

ENVI 170L Section 001

Earth Science Laboratory

Catalog Course Description

A three-hour per week laboratory in earth sciences that closely parallels the material in ENVI 170. Laboratory sessions focus on practical applications of earth science principles through hands-on experiences to solve earth and environmental problems.

Faculty Information

Name: Chad Yost

Email: Chad.yost@indstate.edu

Department: Earth and Environmental Systems

Office Hours: MW 2:00-3:00 pm, and by appointment

Course Learning Objectives

This laboratory course is designed to provide science and non-science majors with practical and experiential learning assignments in Earth science, with an emphasis on the foundational principles of physical geology. Some specific learning objectives are as follows:

- Become familiar with the geographic, geologic, and geophysical evidence that led geologists to develop plate tectonics theory.
- Understand and describe what makes minerals different from other materials.
- Become familiar with the three main classes of rock: igneous, sedimentary, and metamorphic, and describe their textural, mineral assemblage, and formation characteristics.
- Become familiar with common geologic structures and visualize them in three dimensions
- Determine the relative ages of rocks and geologic processes and use these data to interpret complex geologic histories.

Required Textbooks and Materials

(1) Laboratory Manual for Introduction to Geology (5th edition), ISBN: 978-1-324-10071-3; (2) laptop computer with MS Office and Google Earth Pro applications installed.

Graded Elements of the Course

Lab workbook exercises and a final rock identification exam