NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY GIS 203 – CARTOGRAPHY FOR GIS (3 CR.)

Course Description

Focuses on the fundamental cartographic concepts used in planning, designing, and creating effective maps. Provides the foundation to critically evaluate maps to produce accurate and visually pleasing cartographic displays that convey information in a manner that enables easy interpretation. Includes topics of map compilation, map design, map types, and critical evaluation of map content. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

General Course Purpose

This course is designed to familiarize the GIS student/professional with fundamental cartographic concepts used in designing and creating effective maps. It will give the student the ability to plan and construct cartographically correct maps. The course will focus on the following three main topic areas: 1) Map Compilation – data selection, input file formats, map projections, map scale, feature generalization, verbal content, metadata. 2) Map Design – map purpose, map elements, map layout, design elements (symbology, color, typography), map reproduction, output file formats. 3) Map Types – general-reference and thematic (qualitative/quantitative), data classification methods, thematic mapping techniques.

Course Prerequisites/Corequisites

Prerequisite: GIS200 or instructor permission.

Course Objectives

Upon completing the course the student should be able to:

- Describe the fundamental concepts and applications of Cartographic design
- Correctly apply standard Cartographic representations including symbolization, color palettes, and representation of relief
- Describe and explain the relationship between typography and Cartography
- Discuss the application of geodesy and coordinate systems to map design
- Apply the appropriate map type and classification methodology to specific geospatial analyses
- Demonstrate basic proficiency in map design and production, applying principles of scale and generalization appropriately

Major Topics to be Included

- Principles of geovisualization
- Geodesy and coordinate systems
- Data management
- Cartographic generalization
- Map production