Northwest Arkansas Community College
Division of Science & Mathematics

ENSC 1001L Environmental Science

Catalog Description: This is designed to be taken as a corequisite, and to amplify further, 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.

Corequisite: ENSC 1003

Credit hours/ Contact hours/ Load hours: 1/3/1

Target Audience/ Transferability: Successful completion of this course should prepare students for successful further study in environmental and regulatory science. This is a required course for the Environmental & Regulatory Science AAS Degree. ENSC 1001 will transfer to the University of Arkansas at Fayetteville in the Environmental, Soil, and Water Science as elective credit. ENSC 1003 will also transfer to Missouri Southern State University, University and Northeastern Oklahoma State University at Tahlequah, Oklahoma.

Required Material Botkin, Environmental Sciences: Earth as the Living Planet, 6th Edition 2007

Student Learning Outcomes: Students completing this course will:

- Demonstrate an awareness of the need for "scientific literacy" by completing labs on carbon footprints and my environment.
- Gain an understanding of the scientific method by completing labs on investigations of soil.
- Demonstrate understanding 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.

Topics:

- 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

Forms of Assessment: None