

Marine Biology Lab, OCB 3043L, Fall Semester 2018

Course & Instructor Details

Principal Instructor: Dr. Alastair Harborne

Lab Instructor: Melanie Esch

Email: mesch003@fiu.edu

Office hours: By appointment

Location: Biscayne Bay Campus, Lab Classroom: MSB 220B

Hours: T 2:00 PM to 4:50 PM & Th 3:00 PM to 5:50 PM

Prerequisites: BSC 1010 + 1011

Objective: An ecological approach to the biology of organisms in the marine environment. The lab is intended emphasize the integration and practical application of ideas and concepts from the lecture course.

Lab Description:

- Some labs will involve outdoor work, including snorkeling and wading. You should come to lab prepared for field activities including wearing appropriate attire.
- One lab (fish dissections) requires a lab coat, long pants, close-toed shoes, and goggles to be worn. If you do not have goggles, try and borrow from a friend.
- Close-toed shoes and a lab coat are required for every lab meeting.
- Some labs involve work in Microsoft excel. Everyone should bring their laptop on these days if possible.

Required Text: There is not required textbook. Reading will be made available online following the first class.

Personal Required Supplies: Some labs involve getting into the water to snorkel. A mask, snorkel, and fins are required to fully participate.

Lab Grading Scheme: Grades will be based on the following:

1. Quizzes 20%
2. Participation (field trips) 15%
3. Homework 15%
4. Midterm 25%
5. Final Exam 25%

Grading system

A: 93-100%, A-: 90-92% B+: 87-89% B: 83-86% B-: 80-82%
C+: 75-79% C: 70-74% D+: 67-69% D: 64-66% D-: 60-63%
F: <60%

Course Content:

Quizzes (20%)

Students will be quizzed on scientific literature assigned to each lab, the hand out materials, and will also contain at least one question for species identification. The quiz can include any testing methods (assays, multiple-choice, true or false, etc.). The quiz will evaluate your overall understanding of the topic studied. A good example of how to prepare for the quiz is answering questions like these: What background info should I know to understand what they are talking about? What do we not know yet? Why should we care? How did they try to answer the question? Did they succeed? What did they conclude? There will be no make-up quizzes. However, your lowest quiz grade will be dropped at the end of the semester.

Participation (15%)

The class will be broken up into lab groups of 4 students. If a student cannot participate because they are not prepared with the appropriate attire and materials for each lab, they will not be excused and this will reflect in their participation grade. The participation grade will be based on attendance and **individual/team effort** in lab groups. Examples of things not to do: playing on your phone in class, complaining about having to do work, showing up unprepared to participate/get in the water, arriving late, letting your group do your work for you, etc.

Homework (15%)

Aside from lab activities, you will have 2 homework assignments covering material from each lab that you must complete with your individually. These homework assignments will require you to familiarize yourself with **Microsoft Office Excel** to analyze data collected during lab.

Midterm and Final Exam (25% each)

Two exams will be administered to evaluate your understanding of the material learned throughout the semester. They are not cumulative. Midterm I will cover the first portion of the lab while Midterm II will take into account the second (material covered after the first midterm).

Course Website: Google Drive for OCB 3043L

Course materials (lab sheets) and scientific readings will be available on the website. You will be expected to print out the appropriate lab sheet and bring it to class. Failure to do so will reflect on your participation grade.

The course is taught in a lab so you must be wearing close-toed shoes and a lab coat. You must have protective glasses or goggles with you in each class though you will only be required to wear them when instructed by the TA.

General Course Policies:

1. Attendance: Students are expected to come to every class, arrive on time and arrive having learned the material for the week. This class follows standard FIU policy regarding student absence for sickness, religious observations, etc.
2. Excused Absences: Sometimes things happen that are beyond our control. Certain cases are considered reasonable excuses to miss class. These are death in the **immediate** family, personal injury, or severe illness. Some common occurrences that are **not excusable** include common colds and traffic jams. Excused absences will be granted the discretion of the TA. If you find yourself in a situation where you cannot attend class for an excused reason, e-mail your TA in advance so that we can arrange for you to attend a different lab section. **DO NOT TRY TO ATTEND A DIFFERENT LAB SECTION WITHOUT APPROVAL FROM THE TA!**
3. Plagiarism/Academic Honesty: Students are always expected to abide by the university's policies, particularly those governing academic honesty and plagiarism as they appear in the FIU Student Handbook. Students not familiar with how to avoid plagiarism will find links to the FIU library tutorials and information in week one of the online materials. Additionally, if a student work cites data, research or information that he or she has not generated and which is not general knowledge it must be cited appropriately following one of the disciplinary conventions of the academic disciplines represented by the faculty teaching this course. Students must become completely familiar with bibliographic styles and citation conventions. If others' work is not cited adequately by a student he or she can be accused of plagiarism, accusations FIU takes very seriously. The instructor reserves the right to use turnitin.com to check work and to alter the syllabus if needed to deter plagiarism. You will be notified of any changes.
4. Special Needs Students: Any student registered with the DRC should notify the instructor prior to or immediately upon commencement of this course about accommodation needs in accordance with FIU policy.
5. Incomplete Grades: An incomplete grade is a temporary symbol given at the discretion of the instructor for work not completed because of serious interruption not caused by the student's own negligence. An incomplete grade must be made up as quickly as possible, but no later than two consecutive semesters or it will automatically default to the grade the student earned in the course. There is no extension to the two-consecutive semester deadline. The student must not register again for the course to make up the incomplete. In order to receive an incomplete for this class, valid documentation must be provided for the reason the student is requesting the incomplete. The reason, again, must be out of the student's control.
6. Syllabus Changes: **Please note that the instructor reserves the right to alter the syllabus due to need and emergent circumstances. Students will be advised of any change made to the syllabus.**

Weekly Schedule:

<u>Date</u>	<u>Topic</u>	<u>Readings</u>
August 21/23	Introduction, Scientific Method & Scientific Literature	
August 28/30	Seawater Chemistry	Brierley & Kingsford 2009
September 4/6	Erosion & Waves	Harley et al. 2017
*September 15	Field Trip: Snorkeling at Aerojacks	
September 18/20	Plankton	Chust et al. 2014
September 25/27	Field Trip: Marine Producers I (snorkeling)	Duarte & Cebrian 1996
October 2/4	Marine Producers II	Mumby et al. 2004
October 9/11	Midterm	
October 16/18	Sample & Data Processing	
October 23/25	Seining & Food Webs	Mourier et al. 2016
October 30/ November 1	Fish Dissections	Lonstedt et al. 2013 HW 1 DUE
November 6/8	Field Trip: Kayak in the Bay	
November 13/15	Rocky Intertidal Diversity	Paine 1974
November 20/22	Thanksgiving Break, NO LAB!!	
November 27/29	Final Exam	HW 2 Due