# Geography 477/677 Remote Sensing 2 Spring Semester

Lecture:Monday Wednesday10:00-10:50SCI D314Lab Section #1Wednesday2:00-3:50 SCI B308

**Instructor: Eric Larsen** 

**Office Hours:** Mon 11:00-12:00, Tues 10:00-11:00 or by appointment

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**Text:** Digital Image Processing, John Jensen

## **Learning Objectives:**

The objectives of this course are for you to develop the background knowledge and technical skills you will need for employment and/or further study in the field of remote sensing.

- 1.) SWBAT describe the relevant physical principles for remote sensing and explain their importance to the field. Physical principles include properties of the electromagnetic spectrum, the interactions of matter and energy, and relevant physical laws.
- 2.) SWBAT explain of the diversity of platforms, digital formats, and methods available to remote sensing data collection and analysis.
- 3.) SWBAT understand and apply selected mathematical principles involved in the use and analysis of digital remote sensing data.
- 4.) SWBAT use remote sensing software to analyze digital remote sensing data.
- 5.) SWBAT implement their knowledge and technical skills to analyze remote sensing data and use ERDAS Imagine to solve remote sensing problems.

#### Attendance, Testing, and Grading Policy:

You are expected to be present for all lectures and labs. It is your responsibility to take the initiative to obtain materials and lecture notes for those classes you miss. Any absence from an exam must be cleared in advance with the instructor.

#### **Grades:**

Exams (3 exams @ 100 points each) 300 Lab exercises 200 (Note: Your final lab grade will be your percentage score of all

your labs combined).

| A  | >= 93% | С  | 73-76% |
|----|--------|----|--------|
| A- | 90-92% | C- | 70-72% |
| B+ | 87-89% | D+ | 67-69% |
| В  | 83-86% | D  | 60-66% |
| B- | 80-82% | F  | <60%   |
| C+ | 77-79% |    |        |

<u>How grades are calculated:</u> There are 500 points possible. Let's say (for example) you received the following PERCENTAGE scores on your work:

| Exam 1        | 87% |
|---------------|-----|
| Exam 2        | 75% |
| Exam 3        | 92% |
| Lab Exercises | 95% |

So your final grade would be (87+75+92+95+95) = 444/500 = 88.8% = B+

### Laboratory:

A lab manual will be provided in digital format (pdf)

Lab exercises are due one week after assignment, unless otherwise instructed. Late labs will be assessed at 25% late penalty. Late labs will only be accepted for two weeks after the lab due date (or, 3 weeks after being assigned).

#### **Electronic devices:**

Cell phones and other electronic devices should be turned off during class (lecture and lab). Laptops/ipads are OK as long as they are used for 477 only, please remember that electronic devices can be very disruptive to the learning process of those students sitting behind and around you.

## Community Rights and Responsibilities.

In accordance with UW system policies, Geography 477/677 is dedicated to a safe, supportive and non-discriminatory environment for all persons regardless of age, race, religion, gender, sexual orientation or disability.

Students with special needs should talk to me during the first two weeks of class and possibly work with the **Office of Disability Services**. Religious beliefs will be accommodated according to UWS 22.03. It is the responsibility of all students to familiarize themselves with UWSP policies regarding special accommodations, academic misconduct, religious beliefs accommodation, discrimination, and absence for university sponsored events. Please refer to the following web document, "Rights and Responsibilities," which details your rights and responsibilities within the UWSP campus community.

http://www.uwsp.edu/stuaffairs/Pages/rightsandresponsibilities.aspx