

Geography / Natural Resources 377/577

Remote Sensing I

Spring 2024

Lecture: Tuesday, Thursday 8:00-9:00 SCI B338
Lab Section #1 Tuesday, 12:00-2:00 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: Remote Sensing of the Environment: An Earth Resource Perspective.
Jenson, John R.

Attendance 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 the labs combined).

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

How grades are calculated: 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 $(87+75+92+95+95) = 444/500 = 88.8\%$

Laboratory:

A lab manual will be provided.

Lab exercises are due one week after assignment, unless otherwise instructed. Many labs will require working outside the 2 hour lab periods. During the lab introduction, computers are NOT to be used for any function except 377.

Late labs will be assessed at 25% late penalty. Late labs will only be accepted for two weeks after the lab due date.

Electronic devices:

Cell phones and other electronic devices should be turned off during class (lecture and lab). Laptops are OK as long as they are used for 377 only, please remember that electronic devices can be very disruptive to the learning process of those students sitting behind and around you.

Course Objectives:

The objectives of this course are for you to develop the hands-on skills you will need for employment and/or graduate work in remote sensing, emphasizing applications in resource management. The student will develop skills in the following areas;

- 1.) Developing analytic skills in photogrammetry. These include determining scale, distance, area, heights, and density from aerial imagery. Orthorectification and accuracy assessment of image maps will also be emphasized.
- 2.) Interpretation and land cover classification of panchromatic (B/W), color, and color infrared aerial imagery, in both digital and paper form. Stereo viewing of imagery.
- 3.) Using aerial imagery in conjunction with field collected information, maps, GPS, and GIS.
- 4.) Development of skills in software used in the remote sensing field.

Students Rights and Responsibilities. Student commitment: Students are expected to read all assigned materials and to ask informed questions regarding the subject matter. As per the Student Handbook, students should be prepared for two hours of course work for each hour of lecture or lab. GEOG/NRES 377 consists of two lecture and two lab hours a week meaning students can expect an estimated eight hours of self study beyond scheduled lecture and lab times.

Student Rights and Responsibilities: Your rights and responsibilities within the UWSP campus community, including required behavior by students and faculty within the classroom environment are detailed in these documents:

<http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap22.pdf>

<http://www.uwsp.edu/admin/stuaffairs/rights/rightsChap14.pdf>. **ACADEMIC DISHONESTY:** Chapter 14 of the UWSP Handbook (web address below) defines academic misconduct as follows;

1. Seeks to claim credit for the work or efforts of another without authorization or citation
2. Uses unauthorized materials or fabricated data in any academic exercise.
3. Forges or falsifies academic documents or records.
4. Intentionally impedes or damages the academic work of others
5. Engages in conduct aimed at making false representation of a student's academic performance;
or
6. Assists other students in any of these acts.
7. Violates electronic communication policies or standards as agreed upon when logging on initially.

Violation of the above policies on any exam or laboratory exercise will result in a zero for that assignment. A second offense will result in a referral to the Academic Misconduct Hearing Committee.