

PCB 3044 L SYLLABUS – FALL 2015

Labs Meet: Room 305 in Biology or lot E4 (near Softball Stadium) – see schedule on pp. 2 & 3

Instructors: **Madison Hall** BIO 421, madison.hall@knights.ucf.edu
Office Hours: Tues/Weds: 9:30 – 11 am

Ryan Chabot

Office Hours:

Rhett Rautsaw

Office Hours:

Text: Lab Manual is **FREE!** It can be accessed through WebCourses. Alternatively, it can be located through myUCF: Login to the myUCF portal (<https://my.ucf.edu>) and click on the "Online Course Tools" tab to access the course.

Intended Audience: Biological Science majors, Science Education majors, Pre-professional students, and selected graduate students.

Course Description: This course is intended to provide hands-on experience in conducting research in ecology. You will gain ample field experience and participate in a field experiment focused on the effects of prescribed fire on pine flatwoods habitat in the UCF Arboretum. Critical components of an scientific lab report will be written based on this experiment, with the goals of improving science writing skills and understanding what goes into publishing in scientific journals.

Course Prerequisites: You should have minimally taken BSC 2010C & BSC 2011C

Performance Evaluation:

Scientific writing assignments	30%
Summary papers (2 @ 10% each)*	20%
Other assignments (5 @ 5% each)**	25%
Plant I.D. quiz	10%
Participation	<u>15%</u>
Total =	100%
Possible Bonus pts.***	10

Grade scale: A = 100-93.3, A- = 93.2-90, B+ = 89.9-86.7, B = 86.6-83.4, B- = 83.3-80, C+ = 79.9-76.7, C = 76.6-73.4, C- = 73.3-70, D+ = 69.9-66.7, D = 66.6-63.4, D- = 63.3-60, F < 59.9

*Paper summary 1 is chosen for you, paper summary 2 you will be able to choose from a series of articles.

**All due in class – no make-ups allowed

***Given out and added to grades at the discretion of your instructor

Participation: You are expected to be a fully-cooperating member of lab teams. You will work together to collect data that you will share with the class for everyone to use in their research reports. As such, the grades of other students depend on you, too. Additionally, class attendance and punctuality, your cooperation with group members to complete in-class assignments, and the lab instructor's independent observations of your participation will factor into this portion of your grade. We begin lab at the time that it is listed at myUCF. If you are more than 10 minutes late your participation points will be docked.

Attendance: Attendance is mandatory. Almost every lab is conducted with one or more group members, so if you miss the lab, it not only affects you, but your group members as well. One unexcused absence will result in a 5% reduction of your final grade, a second absence will result in a 10% reduction in your final grade, and so on, which will heavily impact your grade. Excused absences are allowed with an official note given to your TA.

Late Policy: All assignments are due on WebCourses before lab begins. If you do not upload your assignment on time, at least 10% will be deducted from your assignment grade for each day that it's late. If you are absent on a day that an assignment is due and you provide documentation there won't be a late penalty, but you must turn in your assignment ASAP. Summary Papers will not be accepted late.

Your Responsibilities:

- Read the lab manual before you come to class
- Assignments are to be submitted on WebCourses before the start of class on the day the assignment is due.
- Print needed instructions and data sheets for each week as needed.
- ASK QUESTIONS – in class, via email, in office hours, by appointment, on the WebCourses Discussion Board
- THINK! Ecology forces us to go beyond memorizing, especially when doing research. This class is intended to teach you how to be independent and solve problems on your own before asking your TA.
- Cooperate with your team and others – many hands make less work, and 15% of your grade depends on your cooperative behavior.
- Dress for the job. Bring water to the field. **Wearing closed-toe shoes is MANDATORY on field days.** Be prepared to get sweaty and dirty while doing field work. We recommend long pants, a long-sleeved shirt, a hat, insect spray, and sunblock. In addition to the usual biting/stinging insects, ticks are also known to be encountered, and there has been at least one recent sighting of a young rattlesnake, so be careful!
- Read and understand the UCF Rules for Student Conduct [<http://www.goldenrule.sdes.ucf.edu>] and UCF Academic Regulations and Procedures [http://www.ucf.edu/catalog/current/academic_regulations_and_procedures/index.html]: These rules apply to you and will be followed in the course.

Student Disabilities:

All reasonable accommodations will be made for disabilities documented through the Office of Student Disability Services (SRC 132; 407-823-2371).

Planned Lab Schedule (subject to change)

Emphasized dates in bold are field days - bring water and dress appropriately!

Meet at:	Week of:	Lab Topics	Due
305	Aug 24-/28	-Introduction to Lab -Goals and safety -Overview of WebCourses & Lab Manual -Hypothesis writing	
305	Aug 31- Sept 4	-Library tutorial -Overview of field experiment -Methods and Introduction section Power Point -Assignment 1: fire ecology literature review	In-Class Assignment 1
	<i>Sept 7-11</i>	<i>No classes – Labor Day on 9/7</i>	
E4	Sept 14-18	<u>Arboretum Trip (1)</u>	Writing assignment 1 (I/M rough)
305	Sept 21- 25	-Scientific paper overview – how to read, what to focus on - In-Class Assignment 2: Excel/statistics exercise	In-Class Assignment 2

E4	Sept 28- Oct 2	<u>Arboretum Trip (2)</u>	Paper summary 1
E4	Oct 5-9	<u>Arboretum Trip (3)</u> -Paper summary discussion -Practice plant I.D. Quiz (5 bonus points)	Writing Assignment 2 (I/M peer)
E4	Oct 12-16	<u>Arboretum Trip (4) & Data collection (1)</u> -Plant I.D. Quiz -Collect 1 data point	
E4	Oct 19- 23	<u>Arboretum Trip (5) & Data collection (2)</u> -Collect 3 data points	Paper summary 2
E4	Oct 26-30	<u>Arboretum Trip (6) & Data collection (3)</u> -Finish Lab Report data collection (4 data points)	Writing Assignment 3 (I/M final)
305	Nov 2-6	-Results/Discussion Power Point - In- Class Assignment 3- Competition exercise -Begin Lab Report calculations	In-Class Assignment 3
305	Nov 9- 13	- In-Class Assignment 4: complete Lab Report calculations -Begin Fire Lab Graphs	In-Class Assignment 4 Writing Assignment 4 (R/D rough)
305	Nov 16/20	-Assignment 5: complete Fire Lab Graphs -Discuss interpretations of data	In-Class Assignment 5 Writing Assignment 5 (R/D peer)
	<i>Nov 23- 27</i>	<i>No class- Thanksgiving</i>	
E4	Nov 30- Dec 4	<u>Extra credit hike</u>	
	<i>Dec 7/2</i>	<i>Classes end. Good luck with finals!!!</i>	Writing assignment 6- (R/D final)