
**BIO 362: Marine Biology
Fall 2017: LAB SYLLABUS**

Course Information

Course: BIO 362: Marine Biology

Lab: Monday, Tuesday, Wednesday, or Thursday, 1:00 – 4:50

Place: Friday Hall 1010

Lab Instructors

M: Name: Melissa Lacroce
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W: Name: Emily Peele
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Lecture Instructor

Asst/Prof. Kara E Yopak

Office: CMS 2332

Email: yopak@uncw.edu

Course Website

We will primarily use Blackboard and/or email to share class documents for labs. Primary lab documents will be shared by your lecture instructor, although information specific to your lab section will be shared by your TA.

Texts

Pechenik, J.A. 2007. *A Short Guide to Writing About Biology*. Pearson-Longman Publishing. ISBN: 0-321-38592-6 (**required**)

And one of the following:

Gosner, K.L. 1999. *A Field Guide to the Atlantic Seashore*. Peterson Field Guide Series. Houghton Mifflin Harcourt. ISBN-10: 0-618-00209-X

Kaplan, E.H. 1999. *A Field Guide to the Southeastern and Caribbean Seashores*. Peterson Field Guide Series. Houghton Mifflin Harcourt. ISBN-10: 0-618-00211-1

Ruppert, E.E. and R.S. Fox. 1988. *Seashore Animals of the Southeast*. University of South Carolina Press. ISBN-10: 0-872-49535-3

Note that these texts (and other field guides) are available in lab for your use

Course Overview

This course is intended for Biology and Marine Biology majors and is designed to build student knowledge of marine organisms and environments in conjunction with lecture material. Laboratory activities are closely linked with class lectures and are designed to give students experiential knowledge and acquaint them with the regional marine fauna and flora.

This syllabus describes the lab component of the course only. See lecture syllabus for additional information on the lecture component of the course.

Learning Outcomes & Course Goals

This course qualifies as a Writing Intensive (WI) course in the UNCW University Studies curriculum. Student Learning Outcomes (SLOs) for the WI requirement are:

- WI 1. Demonstrate an ability to produce written texts that reflect a knowledge and understanding of disciplinary conventions in terms of audience expectations, genre conventions, and/or citation practices. [Inquiry; Information Literacy; Critical Thinking; Thoughtful Expression]
- WI 2. Demonstrate the ability to employ an iterative writing process that includes invention, drafting, and revision in response to instructor feedback to complete a major writing project or series of written assignments. [Critical Thinking; Thoughtful Expression]

During this course, you will have the opportunity to achieve the following learning goals. This is not an exhaustive list but outlines the key topics that will be covered. Notation in brackets indicate alignment with WI SLOs.

- 1) Identify the key organisms within a variety of marine communities.
- 2) Compare the characteristics (biological, physical, chemical, geological) of various marine habitats.
- 3) Explain the ecological role of important organisms or groups of organisms within a marine community.
- 4) Evaluate, discuss, and critique papers from the scientific literature. [WI-1]
- 5) Learn and demonstrate the ability to write a scientific paper based on data collected in class, including appropriate citation of background literature, hypothesis development, appropriate data analysis and presentation, and discussion of findings in the context of the scientific literature. This writing process for this paper will be iterative, with opportunities for both peer and instructor feedback. [WI-1,WI-2]

Lab Structure

This schedule is tentative and subject to change, depending on University closures, weather, and the discretion of the instructor. You will be informed of any changes in lab meetings via Blackboard.

Lab #	Week of	Comments	Topic
01	August 21		Introduction, Properties of Seawater
02	August 28		Writing & Stats Workshop
	Sept 4	Labor Day	NO LAB
03	Sept 11	Critique Due	Field Trip 1 – Fouling Communities
04	Sept 18		Field Trip 2 – Salt Marsh Communities
05	Sept 25	Draft 1 of paper due (Intro & Methods)	Peer Critiques / Meiofauna
	Oct 2	Fall Break	NO LAB
06	Oct 9		Field Trip 3 - Cruise
07	Oct 16	Draft 2 of paper due (entire draft)	Plankton
08	Oct 23		Nekton
09	Oct 30		Tropical Communities
10	Nov 6		Field Trip 4 – Fort Fisher Aquarium
	Nov 13		Lab Exam
	Nov 20	Thanksgiving Break	NO LAB
	Nov 27	Final Paper due	NO LAB

Field Trip Requirements and Recommendations:

We will be taking 4 field trips. Be prepared for appropriate weather conditions. Marine environments tend to be colder, sunnier, and windier than terrestrial habitats. Dress warmly in layers, with lots of sunscreen and a hat. Closed toed shoes are **required** (no sandals, crocs, or flip-flops). Boots or thick-soled dive booties are highly recommended, but tennis shoes are adequate. Prepare to get wet and muddy, and dress accordingly.

State law requires that you wear a seatbelt while traveling in a state vehicle. Therefore, you will wear a seat belt while traveling in a van or another state vehicle.

