

ENVIRONMENTAL STUDIES

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General Information

Formerly the Interdisciplinary Perspectives on the Environment program, Environmental Studies is a collaborative teaching and research program with a student-guided curriculum designed to create the leadership and workforce with the skills needed to help meet global challenges relating to water security and other pressing environmental issues, such as pollution, climate change, and deforestation.

The Environmental Studies program provides an undergraduate curriculum that leverages water and other environmentally-related strengths and expertise across the University of Oklahoma, and provides for scholarly specialization in water-related and other environmental disciplines, in order to prepare students to participate effectively in socially-responsible solutions to some of the greatest environmental problems facing humanity.

Environmental Studies prepares students for environmentally-related jobs, including those in federal, state, and tribal government agencies, environmental consulting firms, corporate, professional, and industrial enterprises, environmentally-related NGOs, journalism, public service, law, advocacy, and legislative lobbying efforts.

Programs & Facilities

Environmental Research Experience for Students (ERES)

ERES is designed to provide undergraduate students with meaningful experience in scholarly research and creative activity focused on important environmental issues of the day.

Environmental Studies Related Internships

Internship experience with course credit is possible for any student interested in getting a headstart on their career. See Internships for more information

Undergraduate Study

Programs Offered

- Environmental Studies, Bachelor of Arts
- Environmental Studies Minor

Graduate Study

Programs Offered

- Environmental Studies, Master of Science

Admission to the Environmental Studies graduate programs is based on the standards for admission established by the Graduate College. See How to Apply information for more details concerning the admission process.

Courses

ENST 1013 Consumption and the Environment 3 Credit Hours

An introduction to the interdisciplinary aspects of human consumption and the environment. Aspect of the production and consumption of food, energy, transportation, and housing are considered for their contributions to global climate change, air and water pollution, and habitat alteration, as well as other relevant topics regarding the environment. Students will learn how complex interactions between natural processes and human activities shape aspects of the global, regional and local environment. (F, Sp) [III-SS].

ENST 2003 Water Resources Advocacy 3 Credit Hours

Water is commonly considered the world's "new oil." Experts vow that water scarcity may ultimately lead to the next world war. This course will provide insight and understanding of challenges, decisions, and advocacy in ecologically and economically sustainable management of water resources, as well as the seriousness of what water scarcity means using national and global case studies. (F)

ENST 2023 American Environmental Perspectives 3 Credit Hours

Prerequisite: sophomore standing or permission of instructor. Based on the relationships between people and the natural world, with a focus on natural, social, and institutional systems in the US, and our shared goals for sustainability, this course explores the role of nature in fulfilling human needs, as well as how American society influences and impacts nature at local, regional, national, and global scales. (F)

ENST 2203 Ecosystem Impacts of Climate Change 3 Credit Hours

Rising temperatures, changing rainfall patterns, rising sea levels and increasing atmospheric carbon dioxide have direct effects on living creatures and the Earth's climate system, which also spawn many indirect changes in ecological systems. This non-majors course will cover the basic of why climate is changing, its effects on plant and animal physiology and behavior, and its impact on the ecosystem. (Su) [II-NS].

ENST 2623 Human-Wildlife Interactions 3 Credit Hours

Prerequisite: sophomore standing or permission of instructor. Examines various aspects of human-wildlife interactions, including issues pertaining to habitat destruction, poaching, and forced sharing of space between humans and wildlife. Species will be studied through examination of case studies, evaluation of their efficacy, and development of additional solutions to these and similar problems arising in wildlife conservation, with particular emphasis on large African mammals. (Sp)

ENST 2813 Environmental Studies Cornerstone 3 Credit Hours

Prerequisite: ENST majors and minors only; departmental permission required; Corequisite: ENST 3891. This course introduces students to the Environmental Studies program. It offers students an overview of environmental teaching and research at OU, and emphasizes the importance of integrating disciplinary perspectives on environmental topics. (F, Sp)

ENST 2970 Special Topics 1-3 Credit Hours

Special Topics. 1 to 3 hours. May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)

