

PCB 3043L – Ecology Lab

Fall 2018

FIU - Ecology Lab

Department of Biological Sciences
Florida International University - Miami , FL

Head TA:

Ivan Rodriguez-Pinto
ivarodr@fiu.edu

Ecology Professors:

Dr. John Geiger
geigerj@fiu.edu

Dr. John Cozza
jcozza@fiu.edu

Lab Location: OE 321

Syllabus

This lab is conducted in four-hour meetings. Be prepared to stay for the entirety of each meeting.

Objectives:

This course will emphasize the integration and practical application of ideas and concepts from the

Ecology lecture course. Emphasis will be placed on your ability to synthesize, articulate, and communicate concepts covered in the lab and lecture, in both written and oral form.

Course Description:

- Most labs will involve outdoor work. Be prepared to get hot and sweaty, wet and muddy, rained on, and even bitten by bugs every week. Some weeks you may want to bring a change of clothes and shower at the gym after lab.
- Students must be prepared to perform laboratory tasks at each meeting. Your attendance and participation in all lab exercises will determine a substantial percentage of your lab grade.
- **DO NOT BE LATE!** After the initial quiz, many of the labs will involve fieldwork away from the classroom making it difficult or impossible for you to catch up (or even find your lab section) once lab has begun.

Texts:

Required

- - The lab manual (our website) consists of exercises and worksheets that will be available for download on the schedule page of this website. Print them out each week and bring them to class. The manual is subject to change. Changes will be noted on the schedule.

Optional

- - Any ecology textbook (such as those required for the lecture class) may be helpful for understanding background information.
 - Three-ring binder to keep lab manual exercises.
 - Field notebook. A bound composition notebook is most appropriate.

Policies:

· **ATTENDANCE IS MANDATORY!** If you do not attend class, you will not be allowed to turn in the associated worksheet for that week, resulting in a grade of zero. There are NO makeup labs! Email your lab TA before missing the lab with your reason for missing and necessary documentation. Excused absences are at the discretion of your TA. Each false document or excuse will result in a 10% reduction in your final grade in addition to the zero you receive on the worksheet.

· Appropriate behavior and respect for other students and the TA is expected at all times by both students and the TA.

· **NO CELL PHONES** are to be used in class, neither in the classroom nor in the field. Any student found using their phone to make/receive calls or send/receive messages will automatically be subjected to a 10% deduction from the grade on the tasks for that day. No exceptions.

· Most of the lab exercises will involve getting dirty and/or wet, so you are advised to dress accordingly.

We suggest old jeans, a T-shirt and old sneakers. (If you wear “fancy clothing”, you will not be excused from field work!)

· All students must check their e-mail accounts on a daily basis for messages about the course. Changes to class schedule, assignments and due dates may be announced by e-mail only. Any e-mail address changes are the student’s responsibility to report to the TA. Include PCB3043L and your name in the subject line of all e-mail.

Reading Assignments:

You are required to read and prepare for each lab assignment prior to attending lab. Preparation for each week’s lab is essential to understanding the material that will be covered in the lab.

Quizzes:

A quiz will be given during the first 10 minutes of each class. Quizzes are based on the reading assignments for that week and the previous week's exercise. If you are late you will not be allowed to take the quiz. The lowest quiz grade will be dropped.

Lab Worksheets:

Worksheet answers must be double spaced, 12 point font, in the outline format indicated by the worksheet. Worksheets must be handed in ON TIME at the beginning of class on the day they are due. 10% will be deducted from the worksheet grade if handed in later than the beginning of lab up until midnight the day the assignment is due. Worksheets will not be accepted after the day they are due. Your TA will describe the details of the worksheets. The lowest worksheet grade will be dropped. You will collect data for most worksheets as a group. However, all other worksheet work will be done by you individually, NOT AS A GROUP. Students found to be working with other students will be penalized for plagiarism.

