

Environmental Sci Courses

ENVS 1301 - Introduction to Environmental Science

Hours: 3

Survey course designed to cover major areas relating to contemporary ecological/environmental problems and to introduce the student to the multiple roles of the environmental professional in addressing these problems.

ENVS 103 - Natural Disasters

Hours: 3

Scientific principles and case studies of natural disasters, including those related to geological, meteorological, biological, cosmological, and man-made hazards and disasters. Note, this can be used to fulfill a core curriculum science requirement.

ENVS 301 - Risk Assessment

Hours: 3

This course is designed to provide an overview of ecological/environmental risk assessments. Students are involved in group projects to produce an ERA based on an existing abandoned hazardous waste site on EPA's National Priorities List. Students also complete a project to develop an Environmental Impact Statement based on a hypothetical government agency project proposal. Prerequisites: None

ENVS 302 - Phase I Environmental Site Assessments

Hours: 3

Project-based course on protocol and methods for conducting Phase I Environmental Site Assessments as mandated by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Phase I Environmental Site Assessments are a common type of investigation conducted by environmental professionals within environmental consulting firms.

ENVS 303 - Research Methods in Environmental Sciences

Hours: 3

This course is intended to provide an introduction to a wide range of methods for conducting research in the environmental field for students. Students will learn how to create the research question, search the literature, develop the methods, collect and analyze data, draw conclusions, publish and present the results. It will also include the techniques of scientific writing and reviewing, grant writing and oral presentations.

ENVS 305 - Environmental Hydrology

Hours: 4

An overview of all aspects of the field of hydrology, including the hydrologic cycle, surface water, and groundwater. The bulk of the course concerns groundwater and focuses on practical methods for ascertaining aquifer characteristics necessary to evaluating groundwater supplies and groundwater contamination problems and remediation. Students must register for both lecture and lab sections

ENVS 308 - Water Quality

Hours: 3

Water Quality is a course about the design of engineered environmental systems for water and wastewater treatment in domestic or industrial applications. Topics include water chemistry; material balances; chemical, physical and biological processes, theory of processes used to treat water and wastewater; applications of theory to design and operate treatment systems, including biological treatment, adsorption, coagulation, precipitation, decantation, filtration, and disinfection.

ENVS 312 - Introduction to Environmental Toxicology

Hours: 3

This course is designed to provide an overview of environmental toxicology, including an examination of the major classes of pollutants, their fate in the environment, their disposition in organisms, and their mechanisms of toxicity. An emphasis will also be placed on assessing the toxicity of pollutants in biological and environmental systems.

ENVS 402 - Air Pollution Control

Hours: 3

This course will introduce the sources of air pollution; analyze its effects on human and other organisms; study of federal, state, and local regulatory requirements; analyze mechanisms and methods for air pollution control and management.

ENVS 403 - Environmental Ethics and Law

Hours: 3

This course is designed to acquaint the student with the numerous ethical issues and perspectives confronting society and environmental scientists. The course also provides an overview of environmental laws on regulations and practice in navigating through these laws.

ENVS 405 - Internship in Environmental Science

Hours: 1-3

This course offers an opportunity for students to gain hands-on experience in the fields of environmental research, education, and sciences. This program enables students to work on specific projects under the direction of professional staff and is tailored to provide the maximum educational benefit to each participant. Students will be able to chose among private, government, and non-governmental organizations (NGO's) that have established collaboration with the Department of Environmental Sciences at Texas A&M University - Commerce.

ENVS 406 - Environmental Remediation

Hours: 3

Environmental Remediation provides a detailed survey of the various methods used in the remediation of contaminated sites; review of federal and state regulations; chemistry of hazardous materials; responding to incidents involving the release of toxic substances; selection of remedial technology; and design of remedial plans.

ENVS 489 - Independent Studies

Hours: 1-4

ENVS 490 - H Honors Thesis

Hours: 3

ENVS 491 - H Ind Honors Readings

Hours: 3

ENVS 497 - Special Topic

Hours: 0-4

Special Topics - 0 - 4 semester hours may vary