- ENST 3023 Environmental Psychology 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. Examines the interplay between human behavior and the environment, both natural and built. Topics include place identity and place attachment, the cognitive hierarchy and human behavior, the influence of design on behavior, biophilia and behavioral inheritance, the psychology of crowding, environment and health, and research applications. (Sp)
- ENST 3203 Sprawl and the Environment 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. The built environment, in particular our pattern of cities surrounded by suburbs, has impacts on the environment. These impacts are both direct and indirect. Direct effects include impact on water quality, habitat fragmentation, endangered species and the covering of natural habitat with impervious surfaces. Indirect impacts include increased reliance on automobiles and subsequent increases in air pollution and greenhouse gasses. Students will examine patterns in land use and their impacts and how different development patterns and practices can minimize environmental impacts. (Irreg.)
- ENST 3213 Law and the Environment 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. Examines the general underlying foundations of the United States constitutional principles. Study of the constitutional and structural conflicts when environmental law is at issue. The focus of the class will shift to practical information and exercises regarding environmental law. Finally, the class will study the three sections of specialized law and their interrelationship with the environment. (Irreg.)
- ENST 3223 Environmental Justice 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. Examines the impact of industrial societies on human beings, especially minority and low income populations. Students are introduced to evidence of disproportionate impact in certain populations, potential causes of the problems, theoretical concepts of environmental justice and how some of these concepts may be implemented to solve problems affecting the various communities. Additionally, students will review the legal and social implications, as well as potential methodology that is defining, refining, and shaping the environmental justice landscape. (Irreg.)
- ENST 3243 Introduction to Water Law 3 Credit Hours**
Prerequisite: English 1213/Expository Writing 1213, junior standing or permission of instructor. Provides an understanding of the fundamental tenets of water allocation in the United States. Topics include the Clean Water Act and its effect on resolving complex pollution issues, competing uses of water, riparian doctrine, prior appropriation, the public trust doctrine, nonpoint source pollution, and oil spills and hydraulic fracturing. (Sp)
- ENST 3263 Ecotourism: Sustainable Wildlife and Nature Tourism 3 Credit Hours**
Prerequisite: ENST 1013 or ENST 2623, junior standing, or permission of instructor. Using case studies and small student group projects, this course explores ecotourism or sustainable wildlife and nature tourism across the broad array of beneficial features, such as protection for a species and income generation for local people, as well as some of ecotourism's less-sustainable and potentially harmful aspects. (F)
- ENST 3303 Food, Agriculture, and the Environment 3 Credit Hours**
Prerequisite: junior standing or permission of the instructor. Food production, both large scale and small scale, has impacts on the environment. From erosion to water pollution to intensive use of fossil fuels, these impacts affect a variety of environmental elements. Since most of us buy our food pre-packaged at the supermarket, we do not see these impacts, nor typically are these impacts reflected in the price we pay. Most of our food arrives from far away, transported over long distances, in many cases from the southern hemisphere. This class will examine the impact of our food production systems on all aspects of the environment including air, soil, and water, as well as its demands and impacts on energy production. (Irreg.)
- ENST 3313 Gardening, Community, and the Environment 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. Explores fundamental concepts and styles of gardening with an emphasis on edibles and organic methods. Class assignments help students connect gardening to environmental and community issues at the personal, local, regional, and global levels. A service learning component promotes hand-on experiences and responsibility to the community. (Irreg.)
- ENST 3423 Anthropogenic Contaminants and Environmental Health 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. Human progress has allowed us to live comfortable, well-fed lives, free from many diseases and environmental fluctuations. This progress has degraded many of the ecosystem goods and services on which we depend. This course will examine human environmental impacts, with a focus on water pollution, and the consequences of human activities on ecosystem goods and services. (Su)
- ENST 3440 Mentored Research Experience 3 Credit Hours**
0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)
- ENST 3463 Water and Ecological Sustainability 3 Credit Hours**
(Crosslisted with BIOL 3463) Prerequisite: junior standing and English 1213 or Expository Writing 1213, Biology 1114 or Biology 1124 or Biology 1134, or permission of instructor. Objective of the course is to allow students to examine and discuss important historical and current issues relating to the interactions between socio-economic use of water resources and ecosystem biodiversity, function, and sustainability. (F) [I-NS].
- ENST 3503 Energy Use, Climate Change, and the Environment 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. The way we live in the modern industrialized world is extremely energy intensive. We will examine our energy use across all sectors, from the fuels used to generate the electricity to run our computers to the energy we are most familiar with, that which we use to fill our cars. (Irreg.)
- ENST 3603 Global Perspectives of Wildlife Conservation 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. A conservation biology course with primary attention aimed at wildlife. Explores the complex relationships that exist between humans and wildlife throughout the world. Group activities and detailed assessment of case studies will introduce students to finding solutions to threats that can provide wildlife conservation in a way that is also beneficial (or at least not harmful) to humans. (F)