Lab Presentation:

You will have to give a powerpoint presentation to the class on an assigned topic of ecology. Instructions for the format of the lab report will be given by your instructor in addition to a grading guideline.

Plagiarism:

Plagiarism is a serious offense, and one that will not be taken lightly. Plagiarism can be intentional (copying another student’s work, collaborating too closely with another student) or unintentional (not citing all references, collaborating too closely with another student). The best ways to avoid unintentional plagiarism are to reference all outside information, and to do all work on your own. If you have any questions about what is plagiarism, please consult your TA. TAs are allowed to ask you to upload your homework on any detection software (such as turnitin.com) to determine if plagiarism has taken place. Suspected acts of plagiarism may be investigated and taken to the FIU Grievance Committee. Plagiarism will result in you receiving a 0 grade for your assignment (no exceptions) and may also result in your suspension or expulsion from the University.

Participation:

This lab requires working in groups. Each group member must participate during lab in order to make it a rewarding experience for all involved. You may also be asked to assist other groups when you have finished your assignment. Equal participation of all members in each group during lab is expected.

Attending Labs:

You are required to attend your enrolled lab section, and that section only. Students are not permitted to attend other TA sections unless cleared beforehand with their assigned TA, the TA of the substitute class, and the Head TA.

Final Exam:

You will be given a final exam at the end of the course. This exam will be based on material covered during the entire lab course. The format of the exam and suggestions for preparation will be discussed with you prior to the exam.

Expectations and Suggestions for Success:

Student's grades are generally reflective of the effort made to prepare for weekly labs. Prepared students have read and reflected upon the main points made in the assigned readings for each lab. Students who begin to work on their lab reports and worksheets the day that they are assigned have a greater opportunity to ask questions of the TA, are able to turn in their assignments on time, and generally get better grades. Often students that have initial difficulty with the course can still be successful. Interacting with your TA early in the semester outside of class is the best way to accomplish this, visit your TA during office hours!

Grading Breakdown:

Please see the Grading tab to view the points breakdown. Assigned grades for the course are up to the discretion of each TA, and may not reflect the table shown.

Syllabus subject to change

Lab TAs

MMC - Fall 2018

Head TA: Ivan Rodriguez-Pinto

Office: AHC-1 317A

Office hours: By appt. only, contact below.

Contact address: ivarodr@fiu.edu

U01 - Monday - 8:00am-11:50pm

TA: Matthew Smith

Office:

Office hours:

Contact address:

U02 - Monday - 12:00pm-3:50pm

TA: Virginia Fourqurean

Office:

Office hours:

Contact address:

U03 - Tuesday - 8:00am-11:50pm

TA: Tanja Zerulla

Office:

Office hours:

Contact address:

U04 - Tuesday - 12:00pm-3:50pm

TA: Jessica Carde

Office:

Office hours:

Contact address: mvanz003@fiu.edu

U05 - Wednesday 8:00am-11:50pm

TA: Kenny Anderson

Office: ECS 153

Office hours: Monday 1-3pm

Contact address: kanderson624@gmail.com

U06 - Wednesday - 12:00pm-3:50pm

TA: Benjamin Sager

Office:

Office hours:

Contact address:

Grading

FIU Ecology Lab

Photo by Jessica Medina

Assignments: 6 lab worksheets (detailed below), 1 presentation, Everglades field trip = 30%.

1. Scientific Writing
2. Introduction to Ecological Statistics
3. Ecological sampling techniques
4. Ecological competition
5. Predator-prey interactions
6. Ecosystem Metabolism
7. Everglades Field Trip
8. Presentation

Lab Write-ups (detailed below) = 20%.

1. Life Tables.

Quizzes: 7 Quizzes, including Fairchild trip = 20%.

Final practical = 25%.

Participation = 5%.

Total = 100%.

The lowest Worksheet (Lab Report) and Quiz will be dropped from your final grade..

