# **Environmental Sciences (ENVS)**

## ENVS 5300 Adv. Environmental Science 3 SCH (3-0)

In-depth exploration of the fundamental principles of environmental systems including biological, chemical, social, political, cultural, and economic factors that affect the environment; scientific and social implications of climate change, including impact of anthropogenic pollutants and human population on the environment.

#### ENVS 5305 Graduate Research Project 3 SCH (3-0)

Designed for project option students and requires completion of a research project. Prerequisite: departmental approval. May be repeated for a maximum of 6 semester hours.

## ENVS 5306 Thesis 3 SCH (3-0)

Designed for thesis option students; the course requires 6 hours of grades, 3 hours will consist of completion of thesis proposal and 3 hours will consist of thesis. Completion of the thesis proposal must occur as a prerequisite to, or be enrolled in during the same semester as the 3 hours of thesis.

## ENVS 5310 Sustainable Landuse Dec & Mgmt 3 SCH (3-0)

Impact of private and public land use on natural resource conservation; private land ownership and management issues; and land administration patters in the United States. Registration in ENVS 5300 Advances in Environmental Science is required.

#### ENVS 5320 North America Wetlands 3 SCH (3-0)

Impact of anthropogenic activities on inland and coastal wetland ecosystems; the effects of altered wetland habitats on plant and animals communities. Registration in ENVS 5300 is required.

# ENVS 5330 Sustainability of Eviron Ecosy 3 SCH (3-0)

Importance of terrestrial ecosystems as habitats for environmental sustainability of plants, forests, and animal communities. Prerequisites: ENVR Intro to Environmental Science. Students can enroll concurrently with Introduction to Environmental Science. ENVS 5300 is required.

## ENVS 5340 Soil and Water Conservation 3 SCH (3-0)

Students will learn the methods of soil and water conservation and management techniques adapted to conserve water and soils in different environments. Students will also study relevant literature for most recent developments in the field of water and soil conservation.

## ENVS 5350 Experimental Design 3 SCH (3)

This course will introduce students to experimental designs and application of designs used in environmental and agricultural sciences; develop understanding of statistical treatment of data and use of statistics to interpret and communicate research data; provide hands-on training on SAS software, and prepare students to real life data collection and analysis.

#### ENVS 5360 Environmental Econ & Sustn Dev 3 SCH (3-0)

The course introduces students to natural and environmental resource economics; emphasizes understanding of economic concepts; and evaluates their application to stakeholder socioeconomic needs of natural resources. Registration in ENVS 5300 Adv. Environmental Science is required.

# ENVS 5390 Adv Studies in Environment Sci 3 SCH (3-0)

Material offered is determined by the needs of the students. May be repeated under a different topic.

# ENVS 5395 Adv Probs in Environmental Sci 1-3 SCH (1-3-0)

Independent work that may include a laboratory or field problem. Variable credit dependent upon the problem; may be repeated for a total of 3 semester hours for thesis option students or 6 semester hours for project option and course-only students. Prerequisite: approval of a faculty member who will supervise the problem.

#### ENVS 5399 Thesis Topic 1-9 SCH (0-1-9)

For thesis option Master's students. To be taken by students who receive a stipend while working on their research project in Environmental Systems Management. Course is designed to be student-specific to meet each student's individual needs and to enhance their graduate education by providing one-on-one time with professors.