- ENST 3613 The Politics of Wildlife Conservation 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. Exploration of the politics of wildlife conservation from a variety of perspectives. Review the history of our own species' impact on the lives of free-ranging animals and examine the many ways that human-wildlife symbiotic relationships have influenced biodiversity loss and growth. Students will learn about the process of implementing national laws and international treaties aimed at conserving wildlife, while also practicing methods of working with local people and key decision makers. Through a series of problem-solving activities and assessment of several relevant case studies, we will focus on the more general "politics" of wildlife conservation. (Irreg.)
- ENST 3633 Wilderness Philosophy 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. Explores the concept of wilderness as a human construct. Provides an overview of the various Western perspectives of wilderness; from the early prehistoric and colonial American views of wilderness, through the inception and designation of federally recognized Wilderness, to the current debate regarding the role of wilderness in contemporary society. (Su)
- ENST 3653 Community Conservation 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. Community conservation involves local people, often working with conservation scientists, protecting and conserving their natural resources. The principles of community conservation are similar globally, but each community conservation project will differ depending on location, habitat type, and the status of wildlife species involved. Select case studies of successful programs will be examined as bases for hypothetical student community conservation projects. (Sp)
- ENST 3663 Hot Topics in Wildlife Conservation 3 Credit Hours**
Prerequisite: ENST 2623 or ENST 3613 or permission of adviser or instructor. Examines the latest technologies used in the field of conservation, new advances in human-wildlife conflict mitigation, updates on political approaches to conservation, and other current conservation news, with emphasis on large African mammals. Provides an opportunity to learn more about how interested stakeholders come together to develop national wildlife policies and conservation action plans. (Su)
- ENST 3713 Nature in the City 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. Given that the vast majority of the Earth's land area has had some kind of human impact, this class will examine how we can maximize the potential of human-altered habitats to support native species, facilitate population exchange, and support wildlife conservation. Additionally, we'll examine how urban plant and animal populations affect people.
- ENST 3723 Issues in Ecological Restoration 3 Credit Hours**
Prerequisite: ENGL 1213 or EXPO 1213, junior standing or permission of instructor. This introduction to the field of restoration ecology will cover philosophical, societal, and scientific aspects of restoring habitats and ecosystems. (Sp)
- ENST 3743 Biological Invasions and Society 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. New species arrive on our shores daily; some of these species become so problematic that we label them "invasive." Explores some of our views of invasive species, what makes a species invasive, how they spread, what their impacts are on human and natural systems, whether or not all invasive species are bad, and what can be done to control them. (Sp)
- ENST 3800 Environmental Internship 1-3 Credit Hours**
1 to 3 hours. Prerequisite: junior standing and permission of IPE coordinator. Supervised work experience at a business, government or non-profit agency, dealing with an environmental issue. May require specific preparation, as appropriate. S/U grade based on completion of advance preparation, if any; evaluation by workplace supervisors; and coordinator's evaluation of a report on the issue dealt with during the internship. (F, Sp, Su)
- ENST 3891 Environmental Studies Learning Community 1 Credit Hour**
Prerequisite: ENST 2813 (or concurrent enrollment); ENST majors and minors only; departmental permission required; may be repeated; maximum credit 3 hours. The Learning Community course gives Environmental Studies majors the opportunity to enrich their classroom experience, through a variety of activities including structured interactions with other students; presentations on academic and policy topics; workshops on career planning; and environmentally related service projects. (F, Sp)
- ENST 3893 Environmental Studies Research Project 3 Credit Hours**
Prerequisite: ENST 2813; ENST majors and minors only; departmental permission required; Corequisite for majors: ENST 3891, if offered. An independent study into an environmental issue with one or more faculty researchers. This class provides experience with academic inquiry, and the integration of multiple disciplinary perspectives. ENST 2813 (Environmental Studies Cornerstone) is a prerequisite because in that class students will choose and plan research projects matching their own interests. (F, Sp, Su)
- ENST 3913 Special Topics in Environmental Studies 3 Credit Hours**
Prerequisite: junior standing or permission of instructor. May be repeated with change of content; maximum credit nine hours. Designed to permit the study of specific and changing issues and problems in environmental studies. (Irreg.)
- ENST 3950 Environmental Research Experiences for Students (ERES): Practical Research 1-3 Credit Hours**
1 to 3 hours. Prerequisite: ENST 3940 or concurrent enrollment. A semester-long course in which a student works independently with a faculty researcher to gain experience and understanding in active research within a specific discipline. (F, Sp, Su)
- ENST 3960 Honors Reading 1-3 Credit Hours**
Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in regular course work. (Irreg.)
- ENST 3970 Honors Seminar 1-3 Credit Hours**
1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)
- ENST 3980 Honors Research 1-3 Credit Hours**
1 to 3 hours. Prerequisite: admission to Honors program. May be repeated; maximum credit six hours. Provides an opportunity for the Honors candidate to work at a special project under the guidance of a professor on a specific environmental related issue. (Irreg.)
- ENST 3990 Independent Study 1-3 Credit Hours**
1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)

