GEOG 286 : REMOTE SENSING

Transcript title

Remote Sensing

Credits

4

Grading mode

Standard letter grades

Total contact hours

60

Lecture hours

30

Lab hours

30

Course Description

Introduces theory and methods of remote sensing with satellite imagery. Covers use of SPOT, Landsat, and QuickBird images with ArcGIS and IMAGINE analysis software. Perform digital analysis, including preprocessing, image classification, and image evaluation. Intended for students enrolled in the second year of GIS or UAS programs or similar academic preparation. (See program director for details.)

Course learning outcomes

1. Describe how remote sensors image various portions of the electromagnetic spectrum can be used to reveal patterns not visible to the human eye.

2. Categorize land cover from remotely sensed imagery.

3. Assess the accuracy of maps created from satellite imagery and lidar.

Content outline

- 1. Introduction to remote sensing
- 2. Electromagnetic spectrum
- 3. Platforms and sensors
- 4. Aerial photography
- 5. Digital imagery
- 6. Image interpretation
- 7. Image classification
- 8. Field data sampling
- 9. Accuracy assessment
- 10. Lidar mapping

Required materials

This course will require a textbook.