Introduction to Geographic Information Systems
GIS 110 and GEOG 110

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Student Learning Outcomes

By the end of the semester, at least 80% of students will be able to:

SLO 1: Identify, explain, and apply GIS and geospatial concepts.
Assignments (exams and/or lab exercises):

- Define GIS
- List and describe components of a GIS
- Give examples of GIS applications
- Name three major GIS developers and their products
- Explain and use geographic coordinate systems and map projections
- Explain data models, file formats, and data types.
- List and describe the three principle geospatial technologies

SLO 2: Manipulate and analyze geographic data with GIS
Assignments (exams and/or lab exercises):

- Manipulate and analyze data in different data models, file formats, and data types
- Apply analytical tools and analyze results
- Create, apply, and analyze geocoding processes
- Create and apply process models
- Create and manipulate geodatabases
- Define, interpret and modify metadata

SLO 3: Design and produce maps using established cartographic principles
Assignments (exams and/or lab exercises):

- Present GIS analytical results in map format
- Apply cartographic design principles and elements to maps

SLO4 : Create and complete an analytical GIS project
Assignments (oral presentation and written format):

- Identify or pose a geographic question
- Design a model to evaluate the question
- Gather the necessary data and create a geodatabase
- Analyze the data
- Evaluate the answer
- Present the project to the class
- Present printed versions of required components

Defined by: Mary Pax Lenney (8/2008)