

# ENVIRONMENTAL STUDIES

## ABOUT THE PROGRAM

The goals of the environmental studies program are to:

1. Increase understanding of how the world as a bio-physical system works, foster awareness of the earth's vital signs and sharpen the ability of students to understand the nature and results of science
2. Encourage a critical understanding of the various historical, political, economic, ethical, and religious forces that have shaped and continue to shape our world
3. Nurture an ecological frame of mind which is willing and able to see things whole and thus resist the narrow specialization that can blind us to the connections between disciplines and bodies of knowledge
4. Cultivate people who have sufficient knowledge, care and practical competence to live in an ecologically responsible way
5. Provide opportunities for students to explore the connections between environmental issues and different religious and philosophical traditions, and to encourage students who are Christian to reflect on their faith and its vision of shalom.

## MINORS

The student who minors in environmental studies may major in anything. For students who major in one of the natural sciences, one of the environmental studies GEMS courses may be replaced by other appropriate science courses, with the permission of the program director. For a student who decides to minor in both environmental science and environmental studies, such a double minor does not constitute a major.

### Environmental Studies

The minor consists of a minimum of 20 credits.

- Eight credits are required in the Natural Sciences, with courses taken from a particular set of GEMS courses for students who are not natural science majors.
- Four credits are required in the Social Sciences: either Environmental Sociology, Environmental Public Policy, or Managing for Environmental Sustainability.
- Four credits are required in the Humanities: either American Literature and the Environment or Environmental Philosophy and History.

- The final four credits, typically taken in the senior year, consist of a two credit internship in a local work setting (business, non-profit organization, governmental agency) and a two credit research project of the student's choosing.

In addition to the courses in the minor, there are a number of general education courses that address various environmental issues and themes and thus may be of interest for Environmental Studies students.

## Requirements

### Required Courses (20 credits)

1. Natural Sciences: choose 8 credits from the following courses

GEMS 130: Intro to Environmental Science, 4 credits

GEMS 153: Populations in Changing Environments, 4 credits

GEMS 157: The Planet Earth, 4 credits

GEMS 160: The Chemistry of Our Environment, 4 credits

GEMS 204: Regional Flora and Fauna, 2 credits

GEMS 295: Abrupt Climate Change, 2 credits

2. Social Sciences: choose 4 credits from the following courses

SOC 395: Environmental Sociology, 4 credits

GES 310: Environmental Public Policy, 4 credits

BUS 356: Managing for Environmental Sustainability, 4 credits

3. Humanities: choose 4 credits from the following courses

ENGL 375 (topical course - fulfills requirement when title is American Literature and the Environment), 4 credits

ENVR 377: Environmental Philosophy and History, 4 credit

REL 365: Ecological Theology and Ethics, 4 credits

4. Senior Integration Experience: 4 credits

ENVR 490: Research Project, 2 credits

ENVR 499: Internship, 2 credits (minimum)

**Thematically Related Courses in the Core Curriculum**

IDS 100: First Year Seminar, 2 credits

The topics will vary depending on the section, but there may be sections with a focus on environmental themes.

REL 100: Earth and Ethics, 2 credits

ENGL 113: Expository Writing, 4 credits

The topics will vary depending on the section, but there may be sections with a focus on environmental themes.

IDS 492: God, Earth, Ethics 4 credits

## COURSES

### ENVIRONMENTAL STUDIES

#### **ENVR 295 - Topics Environmental Studies**

A course offered in response to student and instructor interest. Topics are not generally covered in the regular course listings. Course may be taken multiple times if topics are different.

Credits Awarded: 1-4  
Terms Offered: As Needed

#### **ENVR 377 - Environmental Philosophy and History**

An in-depth study of classic and contemporary texts in environmental philosophy and history, including primary sources by Plato, Aristotle, Descartes, Locke, Thoreau, Berry, Carson, and Leopold, as well as secondary studies by Crosby, Ponting, and Steinberg. The cultural heritage general education requirement is highly recommended prior to this course.

Credits Awarded: 4  
Terms Offered: As Needed

#### **ENVR 395 - Topics Environmental Studies**

A course offered in response to student and instructor interest. Topics are not generally covered in the regular course listings. Course may be taken multiple times if topics are different.

Credits Awarded: 1-4  
Terms Offered: As Needed

#### **ENVR 490 - Research Project**

An in-depth investigation of some issue or problem of the student's choosing. All minor requirements except for the internship are highly recommended prior to this course.

Credits Awarded: 0-3  
Terms Offered: Spring, Fall  
Prerequisites: Permission of instructor

#### **ENVR 493 - Independent Study in Environmental Studies**

An independent study project investigating an issue or problem of the student's choosing. All minor requirements except for the internship are highly recommended prior to this course.

Credits Awarded: 1-4  
Terms Offered: As Needed

### **ENVR 499 - Internship**

A supervised practical experience in a local work setting, e.g., business, non-profit organization, governmental agency, educational institution. All minor requirements except for the research project are highly recommended prior to this course.

Credits Awarded: 2-4

Terms Offered: Fall, Spring

### **Winnett-Murray, Dr. Kathy**

*Professor of Biology (1986)*

Ph.D., University of Florida, 1986

M.S., Calif State Univ Northridge, 1979

B.S., University of Calif Irvine, 1976

## **FACULTY & STAFF**

### **Bouma-Prediger, Dr. Steve**

*Leonard and Marjorie Maas Professor of Reformed Theology (1994)*

Ph.D., University of Chicago, 1992

M.Div., Fuller Theological Seminary, 1987

MPHI, Institute Christian Studies, 1984

B.A., Hope College, 1979

### **Brown, Dr. Kenneth**

*Professor of Chemistry (1999)*

Ph.D., Oklahoma State University, 1999

B.S., Oral Roberts University, 1993

### **Lunn, Dr. John**

*The Robert W. Haack Professor of Economics (1992)*

Ph.D., Univ of California Los Angeles, 1980

M.A., Calif State Univ East Bay, 1975

B.A., Samford University, 1970

### **Peterson, Dr. Jonathan**

*The Lavern '39 and Betty DePree '41 Van Kley*

*Professor of Geology & Env Science (1994)*

Ph.D., University of Chicago, 1989

B.A., Hope College, 1984

### **Stewart, Dr. Joanne**

*Elmer E. Hartgerink Professor of Chemistry (1988)*

Ph.D., Univ of California Berkeley, 1988

B.A., Kalamazoo College, 1982