GEOL 409/509 Prospectus
Intro to Remote Sensing

Instructor: **Jane Dmochowski, she/her**

This course, GEOL409/509, will introduce students to the principles of remote sensing, characteristics of remote sensors, and remote sensing applications. Image acquisition, data collection in the electromagnetic spectrum, and data set manipulations for earth and environmental science applications will be emphasized. We will cover fundamental knowledge of the physics of remote sensing; aerial photographic techniques; multispectral, hyperspectral, thermal, and other image analysis. Students will pursue an independent research project using remote sensing tools, and at the end of the semester should have a good understanding and the basic skills of remote sensing. Expectations for the graduate student independent research projects will be at the graduate level and can relate to their capstone or Ph.D. thesis research topics.

You must have a computer in good working order with reliable internet connection. Please contact me immediately if this will be a problem so you can get the resources you need to succeed in this course.

No textbook. Online readings only.

Grading

Each one of the 5 main course modules is made up of readings and videos, several group workshops, 1-3 online module quizzes/assignments, and 1-3 online post-module quizzes/assignments. Grading will be based on these quizzes/assignments, workshops, final paper and your final presentation. It will also be updated throughout the semester in the Grade Center on Canvas and will be based strictly on your final percentage in the course, and the scale will be posted in the Canvas syllabus at the start of fall classes.

Assignments are weighted by group:

Group	Weight
Workshops	35%
Post-module quizzes/assignments	15%
Module Assignments	15%
Final Products	35%
Total	**100%**