

Course Outline for: GEOG 1101 Earth's Natural Environments**A. Course Description**

1. Number of credits: 4
2. Lecture hours per week: 3
Lab hours per week: 2
3. Prerequisites: None
4. Corequisites: None
5. MnTC Goals: Goal #3 - Natural Science
 Goal #10 – People and the Environment

This course in Physical Geography studies Earth's physical environment, its systems, and the energy that drives them. Students explore interactions between the atmosphere, water, rocks, ice, human activity and other life. Laboratory assignments provide application of scientific method to these concepts.

B. Date last revised: April 2023**C. Outline of Major Content Areas**

1. Earth Systems
2. The role of the atmosphere
3. The role of water in the atmosphere
4. Atmospheric Dynamics
5. Climate
6. Vegetation
7. Soils
8. Landforms
9. Geology

D. Course Learning Outcomes

Upon successful completion of the course, the student will be able to:

1. Explain, using scientific theories, the earth's environmental system both verbally and quantitatively, including the various components of the environment, their controls, their interrelationships, and their global regional distribution. (Goal 3a, 10a)
2. Analyze graphic data bases, including a variety of maps and remote sensing images. (Goal 3b)
3. Demonstrate, through lab activities, the ability to perform the scientific method (formulate hypotheses about environmental processes, collect and analyze measurements of the processes, and assess the validity of your hypotheses on the basis of your data analysis). (Goal 2a, 2b, 2c, 2d, 3b)
4. Communicate lab analyses and conclusions both orally, within lab work groups, and in the form of prepared written responses. (Goal 3c)

5. Explain the fundamental interrelatedness of bio/physical systems and socio/cultural systems in terms of some of the ways in which people affect the environment and the ways in which humans adapt to natural systems. (Goal 2c, 2d, 3d, 10a, 10b)
6. Describe the range of responses that have been developed by various political and social institutions to meet the challenges of natural resources management. (Goal 10c)
7. Evaluate critical social and environmental issues from a scientific perspective. (Goal 2b, 2c, 2d, 10d, 10e)
8. Communicate personal responses to a variety of environmental issues based on a critical assessment of scientific perspectives. (Goal 2d, 10e, 10f)

E. Methods for Assessing Student Learning

Methods for assessment may include, but are not limited to, the following:

1. exams
2. lab exercises
3. quizzes
4. assignments

F. Special Information

None