
ERE 365/ERE 565: PRINCIPLES OF REMOTE SENSING SPRING 2017 - COURSE SYLLABUS

INSTRUCTOR:

Giorgos Mountrakis

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Lectures: Tuesday and Thursday 12:30 - 1:50pm Baker 148

Lab: Section 1: Thursday 2:00 - 4:50pm Baker 437

Section 2: Tuesday 2:00 - 4:50pm Baker 314

REQUIRED TEXT

Remote Sensing and Image Interpretation by Lillesand, KieferChipman (**sixth** or **seventh** edition).

One copy has been placed on reserve at the Moon Library.

COURSE DESCRIPTION

The class provides a qualitative and quantitative introduction to the fundamentals of acquiring, analyzing and utilizing remote sensing data in the performance of natural resource inventories, environmental quality surveys, site development studies and land use analyses. The class describes the fundamentals of remote sensing and also covers introductory concepts and methods in digital image processing and photogrammetry.

COURSE OBJECTIVES

The class aims to provide understanding of

- The basic principles and concepts in remote sensing
- Commonly used terms
- The application of remote sensing
- Basic concepts in digital image processing and photogrammetry

COURSE OUTCOMES

Upon successful completion of the course students should be able to

- Describe the fundamental concepts of remote sensing
- Describe applications of remote sensing
- Describe the applicability of simple remote sensing techniques

ATTENDANCE POLICY

Attendance will not be taken on a daily basis but 2% of your grade will be based on your overall active participation (see participation in the grading section). Lecture and lab discussions are part of the examination material. Also, occasionally clarifications will be offered during lecture/lab time.

STUDENTS WITH LEARNING AND PHYSICAL DISABILITIES

SUNY-ESF works with the Office of Disability Services (ODS) at Syracuse University, who is responsible for coordinating disability-related accommodations. Students can contact ODS at 804 University Avenue- Room 309, 315-443-4498 to schedule an appointment and discuss their needs and the process for requesting accommodations. Students may also contact the ESF Office of Student Affairs, 110 Bray Hall, 315-470-6660 for assistance with the process. To learn more about

ODS, visit <http://disabilityservices.syr.edu>. Authorized accommodation forms must be in the instructor's possession one week prior to any anticipated accommodation. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.

ACADEMIC DISHONESTY

Academic dishonesty is a breach of trust between a student, one's fellow students, or the instructor(s). By registering for courses at ESF you acknowledge your awareness of the ESF Code of Student Conduct (<http://www.esf.edu/students/handbook/StudentHB.05.pdf>), in particular academic dishonesty includes but is not limited to plagiarism and cheating, and other forms of academic misconduct. The Academic Integrity Handbook contains further information and guidance (<http://www.esf.edu/students/integrity/>). Infractions of the academic integrity code may lead to academic penalties as per the ESF Grading Policy (<http://www.esf.edu/provost/policies/documents/GradingPolicy.11.12.2013.pdf>).

GRADING

In group activities you are expected to contribute equally. Failure to do so may result in different grading for each group member.

COMPONENT	CONTRIBUTION
Project	13%
Quizzes	10%
Labs	25%
Midterm	20%
Final	30%
Participation	2%

IMPORTANT: To pass the course your exam grade average ((midterm + final)/2) should be at least 60% (independently of all other grades).

- **PROJECT**

Each week a group of students will provide a 10-15 minute presentation on a student-selected application of remote sensing technology. At the end of the semester each group will have to provide a 10 page report on the subject.

- **QUIZZES**

A quiz will be administered almost every Thursday. Grading will be 0 if you do not respond to the quiz during the allocated time, 1 if your performance is less than 50%, and 2 if your score is larger than 50%. You do not have to be in class to take the quiz, however any difficulties you may experience are solely your responsibility.

- **LABS**

There will be 10 laboratory exercises. In the first half of the semester we will deal with image hardcopies, in the second half we will use computer software.

- **EXAMS**

A midterm exam will be offered on Thursday March 5th at 3:30pm and a final comprehensive exam during the scheduled final exam period.

- **PARTICIPATION**

This grade will reflect the instructor's opinion on your comprehension of the taught material and the effort you put forward. It is mostly based on quality of questions and answers you provide. You will not automatically get credit for just coming to class, so assume that your grade will be 0% if you do not actively participate. The majority of the grade will be based on lecture participation, lab participation will have a minor contribution.

Note that graduate students will have to meet increased project expectations and additional questions at the final exam.

Letter grades will be assigned based on the scale shown below. The grade cutoffs may be adjusted (up or down) by up to one point when assigning final grades at the end of the semester.

Letter Grade	Range of Numerical Grade
A	93 and above
A-	90 to just less than 93
B+	87.5 to just less than 90
B	85 to just less than 87.5
B-	82.5 to just less than 85
C+	80 to just less than 82.5
C	77.5 to just less than 80
C-	75 to just less than 77.5
D	70 to just less than 75
F	less than 70

COMPUTER USE

E-mail will be used as a common means of communicating outside class times. All students have access to an e-mail account through the Syracuse University system. The internet will be used for providing information throughout the course. Computer clusters at ESF and at SU provide access for those who do not have home access.

It is the students responsibility to check daily their email syr accounts.

The class will also use BlackBoard software. Make sure you can log-in using this web address:
blackboard.syr.edu

You are expected to bring a Blackboard-enabled device for Thursday's quizzes.