

Minnesota State University Moorhead

GEOS 205: Thinking Spatially

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 03 - Natural Science

This course covers the analysis of three dimensional physical and/or social information across landscapes, including dynamic interactions among spatial variables and how they change with time. Students will learn to think spatially at different time and spatial scales, understand spatial terms (e.g. proximity, shape, density, position, adjacency, gradient, and others), translate 3D features from the real world to 2D features on maps, and make inferences about causation based on observed spatial correlations. MnTC Goal 3.

B. COURSE EFFECTIVE DATES: 02/27/2014 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Identify a minimum of 10-15 key spatial terms.
2. Make defensible inferences about causation based off the spatial correlations observed from learning outcome number four.
3. Recognize key physical and social features on landscapes.
4. Solve basic physical and social problems with spatial analysis skills.
5. Visualize and graph spatial correlations between different physical and social data across time.
6. Visualize and sketch 2D representations of 3D features from the real world.

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

Goal 03 - Natural Science

1. Demonstrate understanding of scientific theories.
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