

REVISED AFTER HURRICANE DORIAN

PCB 4932L (4353L) – Florida Ecology, Natural History, and Conservation LAB Fall 2019, 1 credit

Instructor: Dr. Gregg Klowden (pronounced "Cloud - in")
Office: Room 202A, Biological Sciences
Office Hours: Wed 1:30p - 3:30p, Thurs 11:15a - 12:15p, or by appointment
E-mail: gklowden@ucf.edu

***Email Requirements: I teach several courses and receive a large volume of emails. To help me help you please:

1. format the subject of your email as follows: "Course – FL Ecology LAB, Subject - Question about lab 1"
2. include your 1st and last name in the body of all correspondence.

I try to respond to emails within 48 hours however, response time may be greater. Please plan accordingly by not waiting to the last minute to contact me with questions or concerns. Due to confidentiality, I will only reply to questions emailed from your Knights email and any questions about grades must be discussed in person and cannot be discussed via email.

Class Meeting Times: Wednesdays 9:15a -12:50p in BIO 104 or on field days at van (location TBA)

Intended Audience: Advanced Biological Science majors & minors.

Course Prerequisite: Previous completion or concurrent registration in FL Ecology, Natural History, and Conservation (PCB 4353)

Course Description:

The purpose of PCB 4353 lab is to provide you with hands-on examples of concepts, organisms, and ecosystems you learn about in lecture. We explore in greater depth Florida's general ecology, habitats, vegetation types, wildlife, and conservation issues. You will also learn more about what ecologists do and how they do it by writing a research proposal. Florida has a tremendous diversity of natural habitats and communities (e.g. pine flatwoods, hardwood forests, pine grasslands, scrub, freshwater and salt marsh, wet and dry prairie, cypress, mangrove, and hardwood swamps, rivers, springs, lakes, intertidal zones, estuaries, and coral reefs) and associated wildlife (emphasizing amphibians, reptiles, mammals and birds), ranging from north Florida flatwoods to south Florida Everglades. We will further explore the diverse ecology that characterizes Florida and differentiates this region from any other area of the continental United States.

Required Resources:

- A. Webcourses: Lab materials, announcements, grades, etc. will be made available on this site.
- B. UCF Library Webpage Access: Necessary to download articles from research journals.

Student Responsibilities:

Etiquette – Students should show proper classroom etiquette. Students should show up to class on time. *Please do not be late or leave early, this disrupts the class.* All cell phones, pagers, etc. should be silenced when entering the classroom.

Email and Webcourses:

You will be expected to have daily access to Webcourses since I will be consistently posting assignment updates, additions, changes, clarifications, etc. All students at UCF are required to obtain a Knight's Email account and check it regularly for official university communications. If you do not own a computer, there are computers accessible to you in all UCF's computer labs, and most computer labs have computers connected to the internet. For further information on computer labs, please see the following website: http://registrar.sdes.ucf.edu/webguide/index_quickfind.aspx.

Attendance is required.

You must arrive on time and remain until excused. **For EACH of the 1st two unexcused absences your course grade will be reduced by 10%. If you miss 3 labs, unexcused or excused, you will receive an F for the course.** Similarly, if you arrive late or leave early your grade will be reduced. The ONLY exceptions to this policy are for legitimate, documentable circumstances. Authorized absence must include written documentation from a competent authority (physician, coach, counselor, etc.). Acceptable absences are major illness, serious family emergencies, special curricular or professional requirements (e.g.

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attending a scientific meeting), court-imposed legal obligations, military obligations, certain religious holidays, and participation in official university-sponsored activities such as intercollegiate athletics. It is your responsibility to contact Dr. Klowden prior to or as soon as possible following an absence. An authorized absence does not excuse you from any missed work. You are individually and entirely responsible for all information, announcements, assignments, and/or handouts that you miss during an absence. Work missed due to unauthorized absence cannot be made up and a grade of zero will be recorded. Work missed due to an authorized absence must be made up or will be assigned a grade of zero. Late assignments will not be accepted.

Lab Participation:

I expect you to have a good attitude and to be active participants in the learning process. This not only means that you are present in all labs but that you are prepared and actively work to improve your understanding of the subject. Ask questions and seek answers both alone and in conjunction with your classmates. In the field you will quickly discover that working outdoors trying to collect ecological data is a challenging endeavor that is generally enjoyable but can at times be uncomfortable, exhausting and monotonous. Please try to keep a good attitude and help your classmates whenever possible. In addition to the learning benefits that active participation will bestow upon you, it will also be reflected in your grade. Dr. Klowden will observe and evaluate your preparedness, general attitude, and enthusiasm in all labs. Your grade may be reduced by up to 20% if it is deemed that your participation is particularly poor.

