EARTH AND ENVIRONMENTAL SCIENCES (GEO) & GEOGRAPHY (GEOG) 2840/4840: GEOSPATIAL INTERNSHIP

SPRING SEMESTER 2020

NOTE: Dual-listed courses: Lower-division (blue) and upper division courses (green) are color-coded to indicate unique information related to each course.

Meeting Time:TO BE DETERMINEDLocationTO BE DETERMINED

Instructor: Michael W Hernandez, Ph.D. or *other faculty member*

Department of Earth and Environmental Sciences

Phone #: (801) 626-8186

Office: TY 334

Communication: WSUOnline – Canvas messaging system (preferred)

mhernandez@weber.edu (alternate)

Office Hours: TO BE DETERMINED OR by appointment

REQUIRED MATERIALS

• Official Internship Paperwork (completed & signed). Students will complete the required paperwork which explains student responsibilities, employer responsibilities, and instructor responsibilities. Students will also read and discuss the various forms, Student Learning Objectives (SLOs), and student evaluation/assessment metrics with the course instructor.

ADDITIONAL MATERIAL

There will be additional readings assigned by the instructor throughout the semester on topics such as a code of ethics and geospatial professional organizations.

COURSE DESCRIPTION & OBJECTIVES

• This summative course provides a structured work experience in a supervised setting under the direction of a geospatial employer mentor and the course instructor. The internship will give you invaluable experience with technical, professional, and ethical issues commonly faced by geospatial professionals in today's workforce. You, together with your work supervisor/mentor and instructor, will develop a set measurable Internship Learning Outcomes (ILOs) that will be used to evaluate your performance and competence in a real-world job situation. Successful completion of this course will provide you with both critical job experience and interpersonal skills that are sought after by employers.

STUDENT LEARNING OUTCOMES (SLOS)

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

- 1. Apply critical thinking skills in analyzing, evaluating, and developing solutions to geospatial problems.
- 2. Understand and apply geospatial skills as part of managing and completing a project.

- 3. Apply professional and ethical behaviors in the course of performing job responsibilities.
- 4. Understand and apply "soft skills" needed in the geospatial workplace.
- 5. Evaluate the internship experience with regard to collaboration in a team setting and knowledge gained about the geospatial profession.

PREREQUISITE / COREQUISITE:

- To register for the course, students should have either successfully completed the geospatial courses listed below (grade of C or higher), be concurrently enrolled in the courses, and receive permission from the instructor.
- <u>GEO/GEOG 2840</u>: GEO 1720, GEOG 2400 (prerequisite or corequisite), consent of instructor
- <u>GEO/GEOG 4840</u>: GEO 3720, GEOG 4400 (prerequisite or corequisite), consent of instructor

LAB FEES: None.

COURSE POLICIES

Methods of Evaluation: Grades are based on overall performance, measured by the scores earned from evaluation of Internship documents (e.g., timesheets, project deliverables, student final report (documenting project work, lessons learned, and self-evaluation), and formal evaluations of the measurable ILOs by the supervisor/mentor and instructor. This course will use the standard +/- grade scale in accordance with university policy. Final grades will be awarded using the following percentage scale that is based on the total number of points earned divided by the total number of available points.

A	93.0+%	B-	79.0-81.9%	D+	66.0-68.9%
A-	89.0-92.9%	C+	76.0-78.9%	D	63.0-65.9%
B+	86.0-88.9%	C	72.0-75.9%	D-	60.0-62.9%
В	82.0-85.9%	C-	69.0-71.9%	E	<60.0%

Evaluations – Supervisor & Instructor (50% of grade) Student Final Report (30% of grade) Internship Documents (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 internship responsibilities and associated measurable ILOs that demonstrate a higher level of accomplishment from the internship experience.

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

- Discussion
- Mentoring

- Workplace experience
- Self-reflection

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 Experience in the Workforce	Develop, manage, complete, and evaluate a comprehensive geospatial project in a workplace setting.
3	UNIT 3: Code of Ethics	Demonstrate knowledge of professional code of ethics, such as published by GISCI and ASPRS organizations.
	UNIT 4: Standard Professional Practices and Professional Organizations	Demonstrate knowledge of standard professional practices (e.g., geospatial fundamentals, professionalism, and integrity, organizational and institutional aspects) and organizations (e.g., URISA, ASPRS, USGIF, AAG, UGIC, etc.)
4	UNIT 5: Workplace "Soft Skills" Experience	Apply soft skills important in the workplace such as interpersonal skills, dependability and reliability, critical & analytical thinking, and communication (listening and speaking).
	UNIT 6: Communication of Project Results	Present data and project results, including lessons learned, in an effective format (e.g., online, written, oral).
5	UNIT 7: Collaborative Work Experience	Demonstrate ability to work collaboratively in a team setting.



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