmentalists, and businesses.

Pre- or coreq: ENVS 201; junior or senior standing.

**ENVS 459. Water, Public Health, and the Environment. 4 Credits.**

Water, Public Health, and the Environment examines the provision of water and sanitation services around the world with a particular focus on its impacts for public health and the environment in low- and middle-income communities.

**ENVS 465. Wetland Ecology and Management. 4 Credits.**

Examines management, law, and policies related to wetlands in an ecological framework; includes wetland type definitions, classification, distribution, formation and development, and restoration.

Prereq: BI 307 or BI 370 or GEOG 360.

**ENVS 467. Sustainable Agriculture. 4 Credits.**

Examines sustainability issues in agricultural production and current food systems. Focuses on environmental aspects of seed, water, soil, energy, and pest management.

Prereq: ENVS 201 or ENVS 202.

**ENVS 477. Soil Science. 4 Credits.**

Chemical and physical characteristics and classification of soils, field soil identification, soil degradation.

Prereq: CH 111 or CH 221 or CH 224H.

**ENVS 493M. Passive Cooling. 4 Credits.**

Conceptual and quantitative investigations of passive cooling design and performance, including precedents, shading, natural ventilation, evaporative cooling, use of thermal mass, radiant cooling assisted by cold night skies, and control scheduling, supported by field investigations and introductory energy modeling. Multilisted with ARCH 493M.

Prereq: ARCH 491.

**ENVS 494M. Passive Heating. 4 Credits.**

Conceptual and quantitative investigations of passive solar heating design and performance, including precedents, solar resource evaluation, glazing selection and orientation, thermal mass materials and positioning, movable insulation, and control scheduling, supported by solar site surveys and modeling in EnergyPlus. Multilisted with ARCH 494M.

Prereq: ARCH 491.

**ENVS 500M. Temporary Multilisted Course. 1-5 Credits.**

Repeatable.

**ENVS 503. Thesis. 1-16 Credits.**

Repeatable up to eight times.

**ENVS 507. Seminar: [Topic]. 1-5 Credits.**

Repeatable.

**ENVS 508. Workshop: [Topic]. 1-8 Credits.**

Repeatable.

**ENVS 510. Experimental Course: [Topic]. 1-5 Credits.**

Repeatable.

**ENVS 525. Environmental Education Theory and Practice. 4 Credits.**

Learning theories, environmental literacy, and the planning, implementation, and evaluation of environmental education programs. Development of teaching materials in collaboration with a community partner for group project.

**ENVS 535. Environmental Justice. 4 Credits.**

Environmental justice and its impact on current decisions. Focus on civil rights law, perception of risk, and relation of sustainability and equity.

**ENVS 550. Political Ecology. 4 Credits.**

Examines how social relations and economic, social, and cultural control of natural resources shape human interactions with the environment.

Theory and case studies.

**ENVS 555. Sustainability. 4 Credits.**

Examines the evolution of the concept of sustainability and its complex and sometimes problematic uses among scholars, policymakers, environmentalists, and businesses.

**ENVS 559. Water, Public Health, and the Environment. 4 Credits.**

Water, Public Health, and the Environment examines the provision of water and sanitation services around the world with a particular focus on its impacts for public health and the environment in low- and middle-income communities.

**ENVS 565. Wetland Ecology and Management. 4 Credits.**

Examines management, law, and policies related to wetlands in an ecological framework; includes wetland type definitions, classification, distribution, formation and development, and restoration.

**ENVS 567. Sustainable Agriculture. 4 Credits.**

Examines sustainability issues in agricultural production and current food systems. Focuses on environmental aspects of seed, water, soil, energy, and pest management.

**ENVS 577. Soil Science. 4 Credits.**

Chemical and physical characteristics and classification of soils, field soil identification, soil degradation.

**ENVS 593M. Passive Cooling. 4 Credits.**

Conceptual and quantitative investigations of passive cooling design and performance, including precedents, shading, natural ventilation, evaporative cooling, use of thermal mass, radiant cooling assisted by cold night skies, and control scheduling, supported by field investigations and introductory energy modeling. Multilisted with ARCH 593M.

Prereq: ARCH 591.

**ENVS 594M. Passive Heating. 4 Credits.**

Conceptual and quantitative investigations of passive solar heating design and performance, including precedents, solar resource evaluation, glazing selection and orientation, thermal mass materials and positioning, movable insulation, and control scheduling, supported by solar site surveys and modeling in EnergyPlus. Multilisted with ARCH 594M.

Prereq: ARCH 591

**ENVS 601. Research: [Topic]. 1-16 Credits.**

Repeatable.

**ENVS 603. Dissertation. 1-16 Credits.**

Repeatable.

**ENVS 604. Internship: [Topic]. 1-5 Credits.**

Repeatable for maximum of 10 credits.

**ENVS 605. Reading and Conference: [Topic]. 1-16 Credits.**

Repeatable.

**ENVS 606. Field Studies: [Topic]. 1-16 Credits.**

Repeatable nine times.

**ENVS 607. Seminar: [Topic]. 1-5 Credits.**

Repeatable.

**ENVS 608. Workshop: [Topic]. 1-16 Credits.**

Repeatable.

**ENVS 609. Terminal Project. 1-16 Credits.**

Repeatable up to eight times.

**ENVS 610. Experimental Course: [Topic]. 1-5 Credits.**

Repeatable. A recent topic is Interdisciplinary Capstone Project.

**ENVS 631. Environmental Studies Theory and Practice. 4 Credits.**

Introduction to various disciplinary perspectives that contribute to environmental studies, including their research methods, vocabularies, and core concepts.

**ENVS 632. Environmental Studies Research Methodology. 2 Credits.**

Identifying a clear and concise research problem, developing methodology to address that problem, and the process of developing a thorough knowledge of relevant literature.

**ENVS 633. Environmental Studies Thesis Development. 3 Credits.**

Interdisciplinary readings in environmental studies focused on topics chosen by each student in consultation with instructor. Preparation for presentations at the Joint Campus Conference.