Field Labs

Throughout the semester we will take field trips to investigate several of Florida's ecosystems. We will observe and discuss various abiotic (e.g. soil, water) and biotic (plant community composition and physiognomy, animal communities) characteristics of each system and compare/ contrast these to other systems.

For all field labs please wear long pants, long sleeves, socks and close toed shoes that can get wet and dirty since you are likely to encounter waist high vegetation, poison ivy, biting insects, rain, mud, etc. and may get wet and muddy. If you have something to do after this lab you may want to bring a change of clothes. Labs will occur rain or shine unless the weather is severe. So, please bring a rain coat on rainy days. Be on time for lab as we will leave promptly. Don't be late or you will miss your ride (and receive an unexcused absence)! Absolutely, positively no personal vehicles are allowed on field trips.

List of required and recommended equipment to bring to each outdoor lab:

Required:

1. Water - bring plenty (i.e. not just 1 small bottle) as we will be outdoors in the sun for many hours.
2. Long pants, long sleeves, socks and close toed shoes that can get wet and dirty
3. Personal medications – allergy, headache, bee sting kit if allergic to bee stings, etc.
4. Field notebook and pencils

Recommended:

- | | | | |
|---------------------|---------------------|----------------|--------------------------------|
| 5. Hat | 8. First aid kit | 11. Camera | 14. Wet wipes & hand sanitizer |
| 6. Sunblock | 9. Field guides | 12. Watch | 15. Backpack |
| 7. Insect repellent | 10. Lunch and snack | 13. Hand towel | |

Photo Slideshow Assignments:

Approximately 1 week following each field trip (see due dates in syllabus) you will need to submit photo slideshows of the flora and fauna that you were able to photograph and identify as well as completing the supplemental questionnaire on Webcourses. Each person will be supplied with a waterproof camera that should allow you to photograph a variety of terrestrial and aquatic subjects. You MUST use this camera for your photos and not your cell phone. Available to you during lab, in Dr. Klowden's office hours, and on reserve in the library will be an assortment of field guides that will help you in the identification of the vertebrates, invertebrates, plants, and mushrooms that you may encounter. Additionally, you may want to use internet resources and download apps of interest to your phone. Slideshows can be constructed using any appropriate software. Numerous suggestions of freely available software and complete details for this assignment are available on Webcourses.

Research Proposal

An important goal for this semester is to write a proposal for research. This proposal will detail the experimental design to answer a set of hypotheses / questions concerning the distribution, abundance, or conservation of any organism or group of organisms in Florida. You probably want to know why this is a worthwhile goal. Most of you will take one of several career paths after undergraduate school: a professional position related to biology, medical school, or graduate school. In any of

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these careers, you will likely read and evaluate research or research proposals or you will write research proposals and do research. Developing and writing a research proposal in this course will improve your evaluation and writing skills in general and specifically for research proposals. Even if you do not take any of the above career paths, there is something in this for you: improved writing skills, improved interpersonal skills from working with a group, and improved evaluation and interpretation of research literature. I also believe that the detailed development of hypotheses, an essential precursor to good research, is often simplified when teaching the scientific process. In short, this will help you learn how science is done.

This project will be done in a group of 3 students and will involve 3 phases:

1. Preproposal
2. Proposal
3. Oral Presentation

Specific details of the expectations for this project are available on Webcourses. Consult the schedule below for deadlines.

Statements of contributions

Following each of the above 3 phases, each person in each group will fill out a survey on Webcourses (a) describing the contribution (including an estimated percentage) of each investigator to the preparation of the pre-proposal, (b) indicating that the content of the pre-proposal represents the original, collaborative work of the research team, and (c) indicating that the content of the pre-proposal is not currently and has not in the past been considered as partial or complete fulfillment of an assignment for another course or research project. I encourage all group members to participate equally, to balance the workload and work together to achieve a common goal. As reported anonymously by the other group members, any member who is not pulling his/her weight or who is unnecessarily dominating will have his/her grade reduced. Failure to submit the statement of contribution on time will result in a 2% reduction PER DAY in your individual grade for the preproposal.

Research Proposal Reviews – Each student will be given 2 of his/ her peer's proposals to review. Reviewing a proposal involves a lot more than assessing compliance, style, and checking for typos. Reviewers will consider innovation, intellectual merit, clarity, budget, and timeline and will ultimately submit a recommendation for or against "funding". The quality of your review will determine your grade on this assignment.