ENST 4883 Environmental Studies Seminar 3 Credit Hours

Prerequisite: ENST 2813, ENST 3893, ENGL 1213 or EXPO 1213, and permission of department; Majors only; Repeatable with change of content; maximum credit 6 hours. Intensive study of interdisciplinary approaches to environmental issues, typically through close reading of major academic works that integrate multiple disciplines. Content will vary by instructor. (F)

ENST 4893 Environmental Studies Capstone 3 Credit Hours

Prerequisite: Majors only; ENST 4883. Students will work in interdisciplinary teams to propose a scientifically informed and ethically justified policy response to a local or regional environmental concern. Content will vary by semester. (Sp) [V].

ENST 4960 Directed Readings 1-4 Credit Hours

1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)

ENST 4970 Seminar 1-3 Credit Hours

Prerequisite: junior standing or permission of instructor. May be repeated with a change of content; maximum credit six hours. Interdisciplinary topics with regard to the environment; May include field work, special presentations, or other activities not covered in regularly scheduled courses. (Irreg.)

ENST 4990 Independent Study 1-3 Credit Hours

1 to 3 hours. Prerequisite: junior standing or permission of instructor. May be repeated; maximum credit six hours. Contracted independent study for a topic not currently offered in regularly scheduled coursework. May include library and/or research and field projects. (Irreg.)

ENST 5053 Advanced Environmental Studies 3 Credit Hours

Prerequisite: graduate standing. An interactive seminar featuring discussions of assigned readings, student presentations, and guest lectures. Topics covered will cross the environmental studies spectrum, from basic ecological principles and approaches to public and agency communication, and will include treatment of historical, policy, and legal perspectives of environmental issues. (Sp)

ENST 5960 Directed Readings 1-3 Credit Hours

1 to 3 hours. Prerequisites: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member affiliated with the Environmental Studies program. (F, Sp, Su)

ENST 5980 Research for Master's Thesis 2-9 Credit Hours

Prerequisite: graduate standing. Variable enrollment, two to nine hours; maximum credit applicable toward degree, six hours. (F, Sp, Su)

ENST 5990 Independent Study 1-3 Credit Hours

1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)

Faculty

| Last Name | First/Middle Name | Middle init. | OU Service start | Title(s), date(s) appointed | Degrees Earned, Schools, Dates Completed |
|--------------|-------------------|--------------|------------------|---|--|
| Trachtenberg | Zev | | | DIRECTOR OF ENVIRONMENTAL STUDIES; PROFESSOR OF PHILOSOPHY | PhD, Columbia |