



THE OHIO STATE UNIVERSITY

GEOG 5225

Geographic Applications of Remote Sensing (24835) Autumn 2026

Syllabus - Instructor Information

Desheng Liu

Professional Qualifications

- Ph.D., Department of Environmental Science, Policy and Management, University of California at Berkeley
- M.A., Department of Statistics, University of California at Berkeley
- M.S., Department of Environmental Science, Policy and Management, University of California at Berkeley
- B.E., School of Remote Sensing and Information Engineering, Wuhan University, China

Syllabus - Required or Recommended Readings

Required Textbook: Jensen, John R., 2016, Introductory Digital Image Processing: A Remote Sensing Perspective, Pearson, 4th ed., ISBN 9780134058160.

Optional Reference: Jensen, John R., 2007, Remote Sensing of the Environment: An Earth Resource Perspective, Prentice Hall: Upper Saddle River, NJ, 2nd ed., ISBN 9780131889507.

Assigned Readings: Peer-reviewed journal papers covering a wide range of real-world remote sensing applications will be available on Carmen Canvas after the midterm exam.

Syllabus - Course Schedule

Week	Topic
1	Introduction to Remote Sensing
2	Remote Sensing Basics
3	Remote Sensing Systems
4	Radiometric Correction
5	Geometric Correction
6-7	Image Enhancement
8-9	Image Classification
10	Change Detection
11	Midterm Exam
12-15	Remote Sensing Applications
16	Final Project

Syllabus - University Policies

Office of Undergraduate Education - Standard Syllabus Statements

- [Academic Misconduct](#)
- [Religious Accommodations](#)
- [Accommodations for Disability and Illness](#)
- [Intellectual Diversity](#)
- [Grievances and Solving Problems](#)
- [Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct](#)
- [Copyrights](#)
- [Content Warnings](#)
- [Mental Health Support](#)
- [Resources for Military-Connected Students](#)
- [Campus-wide Class Cancellations](#)