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.

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Ryshelle McCadney, Adjunct Associate Professor of International and Public Affairs
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Matthew Palmer, Senior Lecturer in Discipline
Rachel Patterson, Lecturer of International and Public Affairs (part-time)
Louise Rosen, Lecturer of International and Public Affairs (part-time)
Sara Tjossem, Senior Lecturer in the Discipline of International and Public Affairs
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.

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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 # Environmental Politics, Policy, # 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.

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<td>ENVP U6246</td>
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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**

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