

# ENVIRONMENTAL STUDIES (ENVS)

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## **ENVS 101 | Introduction to Environmental Studies | 3 cr**

Examines interactions between earth system processes and humans including geologic hazards, water quality/quantity, pollution, land use, energy and mineral resources. Addresses impacts on environmental justice, economic development and policy. Uses a multidisciplinary, environmental studies approach to evaluate the conditions and human values conducive to environmental quality.

**Prerequisites:** None.

**Offered:** Fall, Spring, Summer.

**Meets:** Natural Science: ENVS, Natural Science: ENVS, Natural Science: ENVS, Natural Science: ENVS, Natural Science: ENVS

## **ENVS 102 | Chemistry of the Environment | 3 cr**

Covers chemistry of the environment in three major areas: Earth's atmosphere, hydrosphere, and terrestrial environment. Focuses on key environmental issues, their origins, understanding and alleviation.

**Prerequisites:** None.

**Offered:** Spring.

## **ENVS 109 | Fundamentals of Climate Change | 3 cr**

Surveys the current state of climate science including Earth's energy budget, the atmosphere, the greenhouse effect, ocean circulation, climate feedbacks, climate modeling and Earth's past climate. Also considers uncertainty in projections of future climate and solutions involving carbon sequestration, carbon-trade markets and energy efficiency. Three hour lecture.

**Prerequisites:** None.

**Offered:** Fall.

**Meets:** Natural Science: ENVS, Natural Science: ENVS, Natural Science: ENVS, Natural Science: ENVS, Natural Science: ENVS

## **ENVS 201 | Laboratory Experience in Environmental Studies | 3 cr**

Provides laboratory experience in assessing, measuring, analyzing and monitoring environmental problems. Experiments may include measurements of environmental pollutants, use of instruments to detect environmental contaminants, and collection and sampling for water, soil and air analysis.

**Prerequisites:** ENVS 102.

**Offered:** Fall.

## **ENVS 290 | Special Topics in Environmental Science | 1-4 cr**

Special topics in environmental studies will be examined.

**Prerequisites:** Consent of instructor.

**Offered:** Occasionally.

## **ENVS 335 | Energy | 4 cr**

Various forms of energy and related topics are discussed from a vigorous point of view. These include mechanical energy; chemical energy, fossil fuels, and fuel cells; thermal energy and the laws of thermodynamics; electrical energy; and nuclear energy. Environmental impacts of each type of energy as well as alternative energy sources are also discussed. Three hour lecture and one hour discussion.

**Prerequisites:** MATH 111 and PHYS 101 or consent of instructor.

**Offered:** Spring.

## **ENVS 336 | Environmental Justice | 3 cr**

Evaluates unsolved questions regarding themes of social inequities and environmental contamination. Includes topics such as industrial zoning, brownfield development, urban agriculture, air quality and toxic waste processing. Three hour lecture.

**Prerequisites:** ENVS 101 or BIOS 104.

**Offered:** Fall.

## **ENVS 390 | Special Topics in Environmental Science | 1-4 cr**

Special topics in environmental studies will be examined.

**Prerequisites:** Consent of instructor.

**Offered:** Occasionally.

## **ENVS 490 | Special Topics in Environmental Science | 1-4 cr**

Special topics in environmental studies will be examined.

**Prerequisites:** Consent of instructor.

**Offered:** Occasionally.

## **ENVS 494 | Internship/Fieldwork | 1-3 cr**

Provides students with learning experiences within professional fields that are related to their career goals; such as business operations, professional competencies and conduct, and overall work environment. Requires placement approval by Environmental Studies Director. May be repeated for credit.

**Prerequisites:** Sophomore standing or above and Instructor, Director approval.

**Offered:** Fall, Spring, Summer.

## **ENVS 495 | Environmental Studies Seminar | 1 cr**

Explores major environmental issues from a multidisciplinary perspective.

**Prerequisites:** Junior or senior standing; environmental studies major.

**Offered:** Spring.

## **ENVS 499 | Independent Study | 1-3 cr**

An independent project carried out under the supervision of a member of the environmental studies faculty. Up to 3 credits may count as elective credit toward the minor.

**Prerequisites:** Consent of instructor and director.

**Offered:** Fall, Spring, Summer.