Ecosystems Studies Emphasis

Master of Science in Environmental Science and Policy

Students who select the Ecosystems Studies emphasis may study general features of ecosystems such as nutrient regeneration, productivity, or trophic relationships. They may also focus on specific questions related to endangered species, predation and competition. Natural, managed, and disturbed ecosystems are examined in classroom and field activities. Studies on aquatic systems take advantage of the University's location on Green Bay, participation in the University of Wisconsin Sea Grant Program, and the on-campus Cofrin Center for Biodiversity. The University's proximity to large areas of northern forests and the Door County Peninsula provides convenient locations for the study of diverse ecosystems. The Ecosystems Studies area of emphasis prepares students to:

- design and conduct scientific investigations;
- collect, evaluate, and interpret data;
- make responsible decisions to implement appropriate technologies and strategies to solve environmental problems; and
- effectively communicate the results of environmental studies to other scientists, decision makers and the general public.

Graduates typically work as scientists, environmental specialists, or project managers with industry, commercial laboratories, engineering firms, or government agencies, where their work involves analysis, research, consulting, compliance, or enforcement. Students who pursue the Ecosystems Studies area of emphasis are expected to have completed biology courses beyond introductory courses, typically the equivalent to a minor or major in biology (taken elsewhere or prior to entrance). These courses should include an ecology course.

Ecosystems Studies

Emphasis Prerequisites

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Code	Title	Credits
Required Quantitative Course		4
ENV S&P 755	Environmental Data Analysis	
Choose one of the following required ecology courses:		3
ENV SCI 669	Conservation Biology	
ENV S&P 740	Ecology and Management of Ecosystems	
ENV S&P 743	Landscape Ecology	
ENV S&P 749	Wetland Ecology and Management	
Additional Courses - complete 9 credits		9
Choose any combination from the courses listed here or above.		
Biology:		
BIOLOGY 510	Plant Biodiversity	
BIOLOGY 511	Plant Physiology	
BIOLOGY 512	Mycology	
BIOLOGY 520	Field Botany	
BIOLOGY 522	Environmental Microbiology	
BIOLOGY 542	Ornithology	
BIOLOGY 543	Mammalogy	
BIOLOGY 555	Entomology	
BIOLOGY 557	Marine Biology	
BIOLOGY 601	Fish and Wildlife Population Dynamics	
BIOLOGY 602	Advanced Microbiology	
Environmental Science:		
ENV SCI 520	The Soil Environment	
ENV SCI 530	Hydrology	
ENV SCI 601	Stream Ecology	
ENV SCI 603	Limnology	
Environmental Policy and Planning:		

PU EN AF 522	Environmental Planning	
PU EN AF 578	Environmental Law	
PU EN AF 580	Global Environmental Politics and Policy	
PU EN AF 615	Public and Nonprofit Budgeting	
ENV S&P 713	Environmental & Natural Resource Economics	
ENV S&P 752	Environmental Policy and Administration	
Math and Statistics:		
ENV S&P 760	Social Research Methods	
MATH 529	Applied Regression Analysis	
MATH 630	Design of Experiments	
Seminar and Special Topics:		
ENV S&P 715	Seminar in Ecology and Evolution	
ENV S&P 795	Special Topics	
Internship or Thesis Option:		6-9
ENV S&P 763 & ENV S&P 797	Capstone in Environmental Science and Policy and Internship	
or ENV S&P 799	Thesis	
Total Credits		22-25