

INTRODUCTION TO FIELD BIOLOGY

Bio 405

TTh 2:00-3:20; LSC 306

Prerequisite: Bio 121 or equivalent

INSTRUCTOR:

Dr. Kari Segraves

LSC 438

443-4899, ksegrave@syr.edu

office hours: by appointment

TEACHING ASSISTANT:

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LSC 237

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office hours: Tue 1-2 pm

COURSE OBJECTIVES AND LEARNING OUTCOMES

Once students have successfully completed this course, they will be better able to: (1) describe scientific methodology and statistics, (2) plan and implement experiments in the field, (3) distinguish the major ecosystems of Florida and explain how humans have impacted each ecosystem, (4) write a scientific manuscript for publication in an ecological journal, (5) prepare and deliver oral presentations on a scientific research project, and (6) keep a scientific journal.

COURSE SCHEDULE

Jan 18	Introduction, Project ideas
Jan 20	Scientific Method
Jan 25	Experimental Design (Homework I due)
Jan 27	Statistics (Quiz I)
Feb 1	Statistics
Feb 3	Florida factoids & Historical Biogeography & the LWR (Team Proposal Outline due)
Feb 8	Scrub (Homework II due)
Feb 10	Scrub (Quiz II)
Feb 15	Hammocks
Feb 17	Swamps (Homework III due)
Feb 22	Estuaries (Quiz III)
Feb 24	Mangroves (Team Proposal & Literature review due)
Mar 1	Coral Reefs (ID Quiz)
Mar 3	Final Exam
Mar 8	Proposal Presentations
Mar 10	Official trip meeting - attendance mandatory! (Homework IV due)
Mar 12	Depart for Archbold
Mar 21	Return to Syracuse
Mar 22	Discussion of paper; Class evaluation (Fieldbook due @ 2:00 pm)
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Apr 28	Paper due via electronic submission; *Class will NOT meet
May 6	Last day to hand in late papers

We reserve the right to announce minor alterations to the course schedule.
A separate schedule will be provided for the field trip.

COURSE POLICY

Attendance, lateness— Students are strongly encouraged to attend all class meeting times and to be present promptly at the beginning of class.

Class participation— Active participation in discussions, exercises, and projects is strongly encouraged. Participation is a component of the course grade.

Presentations— There will be two formal team presentations focused on the research projects. The first will be on the proposed project, and the second will be on the results of the completed project. Details of the presentations will be discussed in class.

Field Trip— A major component of the course will be conducted at the Archbold Biological Station in Lake Placid, Florida. Participation in the field trip for its full duration is required.

Field Notebook— Students are encouraged to use creativity while keeping a field notebook. Daily notes pertaining to scientific observations and data collection will be kept during the field trip. Field books may be either bound lab notebooks or they may be electronic versions enhanced with digital images, drawings, or sound recordings. Appropriate content and format will be discussed in class.

Research Project— Students will design, implement, and write-up team projects. All projects will be conducted at the field station. Details of the research project will be discussed in class.

ID Quiz— The ID quiz is an ungraded lab practical. You must pass this quiz with a minimum of a 70% in order to attend the field trip.

Late Assignments— Late work will be deducted 5% per weekday it is late. Work is considered late when it is handed in after 5:00 pm (5:01 pm is late!). For example, if an assignment earned a 90% grade and was turned in on Monday rather than its due date of Friday, it would be scored as an 85% (one weekday late). Unless otherwise noted, assignments are due by 5:00 pm in Kari's mailbox located in LSC 110 (you must have one of the secretaries time stamp your assignment for you).

Academic Integrity— The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort.

With the exception of specified team assignments, student work and performance on quizzes, exams, and assignments will represent individual effort. Cheating is defined as obtaining or giving unauthorized help on assignments, quizzes, exams, and papers. Obtaining illegal copies of quiz or exam questions in advance or tampering with a graded quiz, exam, or assignment are also defined as cheating. Plagiarism is defined as representing someone else's work or ideas as your own. Using more than four consecutive words from a printed source (e.g., book, journal article, or internet resource) without quotation marks and a reference to the source is plagiarism. Similarly, copying from another student's paper or from a website is also considered plagiarism. Copying ideas of others without reference to the source or person is plagiarism. Students caught plagiarizing or cheating will minimally receive zero credit on the assignment, quiz, or exam and may receive a failing grade for the course. All cases of academic dishonesty will be reported to the Academic Integrity office. For detailed information about SU's academic integrity policy, visit the following website: <http://academicintegrity.syr.edu>

Disability Statement— Students who may need academic accommodations due to a disability are encouraged to discuss their needs with me at the beginning of the semester. In order to obtain authorized

accommodations, students should be registered with the Office of Disability Services (ODS), 804 University Avenue, Room 309, 315-443-4498, odssched@syr.edu and have an updated accommodation letter for the instructors. Accommodations and related support services such as exam administration are not provided retroactively and must be requested in advance. For more information about disability services and policy, see the Office of Disability Services website (<http://disabilityservices.syr.edu>).

