# Environmental Studies Major (EVS)

This interdisciplinary program provides a foundation in environmental studies within the framework of a liberal arts education.

Because of the broad spectrum of environmental fields, students are provided with flexibility in selecting a course of study that reflects their specific area(s) of interest (i.e., analytical laboratory studies, field-oriented biology, political science, or some combination). All students in the program are provided with a common foundation (the "Environmental Studies Core") and the opportunity to focus their studies in either the Science or Policy Track. This B.S. degree program (57 to 60 hours) prepares students for future study and employment leading to several possible career paths in government, industry, research, and academia. Independent studies and internships are encouraged.

Graduates of the environmental studies program will demonstrate:

- an understanding of the place environmental studies holds in society and preparedness to successfully pursue a career path;
- an understanding of the scientific method, including construction of hypotheses, data collection and analysis, and the formulation of conclusions;
- an understanding of the basic concepts of environmental studies, including: the unity and diversity of life, principles of ecology, processes of evolution, and an understanding of how humans influence and are influenced by their environment;
- an ability to understand and critique primary scientific literature and communicate effectively to peers in written and verbal form.

Degree Type: Bachelor of Science (BS)

Program Contact: Professor Rick Kopp

No minor required.

Students majoring in Environmental Science must choose one track.

#### **Department: Environmental Studies**

 Type: B.S.

 Core Courses
 19 hours

 Tracks
 39-41 hours

 Science Track
 Additional Core Courses

 Elective Courses
 Policy Track

 Additional Core Courses
 Required Course Selections

 Elective Courses
 Selections

 Total
 58-60

## **Core Courses**

ltem #	Title	Credit Hour(s)
BI0111	Biological Principles	4
BI0314	Evolution and Ecology	4
MAT111	Elementary Probability and Statistics	3
ENV402	Junior Seminar	2
ENV433	Environmental Science and Natural Resources	3
SOC355	Environment and Sustainability	3

## Tracks

Select remaining courses from one track.

## Science Track

### Additional Core Courses

Title	Credit Hour(s)
Cellular and Molecular Biology	4
Organismal Diversity	4
General Chemistry I	3
General Chemistry I Laboratory	1
General Chemistry II	3
General Chemistry II Lab	1
General Geology	4
	Cellular and Molecular Biology Organismal Diversity General Chemistry I General Chemistry I Laboratory General Chemistry II General Chemistry II Lab

## **Elective Courses**

### Group 1

#### Complete 18 credits from the following:

Item #	Title	Credit Hour(s)
BI0300	Marine Biology	3
BI0311	General Microbiology	4
BI0316	Plant Taxonomy and Spring Flora	4
BI0320	Vertebrate Ecology	4
BI0327	Freshwater Biology	4
BI0335	Genetics and Molecular Biology	4
BI0435	Conservation Biology	3
CHE201	Organic Chemistry I	3
CHE202	Organic Chemistry Lab I - Techniques and Synthesis	1
CHE305	Analytical Chemistry	4
CHE309	Organic Chemistry II	3
CHE310	Organic Chemistry Lab II - Qualitative Analysis and Synthesis	1
CHE315	Spectroscopy	4
CHE337	Environmental Chemistry	3
CHE339	Environmental Chemistry Lab	1
CSC303	Fundamentals of Data Computing	3
ENV460	Internship in Environmental Science	1-3

### Group 2

Select one course listed in the Policy Track outside of the natural and physical sciences.

# Policy Track

### Additional Core Courses

Item #	Title	Credit Hour(s)
EC0223	Principles of Microeconomics	3
EC0337	Environmental Economics	3
PHI151	Ethics	3
PHI345	Environmental Philosophy and Ethics	3

# **Required Course Selections**

Item #	Title	Credit Hour(s)
	BI0212 or BI0214	4
	CHE111 or GEL113	4

### **Elective Courses**

### Group 1

### Select 15 hours from the following:

Item #	Title	Credit Hour(s)
CSC303	Fundamentals of Data Computing	3
EC0221	Principles of Macroeconomics	3
ENV460	Internship in Environmental Science	1-3
P0S300	World Politics	3
P0S309	State Government	3
P0S315	Public Administration	3
P0S330	Globalization	3
P0S337	Food and Politics	3
P0S407	International Law and Organization	3
P0S409	Kentucky Government	3
SOC306	Social Movements and Social Change	3
S0C324	Law and Society	3
SOC335	Sociology of Appalachia	3
SOC360	Sociology of Health, Illness, and Healthcare	3
SOC380	Race and Ethnicity	3
SOC400	Community Resilience and Leadership	3
SOC415	Food, Health, and Environment	3

### Group 2

### Select 3-4 hours from the following:

Item #	Title	Credit Hour(s)
BI0300	Marine Biology	3
BI0311	General Microbiology	4
BI0316	Plant Taxonomy and Spring Flora	4
BI0320	Vertebrate Ecology	4
BI0327	Freshwater Biology	4
BI0335	Genetics and Molecular Biology	4
BI0435	Conservation Biology	3
	Total credits:	58-60