

Minnesota State University Moorhead

GEOS 110L: Water, Land & People: An Introduction to Physical Geography Lab

A. COURSE DESCRIPTION

Credits: 1

Lecture Hours/Week: 1

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 03 - Natural Science

This Lab course complements the lecture section of this course and fulfills the lab component for the LASC 3L designation. The course applies lab exercises to addresses physical geography, some aspects of geology, and the basic interactions between humans and their environment. Specific topics include landscapes and landscape formation, soils and ecosystems, surface and groundwater processes, weather and climate, natural hazards, and natural resources. The Lab objectives of this course include a hands on development of students' framework of basic concepts and theories in physical geography and geology, and having students develop their own methodology for analyzing the spatial patterns of the natural world based on the concepts learned. Geography is a discipline of synthesis, and this course will include traditions and theories of geology, anthropology, archaeology, and bioscience with student evaluating societal questions from these broad perspectives. MnTC Goal 3L

B. COURSE EFFECTIVE DATES: 02/10/2022 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Landscape geography and evolution
2. Soils
3. Hydrology
4. Weather and climate
5. Natural resources and hazards

D. LEARNING OUTCOMES (General)

1. Students will be able to create and interpret maps of a variety of types.
2. Students will identify and interpret relationships between geographic features and underpinning natural processes.
3. Recognize and understand the relationship between observational or experimental data and the inference of natural process.
4. Students will be able to predict recurrence intervals for natural disasters based on historical data.
5. Students will be able to explain in what way various disciplines of the sciences have contributed to the various areas of geography.
6. Students will demonstrate comprehension of the interconnected nature of all sciences as manifested in geography.
7. Students will be able to identify and explain how principles of geoscience impact and are impacted by society.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

Goal 03 - Natural Science

1. Formulate and test hypotheses by performing laboratory, simulation, or field experiments in at least two of the natural science disciplines. One of these experimental components should develop, in greater depth, students' laboratory experience in the collection of data, its statistical and graphical analysis, and an appreciation of its sources of error and uncertainty.
2. Communicate their experimental findings, analyses, and interpretations both orally and in writing.
3. Evaluate societal issues from a natural science perspective, ask questions about the evidence presented, and make informed judgments about science-related topics and policies.

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted