

MPA IN ENVIRONMENTAL SCIENCE AND POLICY

MPA in Environmental Science and Policy Curriculum

Basic applied environmental science forms the foundation for the study of policy analysis and management. Courses emphasize the practical skills that sustainability professionals need to make a difference in the world.

Students learn to drive sustainability through the formulation of policy and the management of organizations. The **STEM-designated** program is unique in anchoring the study of sustainability policy and management in basic applied environmental science. The combination of science and policy makes for graduates who have a complex understanding of the environmental, social, and economic dimensions of sustainability.

In the science component of the curriculum, students learn the fundamental science of earth systems and conservation biology, including their human dimensions. Students go on to learn applied microeconomics and applied regression analysis, which are required for policy formulation and analysis. They also learn the core aspects of management, including organizational analysis, budgeting and financial analysis, probability theory, and reporting. At the same time, students practice the work skills that are required to be problem-solving professionals: project management, teamwork, presentation, and memo and report writing.

Contact Us

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Louise Rosen, Lecturer of International and Public Affairs (part-time)

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Anyi Wang, Adjunct Assistant Professor of International and Public Affairs

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Core Curriculum

The classes that comprise the core curriculum (26 Points) prepare students to analyze and understand the formulation and management of public policy. Students learn about organizational analysis, budgeting, financial analysis and reporting, probability theory, applied regression analysis, and applied microeconomics. The program emphasizes a hands-on approach so that students may acquire the analytic, communication, and work skills required to be problem-solving earth systems professionals. These skills include memo writing, presentations, team management, and financial analysis.

The core also includes Workshops in Applied Earth Systems Policy Analysis and Management, which challenge students to apply their theoretical knowledge and functional skills to address real-world environmental policy and management issues. This unique aspect of the program helps the participants synthesize what they are learning and gives them valuable experience as they prepare for careers in public policy.

		Points
ENVP U6234	Sustainability Management	3.00
ENVP U6310	Quantitative Techniques and Systems Analysis in Policymaking	3.00
ENVP U8201	Financial Management	3.00
ENVP U8213 - ENVP U8216	Microeconomics and Policy Analysis I and Microeconomics and Policy Analysis II	6
Workshops:		11
ENVP U9229	Workshop in Applied Earth Systems Management I	
ENVP U9230	Workshop in Applied Earth Systems Management II	
ENVP U9232	Capstone Workshop in Applied Earth Systems Policy Analysis	
Total Points		26

Policy Concentration

The Environmental Science and Earth Systems Concentration (16 Points) comprises both natural and social science courses.

The five natural science courses are Environmental Chemistry, Environmental Toxicology, Climatology, Hydrology, Ecology, and Urban Ecology. The social science course is Earth Systems and Environmental Policy, Politics, and Management (ENVP U6241).

The science component of the concentration is designed to enable students to understand enough science to manage the work of science

experts. Our goal is for students to be capable of more than passive consumption or understanding of environmental science. However, we do not expect MPAs to become producers of scientific research. The environmental science taught in the program focuses on understanding the ecological processes that directly affect human health and well-being.

The policy and management issues our graduates are being trained to address include global change issues such as global warming but more frequently focus on: the provision of safe drinking water; environmentally-sound sewage treatment and disposal; solid and toxic waste management; and the control of local sources of air pollution.

The science courses required in this concentration are designed to support global and local environmental decision-making and management.

		Points
ENVP U6111	Principles of Ecology	2
ENVP U6112	Urban Ecology	2
ENVP U6115	Climatology	2
ENVP U6116	Hydrology	2
ENVP U6220	Environmental Chemistry	2
ENVP U6221	Risk Assessment # Toxicology	2
ENVP U6241	Earth Systems and Environmental Policy, Politics, and Management	3
ENVP U6246	Analytics in Environmental Science Policy	1
Total Points		16

Degree Audit Report

Matriculated students in this program can view their degree audit report on [Stellic](#).

Sample Program

Curriculum and Course Schedule

Summer	Points	Fall	Points	Spring	Points
ENVP U6111	2	ENVP U8213	3	ENVP U8216	3
ENVP U6112	2	ENVP U9230	3	ENVP U8201	3
ENVP U6115	2	ENVP U6310	3	ENVP U9232	5
ENVP U6116	2	ENVP U6225	3	Elective	3
ENVP U6220	2	ENVP U6234	3	Elective	3
ENVP U6221	2	Elective	3		
ENVP U6241	3				
ENVP U6246	1				
ENVP U9229	3				
19		18		17	

Total Points: 54