

ENVIRONMENTAL STUDIES

CURRICULUM COMMITTEE:

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Issues related to the natural environment require an interdisciplinary focus. To fully come to grips with these challenges, we need to understand the way in which technological advances and human behavior affect fundamental ecological processes, what political and psychological tactics may be harnessed to address the problem, and how nature is discussed, described, and experienced. The field of environmental studies provides the opportunity to integrate multiple disciplinary perspectives in order to think about and understand environmental issues. The program at Wooster encourages students to engage hands-on with environmental issues both inside and outside the classroom, and at both local and global levels.

Environmental Studies minors will become knowledgeable about core scientific concepts that are relevant to the environment; able to understand different ways of assessing the value of the natural environment; comfortable with different means of examining and communicating about the environment; and familiar with the ways in which social institutions contribute to environmental problems and potential solutions to those problems. They should also understand their own roles within the human-environment relationship.

The Environmental Studies minor will complement a major in a traditional department so that students combine a detailed understanding of the knowledge and methods within a discipline with a focus on a particular topic. Students with an Environmental Studies minor will complete their I.S. project within their major department. However, they are encouraged to include an environmental component to their I.S. when possible, and the Environmental Studies faculty will endeavor to help them to do so.

Minor in Environmental Studies

Consists of 6 courses:

- ENVS 20000-20004 (This refers specifically to ENVS 200XX, and not to just any 200-level course)
- One cross-listed course in Natural Sciences accepted for ENVS credit
- One cross-listed course in Social Science accepted for ENVS credit
- One cross-listed course in Humanities accepted for ENVS credit
- Two electives from Environmental Studies or cross-listed courses accepted for ENVS credit

Special Notes

- No more than one course within a student's major discipline may be counted toward the Environmental Studies minor.
- In departments with multiple versions of a particular course, only the sections specified in parentheses after the course listing will count toward the Environmental Studies minor.
- Only grades of C- or better are accepted for the minor.

ENVIRONMENTAL STUDIES COURSES

ENVS 11000. SCIENCE, SOCIETY AND ENVIRONMENT

This course presents a number of concepts that lie at the core of the field of environmental studies. Instead of

just looking at environmental problems, we examine their multidimensional causes (sociopolitical as well as biophysical) and what kinds of human and political actions can lead to solutions. The writing portion of this “W” course is focused on producing both written and oral work (podcasts) for a popular audience, so students will learn techniques for turning complex environmental science topics into essays easily understood by an educated audience. [W]

ENVS 19901. INTRODUCTION TO ENVIRONMENTAL SCIENCE [MNS]

Environmental science is a diverse field that incorporates many disciplines, including physical, chemical, biological, social, economic, and political science. This course is an introduction to the field of environmental science, focusing on ecology and earth science principles as they apply to environmental issues. Topics include a survey of general ecosystem and community level ecological principles, with an emphasis on energy flow, nutrient cycling and how natural disturbances and human impacts—such as climate change, air and water pollution, land use change, and loss of biodiversity—potentially affect the environment.

ENVS 19902. ENVIRONMENTAL ISSUES

This course provides an overview of key environmental issues facing our society today. Topics include climate change, land use change, pollution, biodiversity loss, as well as concerns about our water, food, and energy resources. Emphasis will be on an in-depth study of the environmental science (physical, chemical, and biological) informing us about the causes, connections, scope, scale, and impacts of these issues, as well as the feasibility of potential solutions. Science in the context of social, political, and economic perspectives on these issues will also be addressed through readings, discussion, and class activities.

ENVS 20001-20004. ENVIRONMENTAL ANALYSIS AND ACTION

Presents a multidisciplinary perspective on environmental topics by examining in depth an issue of global and/or local significance from the perspectives of the natural sciences, social sciences and humanities. Students will apply fundamental concepts from various disciplines to understand, formulate and evaluate solutions to environmental issues. *Prerequisite: At least one Natural Science course from the cross-listed courses accepted for ENVS credit and one course from the list in either Social Sciences or Humanities. May be repeated for credit as offerings vary. However, no more than two ENVS 200xx credits may count towards the minor. Annually. Fall.*

ENVS 20003. ENVIRONMENTAL CONTAMINATION AND WASTE

The composition, history, social use and ultimate fate of plastics, as well as a wider analysis of contamination of the environment by persistent and endocrine-disrupting synthetic chemicals.

ENVS 20004. SUSTAINABILITY

A discussion of what sustainability means, actions that would increase sustainability, obstacles that hinder our ability to be sustainable, and strategies for change.

