

ENVIRONMENTAL STUDIES MAJOR (M)

A strong focus on Christian environmental stewardship is increasingly important in many parts of society. The Concordia Center for Environmental Stewardship (CCES) provides a wonderful resource for students whose interests are primarily in science or other areas. This major engages student with many facets of the environment. It is often coupled with minors in art, business, chemistry, or justice and public policy, leading to careers in environmental education at nature centers, sustainable business practices, environmental science, park rangers, or law school.

Program Learning Outcomes

Students will:

- Demonstrate an understanding of and an ability to explain major biological and related scientific concepts (Knowledge Base of Biology and Related Sciences);
- Demonstrate the ability to appropriately collect and analyze data while utilizing laboratory equipment and procedures safely and effectively (Biological Procedures and Data)
- Develop investigative and critical thinking skills to explore complex questions and solve challenging scientific problems (Scientific Inquiry);
- Demonstrate the ability to communicate scientific information effectively to both scientists and non-scientists (Scientific Communication);
- Recognize how vocations in science provide opportunities for service to Christ and others and necessitate ethical behavior in all aspects of science (Vocation and Ethics)
- Demonstrate an understanding of how/why a Christian sees evidence of God's design in nature and how to be good stewards of His creation (God's Design and Stewardship).

Curriculum

Code	Title	Hours
Core Requirements (https://catalog.cuw.edu/undergraduate/university/acad-prog/trad/core/)		45
Major Requirements		45-47
Electives		4-12
Minor: Required		18-24
Total Hours		120

Major Requirements

Code	Title	Hours
Required Core Courses		
BIO 156	Environmental Science (Lab Science)	
COMM 105	Public Speaking (Communication)	
	or COMM 20 Interpersonal Communication	
LEGL 230	Environmental Law & Politics (Human Beings and Being Human)	
MATH 205	Statistics I (Mathematics)	
Required Courses		
<i>Foundation</i>		
BIO 141	General Biology I	4

	or BIO 151	Functional Human Biology I	
BIO 142		General Biology II	4
	or BIO 152	Functional Human Biology II	
BIO 240		Zoology	4
	or BIO 244	Botany	
BIO 367		Ecology of the Tropics (Travel Course)	3
BIO 410		Ecology	4
CHEM 105		Elements of General and Biological Chemistry	4
	or CHEM 141	General Chemistry I	
PHIL 240		Environmental Ethics	3
	or PHIL 350	Bioethical Dilemmas in Contemporary Society	
ENV 130		Introduction to Sustainability	3
ENV 160		Introductory GIS	3-4
	or ENV 180	Remote Sensing from Satellites and Drones	
	or ENV 220	Water Quality and Aquaponics	
	or ENV 240	Native Plants of Wisconsin	
	or ENV 320	Environmental Data Analysis	
SCI 235		Earth Science	3-4
	or SCI 195	Meteorology	
	or SCI 246	Oceanography	

Capstone		
<i>Select 2 credits of the following:</i>		2
BIO 490	Biology Senior Seminar (fall and/or spring, 1 cr. each)	
ENV 499	Advanced Applied Field Research (can be taken for 1-3 credits)	

Major Electives		
<i>Select 8 credits of the following (If a course was selected for the Foundation, it cannot be repeated in the Electives section):</i>		8
BIO 146	Essentials of Anatomy and Physiology	4
BIO 240	Zoology	4
BIO 244	Botany	4
BIO 260	Biology of Microorganisms	4
BIO 348	Genetics	4
BIO 368	Ecology of the Tropics-Lab	1
CHEM 142	General Chemistry II	4
ENV 160	Introductory GIS	4
ENV 180	Remote Sensing from Satellites and Drones	3
ENV 220	Water Quality and Aquaponics	4
ENV 240	Native Plants of Wisconsin	4
ENV 320	Environmental Data Analysis	3
PHYS 108	Introductory Astronomy	4
PHYS 151	General Physics I	4
PHYS 152	General Physics II	4
SCI 195	Meteorology	3
SCI 235	Earth Science	4
SCI 246	Oceanography	4
SCI 275	Cosmogony	3

Or other courses approved by the department chair of Life & Earth Sciences

Total Hours	45-47
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