

# ENVS-ENVIRONMENTAL SCIENCE

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## **ENVS 1110G. Environmental Science I**

### **4 Credits (3+2P)**

Introduction to environmental science as related to the protection, remediation, and sustainability of land, air, water, and food resources. Emphasis on the use of the scientific method and critical thinking skills in understanding environmental issues.

#### **Learning Outcomes**

1. Students will learn to critically analyze cause-and-effect relationships in the environment
2. Students will integrate and synthesize knowledge and draw appropriate conclusions based on the scientific method

## **ENVS 2111. Environmental Engineering and Science**

### **3 Credits (3)**

Principles in environmental engineering and science: physical chemical systems and biological processes as applied to pollution control.

Crosslisted with: C E 256

**Prerequisite:** CHEM 1215G and MATH 1511G or ENGR 190.

#### **Learning Outcomes**

1. To understand the nature of water quality parameters in the context of Civil Engineering and Environmental Science (Water Treatment/Wastewater Treatment/Environmental Science)
2. To learn to apply engineering and scientific solutions to water quality problems
3. To understand environmental regulations and their consequences on the design of pollution control systems

## **ENVS 2111L. Environmental Science Laboratory**

### **1 Credit (1)**

Laboratory experiments associated with the material presented in ENVS 2111. Same as C E 256 L.

**Corequisite(s):** ENVS 2111.

#### **Learning Outcomes**

1. List typical analyses commonly performed to evaluate physical, chemical, and microbiological parameters used to describe water quality.
2. Follow experimental procedures listed in the class laboratory manual, or other publications such as Standards Methods, to perform common water quality analyses.
3. Evaluate, analyze, and discuss experimental results and present the conclusions in the form of a professional report