ENVS 22000. FROM FARM TO TABLE: UNDERSTANDING THE FOOD SYSTEM

The production and consumption of food interface with disciplines from biology and chemistry to political economy, sociology, and business management. The aim of this course is to introduce students to this broad, multidisciplinary analysis of the food system and get them thinking critically about where our food comes from, where it goes, and how to make the entire system more sustainable. *Alternate years. [HSS]*

ENVS 23000. SUSTAINABLE AGRICULTURE: THEORY AND PRACTICE

Agroecology is the “science of sustainable agriculture.” It serves as the scientific basis for devising more natural, less environmentally harmful farming practices that build soil fertility and plant resilience while maintaining adequate production levels. The goal of this course is to introduce students to a broad suite of sustainable agriculture principles and practices and to investigate the scientific basis for those practices. Students will learn agroecology techniques by actually practicing them in the campus Learning Garden. Students registering for the course are required to simultaneously register for ENVS 23000L: the associated lab. *(1.25 credits with the lab)*

ENVS 31000. SUSTAINABLE DEVELOPMENT: PRINCIPLES AND PRACTICES

This course will explore the intersection of development and sustainability. We will begin with a historical understanding of the idea of sustainable development, then shift to a more applied and experiential focus with an emphasis on case studies from around the world. Students will be come away with a deeper understanding of concepts that underlie sustainability, including the tragedy of the commons, the interface between population growth and resource use, societal solutions for increasing energy efficiency, and ecological economics. *Alternate years.*

ENVS 32000. RURAL SOCIETY AND THE ENVIRONMENT

Because of the centrality of agriculture, natural resources, and wild nature in rural areas, the study of rural societies allows for an interesting blend of social science subfields: environmental sociology; the sociology of agriculture; rural studies; and social stratification. In this course students will be exposed to empirical research on

the social patterns that characterize rural societies and their relationship to the environment (primarily in the U.S. and to a lesser degree in other countries). In the broader sense, we will grapple with what a rural identity means and how natural resource flows (agricultural, botanical, silvicultural, and mineral) situate rural societies within the national and global political economic structure. More specifically, we will spend time investigating empirical work from a variety of subfields that touch on rural society and the environment: the sociology of agriculture; of natural resource extraction; of race, class, and environmental justice in rural areas; and of natural resource flows in the context of globalization. The course will culminate with each student writing an analytical literature review on a specific topic having to do with rural communities and the environment. *Alternate years.*

ENVS 41000. INTERNSHIP

In consultation with a faculty member associated with the program, students may arrange academic credit for supervised work in an applied setting that is relevant to topics in environmental studies. Placement may be on- or off-campus. Examples of on-campus internships might include work through the physical plant, exploring energy use on campus; through campus grounds, investigating aspects of campus plantings and land use; or through campus dining services, examining ways to promote local foods, reduce energy use, reduce food waste, or develop a composting program. In addition to the work, an internship will include an appropriate set of academic readings and written assignments, developed in consultation with the supervising faculty member, that will allow the student to reflect critically on his or her experience. (.5 - 1.0 credit) *S/NC course. Prerequisite: Prior consultation with the faculty member and permission of the chair of Environmental Studies. Annually.*

CROSS-LISTED COURSES ACCEPTED FOR ENVIRONMENTAL STUDIES CREDIT

NATURAL SCIENCE

BIOLOGY

BIOL 10000-10009. TOPICS IN BIOLOGY (Human Ecology) [MNS]

BIOL 11100. FOUNDATIONS OF BIOLOGY [MNS]

BIOL 20200. GATEWAY TO ECOLOGY, EVOLUTION, AND ORGANISMAL BIOLOGY [W, Q, MNS]

BIOL 35000. POPULATION AND COMMUNITY ECOLOGY

BIOL 35200. ANIMAL BEHAVIOR

BIOL 35600. CONSERVATION BIOLOGY

CHEMISTRY

CHEM 21600. ENVIRONMENTAL CHEMISTRY

GEOLOGY

GEOL 10500. GEOLOGY OF NATURAL HAZARDS [MNS]

GEOL 11000. ENVIRONMENTAL GEOLOGY [MNS]

GEOL 21000. CLIMATE CHANGE [Q]

GEOL 22000. INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (GIS) [MNS]

GEOL 29900. HYDROLOGY

SOCIAL SCIENCE

COMMUNICATION

COMM 20006. ENVIRONMENTAL COMMUNICATION

ECONOMICS

ECON 24000. ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS [HSS]

EDUCATION

EDUC 16000. FUNDAMENTALS OF ENVIRONMENTAL EDUCATION

PSYCHOLOGY

PSYC 22500. ENVIRONMENTAL PSYCHOLOGY [HSS]

PSYC 34000. ADVANCED TOPICS (Psychology of Sustainability) [HSS]

SOCIOLOGY/ANTHROPOLOGY

SOCI 20300. ENVIRONMENTAL SOCIOLOGY [HSS]

HUMANITIES

ART

ARTS 15500/25500/35500. PRINTMAKING (Introductory/Intermediate/Advanced)
[Confirm ENVS crosslisting with instructor]

ENGLISH

ENGL 12019. THE WATERY PART OF THE WORLD [AH]
ENGL 12020. LITERARY NATURES [AH]
ENGL 16004. NON-FICTIONAL WRITING (Nature and Environmental Writing) [W, AH]
ENGL 24022. GREEN ROMANTICISM [AH]

GERMAN

GRMN 22800. STUDIES IN GERMAN CULTURE (How Green Is Germany?) [C, AH]

PHILOSOPHY

PHIL 21600. ENVIRONMENTAL ETHICS [AH]

RELIGIOUS STUDIES

RELS 26929. THEORIES AND ISSUES IN THE STUDY OF RELIGION (Environment) [R]