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## FEG 365/ERE 565: PRINCIPLES OF REMOTE SENSING SPRING 2010 - COURSE SYLLABUS

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### INSTRUCTOR

Giorgos Mountrakis  
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Office: 419 Baker Hall (mailbox: 402 Baker Hall)  
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Office hours: Tuesday/Thursday 11-12pm or email  
for appointment outside these hours.

Lectures: Tuesday and Thursday 8:30 - 9:20am Baker 434

Lab: Thursday 3:30 - 6:20pm Baker 437

Lecture/ Recitation (as needed): Wednesday 8:30 – 9:20am Baker 437

### REQUIRED TEXT

*Remote Sensing and Image Interpretation* by Lillesand, Kiefer and Chipman (**sixth** edition)  
available at Syracuse University Bookstore in the Schine Student Center

### 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

### PROGRAM 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

### RESPONSIBILITIES AND ATTITUDES

Academic dishonesty is unacceptable and will be dealt with severely. Be respectful of your Instructor, TAs and fellow students.

### ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

If you have an identified disability and will need accommodations, you should contact Tom Slocum in the Office of Student Life in 110 Bray Hall. He will discuss the ESF process and work with you to access supportive services. If you have a learning disability, the College will require you to provide supportive documentation and will develop an approved accommodation sheet for you. Accommodations cannot be provided until the accommodation sheet is established and we meet to discuss its applicability to this course. Accommodations cannot be established retroactively.

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## GRADING

COMPONENT	UNDERGRADUATES	GRADUATES
Project	15%	15%
Paper	5%	5%
Lab	30%	30%
Midterm	20%	20%
Final	30%	30%

**IMPORTANT: To pass the course your final exam grade should be at least 65% (independently of all other grades).**

- **PROJECT**

A hands-on experience lasting the entire semester with a focus on building your own amateur sensor. Depending on progress we may launch it at the end of the semester.

- **PAPER**

You will have to write and revise a paper on RS applications at the end of the semester.

- **EXAMS**

A final exam will be offered during the scheduled final exam period and a midterm around the spring break.

- **LABS**

Course will have 8-10 laboratory exercises. In the first half we will deal with image hardcopies, in the second half we will use computer software.

## COMPUTER USE

Word processing and spreadsheet software packages are considered basic tools. These types of programs should be used for written and graphic communication and many types of quantitative analyses. Students are free to choose whatever computer facilities are most convenient while preparing their class submissions.

**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.

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

**[blackboard.syr.edu](http://blackboard.syr.edu)**

## SOURCES OF SUPPORT AND CLASS ABSENCE

If you experience academic or personal difficulties that affect your studies or life, there are people and resources who will help you. In particular, the ESF Office of Student Life, 110 Bray Hall (470-6660) will provide academic support, career guidance, personal counseling, or direct you to the proper source of help. If you encounter a situation beyond your control in which you will be missing 3 or more days of classes, you can contact the Office of Student Life and they will contact all your instructors for you. If you have an identified disability and will need accommodations, contact Tom Slocum in the Office of Student Life in 110 Bray Hall.