A = 90-100%

B+ = 87-89%

B = 80-86%

C+ = 77-79%

C = 70-76%

D = 60-69%

F = <60%

Schedule

Photo by Andres Perez

We will always start lab in OE 321, except for the Fairchild trip.
All homework is due at the start of the lab period one week after the work was assigned.
Print and bring Lab Exercise & Homework from links below for each lab session.
Changes to exercises & homework may be made in class by your TA.

FALL 2018:

Week 1 - August 20, 21, 22

- **Introduction to Ecology & Scientific Writing**

Class information and assignment [here..](#)

Article for assignment [here..](#)

Grading Rubric (for your reference) [here..](#)

Scientific writing tips (useful **throughout** the semester) [here..](#)

Week 2 - August 27, 28, 29

- **Quiz 1**
- **Ecological Statistics**

Class information [here..](#)

Stats presentation for PC [here..](#)

Stats presentation for Mac [here..](#)

Class data (for making figures) found [here..](#)

Worksheet 2 [here..](#)

Data for worksheet questions [here..](#)

September 3, 4, 5 - Labor Day Holiday- NO CLASS

Week 3 - September 10, 11, 12

- **Quiz 2**
- **Sampling Techniques**

Class information [here..](#)

Worksheet 3 [here..](#)

Week 4 - September 17, 18, 19

- **Quiz 3**
- **Life Tables (write up)**

[Class information here..](#)

[Write-up information here..](#)

[Data from a previous semester here..](#)

[Write-up grading rubric here..](#)

[Fish ID Guide](#)

Week 5 - September 24, 25, 26

- **Quiz 4**
- **Field Trip: Fairchild Tropical Botanic Gardens**

[Fairchild website: Fairchild Tropical Botanical Gardens](#)

[Map of Fairchild: Garden map](#)

[Directions to Fairchild: Directions](#)

[Butterfly ID Guide](#)

Week 6 - October 1, 2, 3

- **Quiz 5**
- **Competition**

[Class information here..](#)

[Competition assignment here..](#)

[Class data sheet found here..](#)

Week 7 - October 8, 9, 10

- **Quiz 6**
- **Predation**
[Class information here..](#)
[Predation assignment here..](#)

Week 8 - October 15, 16, 17

- **Everglades Field Trip**
*All students must sign up for a bus seat or a driving pass at [] by *
- **Saturday**
- **TA's attending:**

Week 9 - October 22, 23, 24

- **No class meeting**
- *Individual meetings with TA about proposal presentation*

Week 10 - October 29, 30, 31

- **Quiz 7**
- **Diversity**
Class information [here](#).
- *Diversity assignment [here](#).*

Week 11 - November 5, 6, 7

- **Quiz 8**
- **Ecosystem Metabolism**

Class information [here](#).
Eco Metab assignment [here](#).

November 12, 13, 14 - Veteran's Day Holiday- NO CLASS

November 19, 20, 21 - Thanksgiving Holiday- NO CLASS

Week 12 -

- **Group Presentations (First Week)**
Presentation grading rubric [here](#).
Example presentation: [download here!](#)
Presentation Guidelines

Week 13 - November 26, 27, 28

- **Group Presentations (Second Week)**
Presentation grading rubric [here](#).
Example presentation: [download here!](#)
Presentation Guidelines

Week 14 - December 3, 4, 5

- **Final Lab Exam**

Field trips

FIU Ecology Lab

Banner photo by Jenn Sweatman

We have 2 field trips during this lab. All are mandatory.

Fairchild Tropical Botanical Gardens

(website here: www.fairchildgarden.org)

This will take place during your usual lab hours and will only last the duration of a regular lab.

Transport is not provided, so you will need to make your own way there. Usually students choose to car pool; I recommend this.

Everglades field trip

(website here: Everglades National Park)

This is a one-day weekend trip where you will need to select either the Saturday or Sunday trip. Transport will be provided from campus and it will be an all day trip (7am-5pm) where we will stop periodically in Everglades National Park from the Ernest Coe Visitor Center all the way down to Flamingo.