

**Northwest Arkansas Community College**  
(Science and Mathematics Division)

**Discipline Code**

ENSC

**Course Number**

1001L

**Course Title**

Environmental Science Lab

**Catalog Description**

This is the lab component designed to be taken as a co-requisite to ENSC 1003. Class exercises will include laboratory experiments and analysis, field studies, discussion, and reports. An environmentally based project/exercise will include the use of GIS (Geographic Information Science) and other innovative technologies. Three hours laboratory weekly.

**Prerequisites**

None. Co-requisite ENSC 1003.

**Credit Hours**

1 credit hours

**Contact hours**

45 lab contact hours

**Load hours**

2 load hours

**Semesters Offered**

Fall, Spring

**ACTS Equivalent**

None.

**Grade Mode**

A-F

**Learning Outcomes**

Students completing this course will:

- Demonstrate the need for “scientific literacy” by completing labs on carbon footprints and my environment.
- Gain knowledge of the scientific method by completing labs on investigations of soil.

- Explain challenges and issues affecting their environment by completing lab activities on air and water pollution.
- Employ GIS (Global Information Systems) to create an environmental based project.

## **General Education Outcomes Supported**

None

## **Standard Practices**

### **Topics list**

- Critical Thinking about the Environment
- Earth as a System of Change
- The Human Population and Environment
- Biogeochemical Cycles
- Ecosystems and Ecosystem Management
- Biological Diversity
- Biogeography
- Biological Productivity and Energy Flow
- Ecological Restoration
- Sustaining Living Resources
- Effects of Agriculture on Environment
- Environmental Health, Pollution, and Toxicology
- Fossil Fuels and Environment

### **Learning activities**

- Courses must, at a minimum, cover the core learning outcomes for each topic.
- Ten laboratory exercises covering topics such as soil science, water quality and pollution, air quality, etc.

### **Assessments**

None

### **Grading guidelines**

- At least 50% of the grade should come from proctored work
- Lab activities/exams should comprise approximately 25% of the overall grade.

### **Revision Date**

- April 29, 2021

