Course Outline for: GEOG 1050 Maps and Mapping

A.   Course Description
1.   Number of credits: 3
2.   Lecture hours per week: 3
3.   Lab hours per week: None
4.   Prerequisites: None
5.   Corequisites: None
6.   MnTC Goals: Goal #5 – History and the Social and Behavioral Sciences.

This course is an introduction to maps emphasizing how maps reflect and shape our understanding of the world. Course topics include basic principles of map communication, spatial data, mapping technology and cartographic techniques.

B.   Date last reviewed: April 2023

C.   Outline of Major Content Areas
1.   History of Maps across Cultures
2.   The Global Grid, Map Projections, and Map Scale
3.   Spatial Data and Spatial Data Collection
4.   Basic Principles of Thematic Maps
5.   Applications and Interpretation of Thematic maps
6.   Environmental Perception and Mental Maps
7.   Spatial Information and Privacy
8.   Spatial Analysis and Geographic Information Systems

D.   Course Learning Outcomes
Upon successful completion of the course, the student will be able to:
1.   Describe how maps are a distinct form of communication, and efficient and effective tools for the communication of spatial information. (Goal 2a, 5a)
2.   Identify ways in which maps reflect and embed attributes of the cultural conditions under which they are produced. (Goal 5b, 5c, 5d)
3.   Understand the main elements of the global coordinate system, and recognize basic differences in the properties of different map projections. (Goal 5a, 5c)
4.   Describe the principal types of maps, with attention to the general characteristics, preparation, and appropriate uses of each. (Goal 2a, 5a)
5.   Describe cartographic processes of generalization and symbolization, and the relationship between mapped data and the "real world." (Goal 2b, 2c, 5a, 5c, 5d)
6.   Discuss the role played by maps and cartography in the discipline of geography. (Goal 5a, 5b, 5c)

7. Discuss important ethical issues related to the collection and use of geospatial data. (Goal 2d ,5c)
8. Understand the ways in which technology has historically transformed the availability of geospatial data and the production of maps, most recently with remote sensing, GPS, and GIS technology. (Goal 5a, 5b, 5c, 5d)

E. **Methods for Assessing Student Learning**
Methods for assessment may include, but are not limited to, the following:
1. In-class testing
2. Take-home testing
3. Assignments
4. Quizzes
5. Attendance
6. Group or individual projects
7. Research
8. The instructor will also choose a method for end-of-the-semester evaluation.

F. **Special Information**
None