

# Environmental Studies

INTERDISCIPLINARY

## Faculty

Joseph A. Adler

*Associate Professor of Religious Studies*

Miriam Dean-Otting

*Professor of Religious Studies*

M. Siobhan Fennessy

*Codirector, Assistant Professor of Biology*

Bruce Gensemer

*Professor of Economics*

David E. Harrington

*Codirector, Himmelright Associate Professor of Economics (on leave)*

E. Raymond Heithaus

*Jordan Professor of Environmental Science*

Rosemary Marusak

*Associate Professor of Chemistry*

Robert A. Mauck

*Assistant Professor of Biology*

George E. McCarthy

*National Endowment for the Humanities Distinguished Teaching Professor of Sociology*

Ronald E. McLaren

*Professor of Philosophy Emeritus*

Wade H. Powell

*Assistant Professor of Biology*

Joan L. Slonczewski

*Professor of Biology*

Kenneth J. Smail

*Professor of Anthropology*

David N. Suggs

*Professor of Anthropology*

Stephen E. Van Holde

*Associate Professor of Political Science*

Note: Additional faculty teaching courses approved for credit toward the concentration constitute its extended faculty. Consult a program codirector for a list.

The Environmental Studies Concentration provides an interdisciplinary framework for understanding the

interactions of individuals, societies, and the natural world. The concentration brings together the different perspectives of the humanities, life sciences, physical sciences, and social sciences. The academic program is enhanced by the 400-acre Brown Family Environmental Center (BFEC). The BFEC, within walking distance of campus, features a wide range of natural and managed habitats and includes part of the Kokosing River (Ohio's newest State Scenic River). In addition, Kenyon encourages students to think in more global terms through affiliations with the School for Field Studies (which provides classes in Australia, British West Indies, Costa Rica, Kenya, Mexico, and Pacific Northwest Canada), with the Marine Science Education Network (through Duke University), and with the Marine Biological Lab Consortium in Environmental Science (Woods Hole). Our goals are to increase basic knowledge in the relevant subjects and to learn techniques for evaluating complex issues, especially those with both technological and social components.

Understanding the place of humans in the world has long been a core goal of the liberal arts; the historical perspective is complemented by a future that depends on this understanding. Noting that human domination of the world

environment has reached unprecedented levels, the president of the American Association for the Advancement of Science noted in her Presidential Address of 1997 that we should enter the "Century of the Environment" with a new "contract for science." The implications of our interaction with the environment extend well beyond either natural or social sciences, however, as ethics and aesthetics are integral to those interactions. Consequently, the Environmental Studies Concentration integrates many traditional academic disciplines. In addition, the concentration can be integrated with a major in international studies, an interdisciplinary program.

The environmental studies program consists of four components: a one-semester introductory course, ENVS 112 (1/2 unit); three semester courses in "core" subjects (biology, chemistry, and economics, for 1 1/2 units); a selection of 1 1/2 units (three courses) from affiliated courses in at least two departments; and a one-semester capstone seminar, ENVS 461 (1/2 unit). The concentration requires a total of 4 units. Affiliated courses are offered in anthropology, biology, chemistry, economics, philosophy, physics, political science, religious studies, and sociology.

In the listings that follow, the ♦ symbol designates a course particu-

larly appropriate for first-year students or for upperclass students new to the environmental studies curriculum.

## Concentration Requirements

### Required Environmental Studies Courses: 1 unit

- ◆ ENVS 112 (1/2 unit) Introduction to Environmental Studies
- ENVS 461 (1/2 unit) Seminar in Environmental Studies

### Core Courses in Environmental Studies: 1 1/2 units

- ◆ BIOL 112 (1/2 unit) Population and Environmental Biology
- ◆ CHEM 110 (1/2 unit) Environmental Chemistry (CHEM 111, 112 can serve as a replacement.)
- ◆ ECON 101 (1/2 unit) Principles of Microeconomics

### Elective Courses for Environmental Studies: 1 1/2 units selected from the following courses

#### Anthropology courses

- ◆ ANTH 111 Contemporary Humans: Bioanthropology
- ANTH 333 Old World Archaeology
- ANTH 357 Anthropology of Development

#### Biology courses

- BIOL 228, 229 Ecology and Ecology Laboratory
- BIOL 251 Marine Biology
- BIOL 272 Microbial Ecology
- BIOL 352, 353 Aquatic Systems Biology and Aquatic Systems Laboratory

#### Chemistry courses

- CHEM 231, 232 Organic Chemistry
- CHEM 341 Instrumental Analysis

#### Economics courses

- ECON 336 Environmental Economics
- ECON 345 Economic Analysis of Politics and Law
- ECON 347 Economics of the Public Sector
- ECON 377 Economics of Regulation

#### Philosophy courses

- ◆ PHIL 110 Introduction to Ethics
- PHIL 115 Practical Issues in Ethics
- PHIL 270 Environmental Ethics

#### Physics course

- ◆ PHYS 108 Geology

#### Political science courses

- PSCI 361 International Political Economy
- PSCI 362 Haves and Have Nots: Development and Developing Countries
- PSCI 363 Global Environmental Politics
- PSCI 480 Science and Politics

#### Religious studies course

- RELN 481 Religion and Nature

#### Sociology course

- SOCY 292 Demography

Because careful course selection is necessary to achieve specific objectives, students are urged to consult as early as possible with a program codirector and other faculty members in the Environmental Studies Concentration.

## First-Semester Courses

### Seminar in Environmental Studies: Capstone Seminar

- ENVS 461 (1/2 unit)
- Staff*

The intention of this capstone seminar is to draw together and apply the concepts learned in earlier courses in the Environmental Studies Concentration. The focus of the course will be on case studies of natural-resource management, with the specific area to be determined. In this strongly interdisciplinary effort, we will explore ecological, economic, social, and legal issues that influence how people exploit natural resources, and whether that exploitation is sustainable. Students will be expected to develop and communicate their understanding of the complex and inseparable relationships of human need and environmental management. Prerequisites: junior or senior standing and ENVS 112. Enrollment limited.

#### Individual Study

- ENVS 493 (1/2 unit)
- Staff*

Students conduct independent research under the supervision of one of the faculty members affiliated with the concentration. Prerequisites: permission of instructor and one of the concentration codirectors.

## Second-Semester Courses

### Introduction to Environmental Studies

- ◆ ENVS 112 (1/2 unit)
- Mauck, Staff*

This course examines contemporary environmental problems, introducing the major concepts pertaining to human interactions with the environment. We will explore both local and global scales of this interaction. Course topics include basic principles of ecology, the impacts of human technology, the roots of our perceptions about and reactions to nature, the social and legal framework for responding to problems, and economic issues surrounding environmental issues. We will discuss methods for answering questions regarding the consequences of our actions and especially focus on methods for organizing information to evaluate complex issues. The format of the course will be three-quarters discussion and lecture, one-quarter "workshop." The workshops will include field trips, experience with collecting data, and application of computer modeling. No prerequisites.

#### Individual Study

- ENVS 494 (1/2 unit)
- Staff*

Students conduct independent research under the supervision of one of the faculty members affiliated with the concentration. Prerequisites: permission of instructor and one of the concentration codirectors.