

# ENVIRONMENTAL SCIENCE (ENVI)

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## ENVI 121 Renewable Energy 3 cr.

This course will introduce students to renewable energy. Students will develop an understanding of finite and infinite energy sources and the development and utilization of renewable energy sources. This course gives students the tools needed for quantifying the global environmental impact of renewable energy relative to nonrenewable energy. It will give students a coherent way of understanding various forms of energy extraction, production, and use. This course will guide students to develop methods of analyzing energy policy and proposing innovative clean renewable solutions. Code 3 course fee.

## ENVI 134 Carbon Footprint Analysis 3 cr.

This course will introduce students to Carbon Footprint Analysis. Students will develop an understanding of global environmental guidelines and evaluation systems utilized to measure and help reduce greenhouse gas (GHG) emissions. Greenhouse gasses are recognized as emissions, both natural and synthetic, that trap heat in the planet's atmosphere. This course gives students the tools needed for quantifying the global environmental impact of greenhouse gas emissions. The course will give students a coherent way of understanding greenhouse gas production and guide them to develop reduction and mitigation management tools. Code 3 course fee.

## ENVI 142 Industrial Hygiene 4 cr.

This course will introduce students to the science of Industrial Hygiene. Students will develop an understanding of the chemical, physical and biological stressors in the workplace. This course gives students the tools and laboratory experience needed for identifying the characteristics of workplace toxins, health hazards, and other stressors. The analysis of Industrial Hygiene intoxication will allow students to understand the everyday disease-causing agents and health hazards to which workers are exposed. Code 5 course fee.

Prerequisite(s): Take Any CHEM Course

## ENVI 152 Environmental Sci 4 cr.

An introduction to current environmental problems and the processes used to analyze them from perspectives of the biological, geological, and social sciences. Field and laboratory experiences incorporated into the course. Students will be required to travel to offsite laboratory locations. It is highly recommended that students enrolling in this course have completed high school biology and high school chemistry. Code 5 course fee.

## ENVI 205 Hazardous Materials Management 3 cr.

This course will introduce students to Hazardous Materials Management. Students will develop an understanding of the chemical, physical, and biological properties of hazardous materials. This course gives students the tools needed for identifying the characteristics of hazardous materials, quantifying, and delineating the hazard, as well as the management and design of remediation methods. The analysis of hazardous materials will allow students to understand how common they are in their homes and everyday environments. Code 3 course fee.

Prerequisite(s): CHEM 180 or Higher

## ENVI 210 Indoor Environmental Quality 3 cr.

This course will introduce students to Indoor Environmental Quality. Students will develop an understanding of the quality of a building environment relative to the health and wellness of its occupants. Indoor Environments are complex, and occupants can be exposed to many sources of intoxication or health hazards. Indoor air pollutants can be allergens, chemicals, dust, or microbes. This course gives students the ability to assess indoor pollutants in an occupant's living space or work environment. Code 3 course fee.

## ENVI 217 Occupational Safety and Health 3 cr.

This course will introduce students to Occupational Safety and Health (OSH). Students will develop an understanding of disease-causing agents or conditions, and hazards in the workplace. This course provides students the ability to recognize potential for illness and injury in the working environment. This course will provide a coherent way of understanding the biological, chemical, physical, and radiological components of occupational health and safety, enabling students to conduct workplace evaluations, and make recommendations for remedial actions. Code 3 course fee.

## ENVI 220 Life Cycle Analysis 3 cr.

This course will introduce students to Life Cycle Analysis (LCA). Students will develop an understanding of global environmental guidelines and evaluation systems utilized in LCA as defined by the International Standards Organization (ISO). This course gives students the tools needed for quantifying environmental performance of products and services. The analysis will allow students to determine the environmental impact of a product or service from raw materials, production, and use through recycling or final disposal. Code 3 course fee.

## ENVI 232 Environmental Policy 3 cr.

This course focuses on the development of U.S. environmental policies and how these policies are initiated, implemented, and improved. Students will explore how environmental issues arrive on the public agenda; the role of political institutions in making environmental policy; the economic, political, and institutional forces that shape policymaking; competing approaches to environmental policy analysis; and the goals and strategies of the environmental movement. Code 3 course fee.

Prerequisite(s): ENVI 152

## ENVI 241 Environmental Sustainability 3 cr.

This course will introduce students to global environmental sustainability. Students will develop an awareness and understanding of global, environmental, and sustainability concerns. Biodiversity, renewable energy, and resource management are some of the topics that students will explore in a sustainable and socially equitable context. Code 3 course fee.

## ENVI 259 Field Experience/Practicum 3 cr.

Required of all environmental science majors. This course is intended to provide an off-campus work-study experience that is planned and conducted under the supervision of an environmental science faculty member. Arrangements must be made well in advance before the course is to be taken. Prerequisites: Permission of the department dean.

Prerequisite(s): ENVI 152