ENVIRONMENTAL SCIENCE (ENVS/ENVS&)

Integrated Environmental Science
ENVS 109 5 Credits/Units
3.0 hours of lecture / 4.0 hours of lab
Introduction to scientific inquiry using the foundations of physical, earth and life sciences. Focus on developing the skills to answer basic questions about scientific phenomena through scientific investigations and the ability to assist and guide others through this process. Outdoor field activities are included. Designed for non-science majors and addressing the curriculum needs of early childhood educators. [GE, NS, NS-LAB, SE]

Global Climate Change
ENVS 200 5 Credits/Units
3.0 hours of lecture / 4.0 hours of lab
Prerequisite: CAP 42 (grade of "C" or higher) or placement into Math level 10
An introduction to climate change for non-science majors. Learn what climate means, what makes it change and the techniques scientists use to study it. Use data collection and measurements to see for yourself! Investigate how we can slow climate change, consider how we can live in this new climate and learn to better communicate to others what climate change means. Credit can not be granted for both METR 201 and ENVS 200. [GE, NS, NS-LAB, SE]

Introduction to Soils: A Living System
ENVS 201 5 Credits/Units
3.0 hours of lecture / 4.0 hours of lab
An introduction to soils, including biological, chemical and physical properties. Examine the fundamentals of soil ecology, including soil-plant-water interactions, soil fertility, and soil formation. Topics will integrate the study of physical, chemical, geologic, atmospheric and biological systems. Human-soil interactions will be explored in the context of agricultural and ecological systems. [GE, NS, NS-LAB, SE]

Native Plant Propagation: Principles & Practice
ENVS 202 3 Credits/Units
3.0 hours of lecture
Plant propagation techniques, emphasizing native plants, propagation for restoration projects, and unique problems associated with providing appropriate plant material for restoration or conservation purposes. Emphasizes greenhouse and fieldwork, and includes lectures, field trips, and a class project. [GE, NS, SE]

Field Studies In Environmental Science
ENVS 208 1-8 Credits/Units
2.0 hours of lecture / 12.0 hours of lab
Prerequisite: Completion of a 100- or 200-level BIOL, BIOL&, ENVS, ENVS&, GEOL or GEOL& course (grade of "C" or higher)
Experiential hands-on learning focusing on ecological relationships and environmental quality of the locations visited. Gain valuable and exciting first-hand experience using scientific and field equipment to take measurements and collect field data. Engage in a current issue pertaining to the area and participate in mock town hall meeting to learn about stakeholders and perspectives. Learn about various state and federal agencies and their approach to land management. Check the schedule to see which locations will be visited and the format for the exploration i.e. extended camping trip, day trips etc. Check schedule to see additional fees that cover food, lodging and transportation. [GE, NS, NS-LAB, SE]

Introduction to Ecological Restoration
ENVS 218 5 Credits/Units
3.0 hours of lecture / 4.0 hours of lab
Learning field techniques required for ecological restoration, interacting with agency personnel and others working in the field of restoration. Participating in the collection, analysis and interpretation of data pertaining to ecological health of various habitats. Projects vary depending upon field locations and agency partnerships. [GE, NS, NS-LAB, SE]

Environmental Politics
ENVS 231 5 Credits/Units
5.0 hours of lecture
Examines the relationship between industrial civilization and the natural environment by exploring underlying ecological philosophies and the economic and political processes by which environmental decisions are made. Emphasis on critical thinking and evaluating alternative points of view. Credit not allowed for both ENVS 231 and POLS 231. [GE, SE, SS]

Selected Topics
ENVS 280 1-5 Credits/Units
5.0 hours of lecture
Selected topics in environmental science. Topics vary and course theme and content change to reflect new topics. Because the course varies in content, it is repeatable for credit. Individual topics are listed in the term class schedules. [GE]

Special Projects
ENVS 290 1-5 Credits/Units
5.0 hours of lecture
Opportunity to plan, organize, and complete special projects approved by the department. [GE]

Inquiry-Based Science for Teachers
ENVS 300 5 Credits/Units
3.0 hours of lecture / 4.0 hours of lab
Admission into the program required for enrollment. A survey of earth, physical, and life sciences for early childhood teachers. Exploration of scientific phenomena and engineering design using inquiry-based learning. [GE]

Sustainability & Environmental Practices
ENVS 430 5 Credits/Units
4.0 hours of lecture / 2.0 hours of lab
Admission into the program required for enrollment. Investigate how environmental problems have arisen due to human activities (global warming, air pollution, waste disposal) and their impact on corporate practices, to include the corporate mission, competitive strategy, technology choices, production development decisions, production processes, and corporate responsibilities. Regulations and permits will be reviewed from the perspective of local planning departments. Changes to the environment by using resources at rates that exceed the system's ability to replenish them will also be covered. [GE, NS, SE]

Introduction to Environmental Science
ENVS& 101 5 Credits/Units
3.0 hours of lecture / 4.0 hours of lab
Prerequisite: CAP 46 or MATH 92 or PTCS 110 (grade of "C" or higher) or placement into Math level 30
Introduction to current topics in environmental science and fundamental principles of ecology. Topics include human population growth, natural resource use, biodiversity, climate change, species interactions, habitat alteration and fragmentation, ecosystem services, carrying capacity and sustainability. Labs will be hands-on investigations of the local environment where students will get an opportunity to collect samples and analyze the environmental quality through the study of soils, biodiversity and water. Many of the labs will be conducted in the field. This course is primarily intended for students majoring or minoring in environmental science or environmental studies. [GE, NS, NS-LAB, SE]