

Common Course Outline for: GEOG1101 – Physical Geography**A. Course Description**

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

A study of the earth's physical environment, its systems and the physical processes that drive them. Interactions of the atmosphere, hydrosphere, lithosphere and biosphere with human activity. Laboratory assignments provide application of these concepts.

B. Date last revised: September 2016

C. Outline of Major Content Areas

- a. Earth Systems
- b. The role of the atmosphere
- c. The role of water in the atmosphere
- d. Atmospheric Dynamics
- e. Climate
- f. Vegetation
- g. Soils
- h. Landforms
- i. 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. (3a, 10a)
2. Analyze graphic data bases, including a variety of maps and remote sensing images. (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). (3b)
4. Communicate lab analyses and conclusions both orally, within lab work groups, and in the form of prepared written responses. (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. (3d, 10a and b)
6. Describe the range of responses that have been developed by various political and social institutions to meet the challenges of natural resources management. (10c)
7. Evaluate critical social and environmental issues from a scientific perspective. (10 d and e)
8. Communicate personal responses to a variety of environmental issues based on a critical assessment of scientific perspectives. (10 e and f)

E. Methods for Assessing Student Learning

Instructors may use any or all of the following, but are not limited to:

- a. Minimum of three fifty minute exams
- b. Weekly written lab reports
- c. Any other additional work assigned

F. Special Information

- a. Students should consult their course syllabus for specific grading policies.