GEOG 265 : GEOGRAPHIC INFORMATION SYSTEMS

Transcript title
Geographic Information Systems

Credits
4

Grading mode
Standard letter grades

Total contact hours
60

Lecture hours
30

Lab hours
30

Course Description
Introduces students to principles and practice of geographic information systems (GIS), while providing experience using ArcGIS and Spatial Analyst software. Develops both theoretical understanding of GIS and experience in accessing GIS datasets. Covers raster and vector GIS.

Course learning outcomes
1. Distinguish the types of features that are represented by different spatial data models (raster vs vector).
2. Use geographic information systems software to edit features and attribute tables.
3. Classify data using various levels of attribute measurement (nominal, ordinal, interval/ratio).

Content outline
1. Introduction to geographic information systems
2. Map design with Pro
3. Geoids, ellipsoids, and datums
4. Map projections and coordinate systems
5. Spatial data models and the real world
6. Attribute data
7. Level of measurement
8. Classifying data
9. Spatial analysis
10. Terrain analysis

Required materials
This course will require a textbook.

General education/Related instruction lists
- Science not Lab