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.