ENSP - ENVIRONMENTAL SCIENCE AND POLICY

ENSP101 Introduction to Environmental Science (3 Credits)
One of two required courses that introduce students to the topics studied and methods employed in environmental science and policy. Emphasis on scientific ways of knowing; the systems, cycles, flows, and interfaces that characterize the atmosphere, lithosphere, hydrosphere, and biosphere; the analysis of human impacts on these systems; and the nature of scientific uncertainty and methods of quantifying environmental processes.

ENSP102 Introduction to Environmental Policy (3 Credits)
Second of two courses that introduce students to the topics studied and methods employed in environmental science and policy. Emphasis on the process of formulating, implementing, and evaluating policy responses to environmental problems, with particular attention to policy controversies related to scientific uncertainty, risk assessment, the valuation of nature, and distributional equity. May be taken before or after ENSP101.

Additional Information: May be taken before or after ENSP101.

ENSP305 Applied Quantitative Methods in Environmental Science and Policy (3 Credits)
Intended for students interested in pursuing career or graduate research opportunities that will include management of environmental databases, detailed analysis of environmental data, and/or application of predictive environmental models. Students will learn necessary skills to manage and analyze environmental data through hands-on training in commonly used software and a series of topical case studies. Data analysis and data management will be taught using publicly available real-world environmental data sets.

Prerequisite: BIOM301, ECON321, GEOG306, PSYC200, or SOCY201; and (ENSP101 and ENSP102). And MATH120, MATH130, MATH136, or MATH140; or must have completed MATH220.

Restriction: Must be in a major in AGNR-Dean-Environmental Science & Policy Program; or permission of AGNR-Dean-Environmental Science & Policy Program.

Credit Only Granted for: ENSP305 or AREC382.

Additional Information: Applied topics covered in this course will supplement coursework in introductory statistics and mathematics; this course is not intended for students with significant previous advanced data analysis or statistical experience.

ENSP330 Introduction to Environmental Law (3 Credits)
An overview of environmental law, from its common law roots to its role in the modern regulatory state, including an examination of major federal environment statutes and the policy debates inherent in them. Other areas covered include civil and criminal enforcement, standing to sue, land use control, and regulatory takings.

Prerequisite: Permission of AGNR-Dean-Environmental Science & Policy Program.

Recommended: ENSP101; and ENSP102.

Restriction: Junior standing or higher.

Credit Only Granted for: ENSP330 or ENSP399A.

Formerly: ENSP399A.

ENSP340 Water: Science, Ethics, and Policy (3 Credits)
Exploration of the science, policy, and ethical aspects of water resource protection and management. Focus on water pollution, water availability, ecosystems, and sustainability.

Prerequisite: ENSP101 and ENSP102.

Restriction: Must have earned a minimum of 60 credits; and permission of instructor.

Credit Only Granted for: ENSP340 or ENSP399B.

Formerly: ENSP399B.

ENSP342 Environmental Threats to Oceans and Coasts: Towards an Integrated Policy Response (3 Credits)
An interdisciplinary study of the challenges of maintaining the health and vitality of oceans and coasts in the face of climate change, extreme weather, and other threats including pollution, and oil and gas development. Exploration of four broad themes: resource management, conservation and stewardship, pollution, and coastal zone management. Also, an analysis of current efforts to integrate these themes through ecosystem-based management; marine spatial planning; and related policy responses.

Prerequisite: ENSP101 and ENSP102.

Restriction: Must have earned a minimum of 60 credits; and permission of Environmental Science and Policy program.

Credit Only Granted for: ENSP399A or ENSP342.

Formerly: ENSP399A.

ENSP350 Energy Resources: Science and Policy in the 21st Century (3 Credits)
Energy resource production and consumption, including historical context, current trends in the U.S. and globally, and social and environmental implications. Includes fuel-source formation, history of use, modern trends in consumption, production, pricing and trade, reserves and resources, environmental and social impacts, future outlook and potential new technologies related to energy efficiency and conservation.

Prerequisite: ENSP101 and ENSP102.

Restriction: Must have earned a minimum of 60 credits; and permission of AGNR-Dean-Environmental Science & Policy Program.

Credit Only Granted for: ENST405, ENSP350, ENST605, or MEES698Z.

ENSP386 Internship (3-6 Credits)

ENSP399 Special Topics in Environmental Science and Policy (1-3 Credits)
A substantive and specialized examination of contemporary issues in environmental science or policy.

Restriction: Must be in Environmental Science and Policy program; or permission of AGNR-Dean-Environmental Science & Policy Program.

Repeatable to: 12 credits if content differs.

ENSP400 Capstone in Environmental Science and Policy (3 Credits)
Integration of physical, biological, and social sciences with applications to environmental science and policy. Problem-solving and multi-disciplinary case study evaluations pertinent to contemporary and future issues related to the environment.

Prerequisite: ENSP101; and ENSP102.

Restriction: Must be in Environmental Science and Policy program.

Credit Only Granted for: ENSP400.

Repeatable to: 6 credits if content differs.
ENSP499 Honors Thesis Research (1-6 Credits)
Individual research, thesis, and oral defense. The research project will be conducted under the supervision of a faculty member.

Restriction: Must be in the ENSP Honors program; and permission of AGNR-Dean-Environmental Science & Policy Program.

Repeatable to: 6 credits.