# **SECTION HEADING**

# **GEOG 1101: Introduction to Physical Geography**

## Description

Introduction to Physical Geography studies the geographical distribution of the natural environment, with an emphasis on spatial data analysis, weather, climate, geological formations and the hydrosphere, to examine the relationship of people to their physical surroundings.

#### Credits

4

## Prerequisite

STSK 0095 or placement by multiple measures

#### **Topics to be Covered**

- 1. Cartography
- 2. Spatial Data Analysis
- 3. Atmosphere
- 4. Weather
- 5. Climates and Climate Change
- 6. Lithosphere
- 7. Plate Tectonics
- 8. Rock Formation
- 9. Landscapes
- 10. Soils
- 11. Glaciation
- 12. Hydrosphere
- 13. Ocean Circulation
- 14. Fresh Water Cycle
- 15. Coast Lines
- 16. Biosphere
- 17. Ecosystems
- 18. Biomes

#### **Learning Outcomes**

- 1. Acquire and convey information through mapped data
- 2. Identify the different spheres involved in earth processes
- 3. Examine patterns in atmospheric condition data
- 4. Delineate weather and climate
- 5. Relate atmospheric and oceanic circulation patterns
- 6. Examine tectonic plate movement and landscape formation
- 7. Delineate stages in the rock cycle
- 8. Identify the results of glacial action on the landscape
- 9. Delineate categories of soils
- 10. Examine the causes and consequences of sea level rise
- 11. Relate ecosystem and biome location to geological, hydrological and atmospheric processes.
- 12. Identify the consequences of the environment on human settlement patterns

## Credit Details

Lecture: 4

Lab: 0

OJT: 0

MnTC Goal Area(s): Goal Area 10-People and the Environment

# Minnesota Transfer Curriculum Goal Area(s) and Competencies

Goal Area 10: People and the Environment

1. Explain the basic structure and function of various natural ecosystems and of human adaptive strategies within those systems.

2. Discern patterns and interrelationships of bio-physical and socio-cultural systems.

3. Describe the basic institutional arrangements (social, legal, political, economic, religious) that are evolving to deal with environmental and natural resource challenges.

4. Evaluate critically environmental and natural resource issues in light of understandings about interrelationships, ecosystems, and institutions.

5. Propose and assess alternative solutions to environmental problems.

6. Articulate and defend the actions they would take on various environmental issues.