WSI 215 - MARINE GIS & DATA PROCESSING

Course Description

This course builds upon the basics of GIS taught in GEO 115 - Introduction to GIS, with a focus on basic spatial analysis techniques using standard and maritime/marine datasets. More advanced cartographic methods and spatial data management techniques are introduced using ArcGIS Desktop, Hypack, and other computer tools. Group 2 course.

Credit Hours

3

Contact Hours

4

Lecture Hours

2

Lab Hours

2

Required Prerequisites

ENV 115 or GEO 115 with a 2.0 or higher

Recommended Prerequisites or Skills Competencies

Students must have intermediate computer and internet skills, typically acquired in ENV115 or GEO115 or similar.

General Education Outcomes supported by this course

Critical Thinking - Direct

Course Learning Outcomes

Knowledge:
- Describe the concepts associated with remotely sensing underwater bathymetry; features and objects.

Application:
- Demonstrate competencies using aquatic data collection systems.

Integration:
- Implement problem solving strategies using hydrographic collection systems.
- Process typical marine remote sensing datasets from different sources.

Human Dimension:
- Work collaboratively with peers to solve technology problems.

Caring - Civic Learning:
- Appreciate their ability to use technology to deepen their marine processing skills.

Learning How to Learn:
- Calmly deal with the various technical issues that inevitably occur when working with computers and sensors.