

## ENVIRONMENTAL SCIENCE COURSES (ENVS)

**ENVS 101-102**                      **EARTH AND ENVIRONMENTAL SCIENCE I-II (3, 3)** *Corequisite: ENVS 101L-102L.* Three hours lecture. This course sequence offers an interdisciplinary introduction to the scientific study of the earth's physical and biological systems with an emphasis on environmental changes and their implications.

**ENVS 101L-102L**                      **EARTH AND ENVIRONMENTAL SCIENCE LABORATORY I-II (1, 1)** *Corequisite: ENVS 101-102.* Three hours laboratory to accompany ENVS 101-102.

**ENVS 211**                              **PHYSICAL GEOGRAPHY (3)** Three hours lecture. This course provides a broad natural science background for students. The interrelationship of the lithosphere-hydrosphere-atmosphere, climate-soil-vegetation, and landforms of the world bring into perspective observable natural phenomena.

**ENVS 238**                              **INTRODUCTION TO RESEARCH (1-3)** *Prerequisite: Consent of supervising instructor.* This course provides the beginning student the opportunity to conduct lab, field, or library research under the supervision of a faculty member. Credit is dependent upon the scope of the work.

**ENVS 320**                              **CONSERVATION BIOLOGY (2)** *Prerequisites: ENVS 101/101L-102/102L or BIOL 111/111L-112/112L (or permission of instructor).* Three hours lecture and three hours laboratory. One-half semester modular course paired with another related half-semester modular course. This multi-disciplinary course addresses biological diversity at the genetic, population, and species levels. In particular, human impacts on diversity are studied and practical approaches to understanding and preventing extinction are explored.

**ENVS 324**                              **SUSTAINABLE FOREST MANAGEMENT (4)** *Prerequisites: satisfactory completion of the following: ENVS 101, 101L and ENVS 102, 102L or BIOL 111, 111L.* This course teaches the principles and techniques of forest management from both economic and environmental standpoints. Students will be trained in silviculture, dendrology, and timber cruising and harvesting during lectures, labs, and field trips. Topics related to timber harvesting such as watershed management, wildlife conservation, rangeland management, global climate change, and outdoor recreation will also be explored. The importance of managing forests so that they do not become depleted will be the over-riding theme of the course.

**ENVS 325**                              **LANDSCAPE ECOLOGY (2)** *Prerequisites: ENVS 101/101L-102/102L or BIOL 111/111L-112/112L (or permission of instructor).* Three hours lecture and three hours laboratory. One-half semester modular course paired with another related half-semester modular course. This course examines the mechanisms underlying large-scale ecological processes and their changes across space and time. The relationships among landscape structure, resource distributions, and populations are studied with an emphasis at the ecosystem level.

**ENVS 331**                              **PRINCIPLES OF HYDROLOGY (4)** *Prerequisite: MATH 103, CHEM 104-105 (or permission of instructor).* Three hours lecture and three hours laboratory. This course is a study of the principles and theory of surface water and groundwater flow, chemistry, and quality; understanding and determination of water budget, hydrologic cycle, and Darcy's law; social, political, and economic issues related to hydro-logical systems.



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es. The area for investigation is developed in consultation with a faculty sponsor and credit is dependent on the nature of the work. May be repeated for no more than six credits.

**ENVS 398** **SPECIAL TOPICS IN ENVIRONMENTAL SCIENCE (1-3)**  
[credit depends on topic] *Prerequisites: A background of work in the discipline or prior consent of instructor.* This course will focus on an aspect of the discipline not otherwise covered by the regularly offered courses. The topic will vary according to professor and term; consequently, more than one may be taken by a student during his/her matriculation.

**ENVS 399** **INTERNSHIP IN ENVIRONMENTAL SCIENCE (1-12)**  
*Prerequisites: Juniors or seniors with a 2.25 minimum QPA; approval of written proposal by internship coordinator, and supervising faculty prior to registration.* This internship is offered to qualified students allowing them to gain personal and practical experience in various areas of environmental science. Internships include but are not limited to working in environmental laboratories, natural resources conservation, restoration of natural areas, and help with research projects conducted by senior scientists and engineers.

**ENVS 428** **INDIVIDUAL RESEARCH IN ENVIRONMENTAL SCIENCE (1-6)** *Prerequisite: Junior or senior standing; consent of supervising instructor.* This independent opportunity to conduct a field, laboratory, or literary study project culminates in a formal paper and/or presentation as directed by the supervising instructor. Credit is dependent on the nature of the work but may not exceed three credit hours per semester.

**ENVS 490** **ENVIRONMENTAL SCIENCE SEMINAR (1)** *Prerequisite: At least forty hours from the environmental science major curriculum.* This seminar course provides an opportunity for students to study a range of biological questions presented by outside speakers. Additionally, student communication skills are assessed through oral presentations on internships or individual research projects, as well as other topics. Intended as a capstone course.