Performance Evaluation:

	Proportion of grade
Scientific Journal exercise	1%
Avoiding plagiarism exercise	1%
Photo montage or slideshow (6 x 8%)	48%
Potential research topics	2% (failure to hand in on time results in -10% to your individual proposal grade)
Final research topic	1%
Annotated bibliography	4% (failure to hand in on time results in -20% to your individual proposal grade)
Research preproposal	7%
Research proposal	20.0%
Proposal reviews (2 x 4%)	8.0%
Oral presentation	<u>8.0%</u>
	100%

Grading Scale:

A 93.0 – 100%	B+ 87.0 - 89.9%	C+ 77.0 - 79.9%	D+ 67.0 - 69.9%	F 0 - 59.9%
A- 90.0 - 92.9%	B 83.0 - 86.9%	C 73.0 - 76.9%	D 63.0 - 66.9%	
	B- 80.0 - 82.9%	C- 70.0 - 72.9%	D- 60.0 - 62.9%	

Grade Rounding Policy

The overall semester grade will not be rounded. In other words, either you have the grade or you don't. In other words, a 79.99 is still a 'C'. As I strive for consistency and fairness, there will be no exceptions to this policy and no other adjustments will be made (i.e. No additional curving or extra credit will be offered).

Academic Integrity and Ethics:

UCF faculty supports the UCF Creed. Integrity - practicing and defending academic and personal honesty is the first tenet of the UCF Creed. This is in part a reflection of the second tenet, Scholarship: -I will cherish and honor learning as a fundamental purpose of membership in the UCF community. Course assignments and tests are designed to have educational value; the process of preparing for and completing these exercises will help improve your skills and knowledge. Material presented to satisfy course requirements is therefore expected to be the result of your own original scholarly efforts.

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Students should familiarize themselves with [UCF's Rules of Conduct](#). According to Section 1, "Academic Misconduct," students are prohibited from engaging in:

- *Unauthorized assistance*: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.
- *Communication to another through written, visual, electronic, or oral means*: The presentation of material which has not been studied or learned, but rather was obtained through someone else's efforts and used as part of an examination, course assignment, or project.
- *Commercial Use of Academic Material*: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor's PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.
- *Falsifying or misrepresenting* the student's own academic work.
- *Plagiarism*: Using or appropriating another's work without any indication of the source, thereby attempting to convey the impression that such work is the student's own.
- *Multiple Submissions*: Submitting the same academic work for credit more than once without the express written permission of the instructor.
- *Helping another violate* academic behavior standards.

Students who engage in academic misconduct contradict the educational value of your courses and undermine the value of the UCF degrees earned by their more honest peers. For more information about Academic Integrity, students may consult [The Center for Academic Integrity](#). For more information about plagiarism and misuse of sources, see "[Defining and Avoiding Plagiarism: The WPA Statement on Best Practices](#)".

Responses to Academic Dishonesty, Plagiarism, or Cheating

Students should also familiarize themselves with the procedures for academic misconduct in UCF's student handbook, [The Golden Rule](#). UCF faculty members have a responsibility for students' education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a "Z Designation" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see <http://goldenrule.sdes.ucf.edu/zgrade>.

Course Accessibility Statement

The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need disability-related access in this course should contact the professor as soon as possible. Students should also connect with [Student Accessibility Services](#) (Ferrell Commons 185, sas@ucf.edu, phone (407) 823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable. Determining reasonable access and accommodations requires consideration of the course design, course learning objectives and the individual academic and course barriers experienced by the student.

Campus Safety Statement

Emergencies on campus are rare, but if one should arise in our class, everyone needs to work together. Students should be aware of the surroundings and familiar with some basic safety and security concepts.

- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Please make a note of the guide's physical location and consider reviewing the online version at http://emergency.ucf.edu/emergency_guide.html.
- Students should know the evacuation routes from each of their classrooms and have a plan for finding safety in case of an emergency.
- If there is a medical emergency during class, we may need to access a first aid kit or AED (Automated External Defibrillator). To learn where those items are located in this building, see <http://www.ehs.ucf.edu/workplacesafety.html> (click on link from menu on left).
- To stay informed about emergency situations, sign up to receive UCF text alerts by going to my.ucf.edu and logging in. Click on "Student Self Service" located on the left side of the screen in the tool bar, scroll down to the blue "Personal

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Information" heading on your Student Center screen, click on "UCF Alert," fill out the information, including your e-mail address, cell phone number, and cell phone provider, click "Apply" to save the changes, and then click "OK."

- If you have special needs related to emergency situations, speak with your instructor outside of class.
- To learn about how to manage an active-shooter situation on campus or elsewhere, consider viewing this video. [You CAN Survive an Active Shooter](#)

Deployed Active Duty Military Students

If you are a deployed active duty military student and feel that you may need a special accommodation due to that unique status, please contact your instructor to discuss your circumstances.