TEXTBOOK AND SUPPLIES

The following text & supplies are required for the field trip.

1. Alden P., Cech R., and G. Nelson. (1998) National Audubon Society Field Guide to Florida. Chanticleer Press Inc., New York.
2. A bound field notebook is required (electronic format is also acceptable). Ring or spiral binders are not acceptable for the field notebook.
3. You may also wish to consider purchasing additional items for the field trip. Please see the website for further information.

I strongly recommend also purchasing:

Knisely, K. (2009) A student handbook for writing in biology, third edition. Sinauer Associates, Sunderland, MA. This text is available at the bookstore.

COURSE WEBSITE

Grades will be posted on blackboard. All other information for the course will be posted on the course website. The website is a great place to find trip information, example quiz questions, and photos of common Florida plants and animals. We strongly encourage students to regularly check the website for important information. http://plantecology.syr.edu/segraves/Courses_pages/FieldBiology.html

GRADING

The following is the percentage breakdown for guaranteed final grades:

A	93-100%	C+	77-79%
A-	90-92%	C	73-76%
B+	87-89%	C-	70-72%
B	83-86%	D	60-69%
B-	80-82%	F	less than 60%

Participation— Participation in discussions, team assignments, and lab/field exercises will be worth 10% of the final grade. Inappropriate behavior on the field trip will result in a lowered participation score.

Quizzes— Quizzes are cumulative and will cover material presented in lab, discussions, and readings. Each quiz will be worth 4% of the final grade. Quizzes are to be taken at the scheduled time during class. Students who miss quizzes and have appropriate written documentation (note from student health, coach, etc.) of a valid excuse will either be given a make up quiz or the remaining quizzes will count as the total quiz grade. This choice is at Kari's discretion. If possible, students who need to miss the scheduled quiz time should provide notification well in advance of the date.

Final Exam— There will be a cumulative final exam covering the material presented in lab, discussions, and readings. Students who miss the final with appropriate written documentation of a valid excuse will have the exam portion of their grade removed from the final grade. The final will be worth 10% of the final grade.

Homework Assignments— Homework assignments will be worth 18% of the final grade. Each assignment will be weighted equally. Unless otherwise indicated (e.g., team proposal) homework assignments must represent an individual’s effort. Any collaboration, discussion, or assistance on homework assignments is considered a violation of the academic integrity policy. Late homework assignments will only be accepted until the beginning of the next class meeting time (e.g., if due on Tuesday, the assignment will be accepted until 2:00 pm the following Thursday).

Field Notebook— The field notebook will be worth 10% of the final grade. Notebooks are due at 2:00 pm on the due date and will not be accepted late.

Team Presentations— The presentations are worth 15% of the final grade. The first presentation is prior to the field trip, the second will be during the field trip (see schedule). There will be no make-up presentations. Students who miss a presentation and have appropriate written documentation of a valid excuse will be given the grade received by their teammates for the missed presentation.

Final Project Paper— The final paper, written as a scientific article, will be worth 25% of the final grade. The final paper may be submitted as either an individual or team effort. Details of the requirements for each of these formats will be discussed in class. The final paper is due by 5:00 pm on the due date. Late papers will be accepted for a brief period of time (see schedule).

A note on team projects— Sometimes the distribution of labor within groups becomes unfair. To remedy this problem, individuals will be assigned specific tasks for the group project. Grades will be scaled according to performance on these individual assignments.

Grading complaints— Obvious mistakes in grading should be brought to our attention as soon as possible. For other re-grades, we will examine the entire assignment or quiz. In this latter case, students risk a global change in grade on other parts of the assignment or quiz which may result in a lower grade.

Extra credit— There will be extra credit opportunities on the field trip. Details will be provided at Archbold.

Grade Overview

Participation	10%	
Quizzes (3 @ 4%)	12%	*ID Quiz is worth no points, but must be passed
Final Exam	10%	
Homework (6 @ 3%)	18%	
Field Notebook	10%	
Presentations (2 @ 7.5%)	15%	
Final Paper	25%	