ENS

Environmental Studies

ENS 101: Prospects for Planet Earth
An introduction for non-science majors to global environmental change. Exploration of the natural science of Earth's environment; the scientific, socioeconomic, and political issues that influence human impact on the global environment and responses to environmental changes; the strategies for humans to live in greater harmony with planet Earth. Global issues are related to the particular issues of the United States, the Northeast, and the greater metropolitan New York City-Long Island area.

DEC: E
SBC: SNW
3 credits

ENS 119: Physics for Environmental Studies
The principles of physics as they apply to environmental issues. A review of mathematics is followed by a discussion of Newton's laws, conservation principles, topics in fluids and wave motion, optical instruments, and radioactivity. Three lectures and one laboratory session per week. This course is offered as both ENS 119 and PHY 119.

Prerequisites: MAT 123; CHE 131

DEC: E
SBC: SNW
4 credits

ENS 311: Population, Technology, and the Environment
A study of the biological, social, and economic factors that influence population growth. The development of new technologies and their influence on resource use and the effects that increasing population and changing technologies have on the environment are explored.

Prerequisites: MAR 340; one semester of BIO

DEC: H
SBC: STAS
3 credits

ENS 339: Economics of Coastal and Marine Ecosystems
This course will view human interactions with coastal and marine ecosystems through the lens of economics. Consideration of the socioeconomic implications of policy decisions involving environmental and natural resources has become increasingly important for ecosystem management. Topics will include the basics of welfare analysis, the concept of ecosystem services, the challenges associated with public goods, methods for economic valuation of non-market goods and services, strategies for sustainable use of coastal and marine resources, and case studies of the application of fundamental principles of environmental economics to national and international policy. This course is offered as both ENS 339 and ENV 339.

Prerequisite: U3/U4 status; ENS 101 or SBC 111 or MAR 104

DEC: H
SBC: STAS
3 credits

ENS 395: Topics in Environmental Sciences
May be repeated as the topic changes.

Prerequisite: one upper division ENS course
3 credits

ENS 443: Environmental Problem Solving
The integration of information and skills from the natural sciences, social sciences, engineering and the humanities to address important environmental problems. An environmental problem of current interest is presented. Working in small groups, students develop a proposal to solve the problem, collect and analyze data, and present results. Data collection may include field and laboratory work outside of scheduled class meetings.

Prerequisites: U3 or U4 standing; ENS major or minor
3 credits

ENS 447: Readings in Environmental Sciences
Tutorial readings in the environmental sciences. This course may be repeated but no more than 3 credits may be used toward Environmental Studies major requirements.

Prerequisite: Permission of instructor and SoMAS undergraduate director
1-3 credits, S/U grading

ENS 487: Independent Research in Environmental Studies
An independent project, developed out of advanced coursework in environmental studies, designed in consultation with and supervised by a faculty member. The project should be formulated before the start of the semester in which the research will be done and should culminate in a substantial written paper. May be repeated.

Prerequisites: Permission of a supervising faculty member and SoMAS Undergraduate Programs Director
SBC: EXP+
0-6 credits

ENS 488: Internship in Environmental Studies
Internships provide students with an opportunity of gaining experience working in the community at government agencies, environmental groups, aquaria, summer camps, field studies, etc. A suitable proposal must be presented by the student and approved by the Director of Undergraduate Studies before the internship begins. May be repeated for a maximum of 6 credits for the ENS major, 3 credits for the ENS minor.

Prerequisite: Permission of the SoMAS Undergraduate Programs Director

SBC: EXP+

0-6 credits, S/U grading