Northwest Arkansas Community College
Division of Science & Mathematics

ENSC 2204 Introduction to Soil Science

Catalog Description: The study of the chemical, physical, and biological properties of soils including the classification and origin of soils.GPS skills included. Three hours lecture and three hours lab weekly.

Prerequisite: There are no prerequisites for the course. Previous coursework in chemistry or geology is recommended.

Credit hours/ Contact hours/ Load hours: 4/6/5

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 2204 will transfer to the University of Arkansas at Fayetteville in the Environmental, Soil, and Water Science as elective credit. ENSC 2204 will also transfer to Missouri Southern State University and Northeastern Oklahoma State University at Tahlequah, Oklahoma.

Student Learning Outcomes: Students completing this course will:

- List issues related to karst topography and sedimentary rock soils, including topsoil loss and water quality concerns related to the rapid growth of any region.
- Describe the function of soils, basic structure and characteristics of soils and how they are formed.
- Compare the environmental challenges and concerns within the Northwest Arkansas region.
- Employ GIS (Global Information Systems) to develop an environmental based project.
- Apply the principles learned to comprehend, evaluate and solve problems of soil management in the environment.

Topics:

- Function of Soils
- Basic Structure and Characteristics of Soils
- Soil Water Characteristics and Hydrology
- Soil Aeration, Temperature, and Colloids
- Acidity, Alkalinity, and Salinity of Soils
- Organisms and Organic Matter
- Fertility of Soils
- Soil Erosion and Control

Forms of Assessment: None

Updated on website 4/27/10