Minnesota State University Moorhead

GEOS 117: Water, Land, and People

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 3

Lab Hours/Week: 3

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 03 - Natural Science

Focuses on the most recent changes in the earth and the portion of the earth with which people have the most interaction, including water, soil, air, and landforms developed by rivers, wind, and glaciers, with emphasis on how our environment influences and is influenced by human activity. Concurrent registration in GEOS 117 Lab required. MnTC Goal 3.

B. COURSE EFFECTIVE DATES: 09/23/2016 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

- 1. Introduction and Perspectives
- 2. Geologic Time
- 3. Glaciation and the Pleistocene Record
- 4. Fluvial Processes and Landforms
- 5. Weathering, Soils, and Mass Wasting
- 6. Volcanism and Plate Tectonics
- 7. Littoral Processes and Landforms
- 8. Karst

D. LEARNING OUTCOMES (General)

- 1. Demonstrate an understanding of geological theories, concepts, and perspectives in relation to geomorphological processes and landforms.
- 2. Apply this knowledge in the interpretation of surface landforms.
- 3. Evaluate how humans impact the surface of the earth as well as how various geomorphologic processes impact humans.
- 4. Analyze topographic maps, aerial photographs, digital elevation models, and other data to draw conclusions about landform origins, composition, development, and potential as hazards or resources.

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

Goal 03 - Natural Science

- 1. Demonstrate understanding of scientific theories.
- 2. 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.
- 3. Communicate their experimental findings, analyses, and interpretations both orally and in writing.
- 4. 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