GEO 115 - INTRODUCTION TO GIS

Course Description

This course explores the fundamentals of Geographic Information Systems (GIS) for map reading, interpretation and analysis, in conjunction with the principles of cartography. Computer and Internet technologies are utilized for the generation, manipulation, storage and retrieval of maps and associated geographic attributes. Topics covered include: basic GIS concepts, display of data and attributes, queries, metadata, tabular relationships, data editing, projections and datums, and basic cartography. Group 1 course. Intermediate computer skills (Windows) and Internet experience required.

Credit Hours

3

Contact Hours

4

Lecture Hours

2

Lab Hours

2

Recommended Prerequisites or Skills Competencies

MTH 100

General Education Outcomes supported by this course

Communications - Direct

Course Learning Outcomes

Knowledge:
- Develop an understanding of spatial relationships and spatial queries.

Application:
- Develop methods for visualizing the areas they are mapping.
- Students relate census data to the creation of maps.

Integration:
- Integrate data from a variety of sources into easily interpreted maps.
- Apply problem solving strategies when analyzing data sets.

Human Dimension:
- Analyze demographic data to describe communities.
- Consider potential careers in Geographic Information Systems.

Caring - Civic Learning:
- Investigate local areas by interpreting various information sources.

Learning How to Learn:
- Use data analysis skills in real-world applications.