Copyright

This course may contain copyright protected materials such as audio or video clips, images, text materials, etc. These items are being used with regard to the Fair Use doctrine in order to enhance the learning environment. Please do not copy, duplicate, download or distribute these items. The use of these materials is strictly reserved for this online classroom environment and your use only. All copyright materials are credited to the copyright holder.

Third-Party Software and FERPA

During this course you might have the opportunity to use public online services and/or software applications sometimes called third-party software such as a blog or wiki. While some of these could be required assignments, you need not make any personally identifying information on a public site. Do not post or provide any private information about yourself or your classmates. If appropriate you may use a pseudonym or nickname. Some written assignments posted publicly may require personal reflection/comments, but the assignments will not require you to disclose any personally identity-sensitive information. If you have concerns, please contact your instructor.

Additional Resources:

- Myers, R. L. and J. J. Ewel. 1991. Ecosystems of Florida. University of Central Florida Press. 765 pp.
- Florida Natural Areas Inventory www.fnai.org
- Ewel, C. E. and H. T. Odum. 1984. Cypress swamps. University of Florida Press. 472 pp.
- Mitsch, J. M. and J. G. Gosselink. 2000. Wetlands, 3rd edition. John Wiley & Sons, Inc. 920 pp.
- Barnett, C. 2007. Mirage: Florida and the vanishing water of the Eastern U.S. The University of Michigan Press. 240 pp.
- Davis, S. M. and J. C. Ogden (editors). 1994. Everglades: the ecosystem and its restoration. St. Lucie Press. 826 pp.
- Kruczynski, W. L. and P. J. Fletcher. 2012. Tropical connections: South Florida's marine environment. IAN Press. 492 pp.
- Odum, H. T., E. C. Odum, and M. T. Brown. 1998. Environment and Society in Florida. St. Lucie Press. 449 pp.
- Perry, J. and J. Greverus Perry. 1998. The nature of Florida. University of Georgia Press. 238 pp.
- Simberloff, D., D.C. Schmitz, and T. C. Brown. 1997. Strangers in paradise: impact and management of nonindigenous species in Florida. Island Press. 467 pp.
- Weisskoff, R. 2005. The economics of Everglades restoration. Edward Elgar Publishing Limited. 345 pp.
- White, G. L. 2010. Conservation in Florida: its history and heroes. The Florida Historical Society Press. 287 pp.

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TENTATIVE Course Calendar (subject to change)

Week	Day/ Date	Topic	Important dates
1	Wed 8/28	Course Intro Proposal Intro – Hypotheses, experimental design Intro to Library Resources Scientific Journal Articles exercise	Avoiding plagiarism online assignment (Due Fri 8/30 by 5:00p)
2	Wed 9/4	NO CLASS DUE TO HURRICANE DORIAN	
3	Wed 9/11	Proposal Working Groups	Potential research topics (Due Wed 9/11 before class) Final research topic (Due by end of class)
4	Wed 9/18	Field day 1 – Pine flatwoods	Annotated bibliography (Due Wed 9/18 by 11:59p)
5	Wed 9/25	Proposal Working Groups Photo Slideshow Presentations 1	Photo slideshow 1 (Due Wed 9/25 before class)
6	Wed 10/2	Field day 2 – Hardwood hammock	Deadline for initial group meeting w/ Dr. K
7	Wed 10/9	Field day 3 – Scrub ecosystem ecology	
8	Wed 10/16	Proposal Working Groups Photo Slideshow Presentations 2 and 3	Photo slideshows 2 and 3 (Due 10/16 before class)
9	Wed 10/23	Field day 4 – Marsh	Preproposal (Due Tue 10/15 by 11:59p) Contribution Statements (Due Wed 10/16 by 11:59p)
10	Wed 10/30	Proposal Working Groups Photo Slideshow Presentations 4	Photo slideshow 4 (Due 10/30 before class)
11	Wed 11/6	Field day 5 – Swamp	
12	Wed 11/13	Field day 6 – River/ springs	Proposals (Due Wed 11/13 by 11:59p) Contribution Statements (Due Thur 11/14 by 11:59p)
13	Wed 11/20	Presentations	Presentations (Wed 11/20 during class) Contribution Statements (Due Thur 11/21 by 11:59p)
14	Wed 11/27	NO CLASS – THANKSGIVING BREAK	Proposal reviews (Due Tue 11/26 by 11:59p)
15	Wed 12/4	Photo Slideshow Presentations 5 and 6	Photo slideshows 5 and 6 (Due Wed 12/4 before class)
F	Wed 12/11	No Final Exam	

"I'm a great believer in luck, and I find the harder I work the more I have of it."
-Thomas Jefferson

Dr. Klowden reserves the right to modify the syllabus as needed. Students will be informed of changes.
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