ENVIRONMENTAL SCIENCE (ENSC)

ENSC 1101 Intro to Environmental Sys Lab
An introductory laboratory course for majors and non-majors that emphasizes the principles of environmental science. Students will conduct observational and manipulative experiments that examine effects of environmental factors on the biology and ecology of an ecosystem. The course will also involve discussions of case studies in environmental sustainability. Must be taken concurrently with ENSC 1301.
TCCN: ENVR 1101

ENSC 1301 Intro to Environmental Syst
An introductory course for majors and non-majors that applies the principles of the scientific method and critical thinking to environmental issues through a multidisciplinary approach. Students will gain an understanding of biotic interactions in environmental systems and the human impact as it relates to public policy and natural resource use. The course will focus on environmental sustainability and the ecological principles essential to understanding processes in environmental systems. This course is a prerequisite for ENSC/BIOL 3401 and must be taken concurrently with ENSC 1101.
TCCN: ENVR 1301

ENSC 3310 Environmental/Natural Res Con
Principles of ecology and resource management. The course outlines many of the national and international environmental problems and offers legislative, technological and methodological solutions to these problems.
Prerequisites: ENSC 3401.

ENSC 3340 Environmental Reg&Policies
A study of American Environmental Regulations. Topics include Clean Water Act, RCRA, UST, CERCLA, EPCRA, NEPA, TSCA, OSHA, FIFRA. Will include site visits.

ENSC 3401 Environmental Sciences
An interdisciplinary course including the following topics: ecosystems, population dynamics, flow of energy, solid wastes, control of weeds and pests, environment and human health and anthropogenic effects on the environment. Lab fee: $27.25 (Cross-listed with BIOL 3401)
Prerequisites: Eight hours of major's biology or permission of instructor.

ENSC 4170 Senior Seminar
A discussion of research and current topics in environmental sciences. Required of environmental sciences minors in their senior year.

ENSC 4173 Undergraduate Research
A course adapted to the study of special topics in environmental sciences. For advanced students capable of developing a problem independently through conference and activities directed by the instructor. Problem is chosen by the student with approval of the instructor prior to registration. Lab fee: $27.25.
Prerequisites: Permission of instructor.

ENSC 4273 Undergraduate Research
A course adapted to the study of special topics in environmental sciences. For advanced students capable of developing a problem independently through conference and activities directed by the instructor. Problem is chosen by the student with approval of the instructor prior to registration. Lab fee: $27.25.
Prerequisites: Permission of instructor.

ENSC 4340 Environmental Reg & Policies
This course examines United States environmental policy and regulation from a range of perspectives. The course will emphasize the continual struggle to protect natural resources while sustaining society and culture. It will also explore how environmental regulations have been influenced by historic events, economic, and cultural needs. There will be an emphasis on environmental laws, jurisdiction, stakeholder participation/responsibility, enforcement and sustainable development. (Formerly ENSC 3340).
Prerequisites: 8 SCH of natural science and junior or senior standing.

ENSC 4373 Undergraduate Research
A course adapted to the study of special topics in environmental sciences. For advanced students capable of developing a problem independently through conference and activities directed by the instructor. Problem is chosen by the student with approval of the instructor prior to registration. Lab fee: $27.25.
Prerequisites: Permission of instructor.

ENSC 4410 Environmental Toxicology
The course serves to provide an introduction to environmental poisons. Topics include general principles of toxicology, biotransformations, testing procedures, target organs, toxic substances and risk assessment including the toxicity of metals and pesticides. Lab fee: $27.25. (Formerly ENSC 4310)
Prerequisites: Twelve hours of biology and/or environmental sciences or permission of instructor.

ENSC 4420 Environmental Microbiology
An overview of the relationship between microbial metabolism, physiology, and the environment. The application of modern microbiological concepts to address and solve current environmental problems is emphasized. Topics include air, water and soil microbiology, geochemical activities of microbes, biotransformations, pollution, pollution abatement using microbes. Lab fee: $27.25. (Cross-listed with BIOL 4420/5420)
Prerequisites: BIOL 2421 or permission of instructor.

ENSC 4430 Limnology
Study of the structure and function of inland waters, ecology of freshwater systems such as lakes, ponds, rivers, and streams. Topics include physical and chemical properties of freshwater, habitats, biotic composition, productivity water use. Lab fee: $27.25. (Cross-listed with BIOL 4430)
Prerequisites: BIOL 3410 or permission of instructor.

ENSC 4473 Undergraduate Research
A course adapted to the study of special topics in environmental sciences. For advanced students capable of developing a problem independently through conference and activities directed by the instructor. Problem is chosen by the student with approval of the instructor prior to registration. Lab fee: $27.25.
Prerequisites: Permission of instructor.