Assessments

The lab grade comprises 35% of the total course grade (See the Lecture Syllabus for details on the final course grade). Your lab grade is assessed as follows:

Assignment	Percentage of Lab Grade
Lab Report (Draft 1)	5%
Lab Report (Draft 2)	10%
Lab Report (Final Draft)	25%
Lab Exam (1)	35%
Pre-lab & Post-lab assignments (10 labs)	20%
Literature Critique (1)	5%
TOTAL	100%

1. Pre-lab Assignments: Each lab will have a pre-lab assignment associated with it. These are short assignments (a few questions) that require a bit of background reading to ensure you are prepared for the material covered in the lab. You will be required to complete pre-labs **prior** to coming to each lab and will hand these in to your TA **before every** class. If you don't complete the pre-lab assignment, then you will **NOT** be allowed to participate that week's lab/field trip and you will receive a zero grade for that particular lab. The pre-lab is your ticket into the lab.

2. Post-Lab Assignments: You will be required to complete written assignments for most lab exercises; often in the form of handouts/worksheets. These assignments will be due at the beginning of the lab meeting (i.e., 1 pm) the **following week**.

3. Lab Report: You will prepare a formal lab report following the scientific format of *Marine Ecology Progress Series* (according to the rubric provided on BlackBoard) based on data obtained from one of your labs (Lab 3: Fouling Communities). You will turn in 2 drafts of this report and receive feedback on each draft (from your peers on draft 1 and from your TA on draft 2), so crafting the report will be a semester-long project with multiple revisions and improvements. Each draft of the lab report is required and constitutes an increasing proportion of your lab grade (first draft: 5%, second draft: 10%, final report: 25%).

4. Literature Critique: You will read a paper from the primary literature and write a 1-1.5 page critique. The paper will be assigned by the instructor and will be related to material relevant to the group experiment as background but also will provide experiences that can be applied in preparing the Lab Report (see section 3). You should rely heavily on the information in Pechenik (2007) regarding how to read and critique a scientific paper as well as the grading rubric provided on BlackBoard. The page limit will be strictly enforced. A good critique will include a statement of critical findings and an evaluation of approach and techniques. The critique will be completed as a homework assignment and is worth 5% of your total lab grade.

5. Lab Exam: One final exam will be used to probe your knowledge of the material studied during labs. Questions will cover all aspects of material studied in each lab, including the scientific method, interpretation of experimental data generated by the class, identification of living or preserved organisms, their distinguishing characteristics, as well as information about habitat, adaptations, or physical and biological

features of the environments studied. The exam will be out of 100 points. Do not assume exam questions will be the same as those on any practice quizzes or lecture exams.

Course Policies

Lab Environment

Please treat yourselves, your peers, and instructors with due respect. Feel free to ask questions or state your views in a respectful manner. Remember, your conduct includes what you do, what you say, how you act, and what you wear (i.e. leave bathing suits and pajamas at home).

The values endorsed in the [Seahawk Respect Compact](#) will be upheld in the classroom, and any students deviating from this code will be required to leave.

Attendance

YOU MUST ATTEND LAB ON THE DAY FOR WHICH YOU ARE REGISTERED. You are required to attend all class meetings. You are expected to arrive on time for, and participate in, all class meetings. *There are no make-up lab exams or make up labs.*

Late Assignments

All lab assignments are due by **1pm** on the day of your lab section. Weekly lab assignments are due the following lab meeting; due dates for other assignments are outlined above in the Lab Structure section. *Late assignments will not be accepted - No exceptions outside of a medical or family emergency, which must have documentation.*

Cell Phones and Other Electronic Devices

All personal electronics should be turned off and stowed prior to entering class **and on field trips** unless being used for work purposes. Palmtop or laptop computers are permitted when used for note taking or other class business. **Computer privileges will be rescinded if you are found web-surfing during class.**

Disabilities

If you are a person with a disability and anticipate needing accommodations of any type for this course, you must first notify Disability Services (DePaolo Hall, <http://uncw.edu/disability/about/index.html>), provide the necessary documentation of the disability, and arrange for the appropriate authorized accommodations. Once these accommodations are approved, please identify yourself to your Instructor and TA so that we can implement these accommodations.

Academic Dishonesty

Academic dishonesty will not be tolerated. As a student at UNCW you are bound by the [Student Academic Honor Code](#). Violations of the Student Code of Conduct are subject to university discipline. Action can include assignment of a grade of "0" on the appropriate assignment, assignment of an "F" grade in the course, or referral to the College of Arts and Sciences for more severe action. This includes use of any electronic device during an exam. The Department of Biology and Marine Biology strongly supports the honor code and any actions that run counter to this code will not be tolerated in this course.

Violence and Harassment:

UNCW practices a zero-tolerance policy for violence and harassment of any kind. For emergencies contact UNCW CARE at 962-2273, Campus Police at 962-3184, or Wilmington Police at 911. For University or community resources visit <http://uncw.edu/wrc/crisis.htm>.

Resources

Students are encouraged to learn about and use the services of the University Learning Center. Tutoring at ULC is NOT remediation: the ULC offers a different type of learning opportunity for those students who want to increase the quality of their education. ULC services are free to all UNCW students. For more information visit www.uncw.edu/stuaff/ulc