EARTH AND ENVIRONMENTAL SCIENCES (GEO)

Successful completion of the course demonstrates your mastery of the competencies expected for an entry-level geospatial technician (GEO 2850) or entry-level geospatial analyst (GEO 4850).

STUDENT LEARNING OUTCOMES (SLOS)

By the end of the course, students are expected to:

1. Apply critical thinking skills in generating, analyzing, implementing, and evaluating solutions to geospatial problems.
2. Understand, apply, analyze, and evaluate project management steps and geospatial skills as part of managing and completing a comprehensive project.
3. Apply both professional and ethical behaviors in the course of performing job responsibilities.
4. Demonstrate ability to work collaboratively as a team member.
5.

Final Project Proposal and Implementation – Instructor (40% of grade)
Final Project Report / e-portfolio (40% of grade)
Peer Assessment: Final Project Report and Presentation (20%)

Upper Division Course Credit Requirements

This is a **dual-listed course** where lower division or upper division credit is earned with successful completion of the course, earning a grade of C or better. ***Students enrolled in the upper division section of the course will have additional responsibilities and associated measurable CLOs that demonstrate a higher level of accomplishment*** from the capstone experience.

Methods of Instruction: Instruction will take place at the workplace and individual meetings with faculty:

Learning Modules
Discussion
Hands-on Experience
Collaborative Learning
Peer-mentoring

COURSE REQUIREMENTS

SLO	UNITS	Description
1	**UNIT 1:** Problem Solving Experience in the Geospatial Field	Apply critical thinking skills to solve problems by generating, evaluating, and implementing geospatial solutions.
2	**UNIT 2:** Geospatial Project Components	
	Project Scope	Describe how strategic planning should influence projects undertaken by an organization.
	Project Management	Describe the difference between a project, program, and product. Describe the constraints of projects and the framework for project management.
	Time Management	Describe the use of workflow planning and the tracking of project tasks.
3	**UNIT 3:** Code of Ethics	Demonstrate knowledge of professional ethics, such as published by GISCI and ASPRS organizations.

4   **UNIT 5:** Collaborative
Work Experience