

Geography / Natural Resources 377/577

Remote Sensing I

Fall Semester

Lecture: Online
Lab Section #1 Wednesday 12:00-1:50 AM SCI B308
Lab Section #2 Wednesday, 2:00-4:35 AM SCI B308

Instructor: Eric Larsen

Online Office Hours: Mon 1-2, Thurs. 11-12, or by appointment

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Text: Remote Sensing of the Environment: An Earth Resource Perspective.
Jenson, John R. (2nd edition)

Class Attendance:

With COVID protocols in place, class will be online and lab will be by cohort groups. You will (most likely) attend 1 lab/every 2 weeks in person and the other will be online. See Canvas which cohort group you are assigned to. Some students have chosen to take the class 100% online, and I fully support that decision.

Laboratory:

A lab manual will be provided.

Lab exercises are due two weeks 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.

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 $(87+75+92+95+95) = 444/500 = 88.8\% = B+$

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 for 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 calculations from aerial imagery. Orthorectification and accuracy assessment of image maps will also be emphasized.
- 2.) Interpretation and land cover classification of panchromatic, color, and color infrared aerial imagery, in both digital and paper form. Developing skills in 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

COVID-19 Safety Measures and Requirements:

We need to take extra precautions, as outlined in our UWSP return-to-campus guidelines. Face coverings, physical distancing, hand-washing and daily symptom monitoring are essential for everyone. Extra cleaning, disinfecting, directional signage, reduced capacity in classes, labs and meeting rooms are the norm.

At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the Disability and Assistive Technology Center to discuss accommodations in classes. [Please](#)

note that unless everyone is wearing a face covering, in-person classes cannot take place. This is university policy and not up to the discretion of individual instructors. They are mandatory based on the advice of medical professionals because, combined with physical distancing and other measures, they help protect both the health of others and the person wearing the face covering. By university policy, your instructor is not allowed to begin class unless everyone is wearing a face covering. Failure to adhere to this requirement could result in formal withdrawal from the course.

You are also required to maintain a minimum of 6 feet of physical distance from others whenever possible. Your instructor will not have normal 'office hours' since students cannot enter instructor's offices (due to social distancing space and ventilation issues). Please e-mail your instructor outside of class hours if help is needed in an assignment.

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/admin/stuaffairs/rights/rightsCommBillRights.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.