ZOO4926 – Marine Ecology

Syllabus-Spring 2019

I. Class Meetings

Tuesday	Period 2-3	8:30 AM – 10:25 AM	ROG 0110
Thursday	Period 3	9:35 AM – 10:25 AM	ROG 0110

II. Contact Information

Instructor:
Margo Stoddard, PhD
Office: 310A Bartram Hall
Office hrs: T 10:45 am -12:45 pm, Th 10:45 -11:45 am
E-mail: mstodd@ufl.edu

TA:
Philip Shirk
Office: 616 Bartram Hall
Office hrs: by appointment
E-mail : plshirk@ufl.edu

III. Course Description and Learning Objectives

Marine Ecology is the study of marine organisms and how they interact with their environment. In the first part of the semester, we will review physical characteristics of the marine systems (e.g., rocky intertidal, estuaries, open ocean), the function of groups of organisms within these systems, and how ecological principles apply to marine ecosystems. The second half of the semester will focus primarily on how global change has influenced marine systems, and how restoration and conservation might mitigate some of these changes. Throughout the semester, we will discuss primary literature (from journals) to understand how researchers address questions related to concepts and processes discussed in class. The course combines lectures, readings, in-class discussion, and writing exercises with an emphasis on critical thinking and problem solving. By the end of the course, students will be able to:

- Understand conceptual foundations of ecology, and how they apply to marine systems
- Summarize and critically assess the main objectives, methods, results, and conclusions of peer-reviewed papers.
- Develop and clearly communicate hypotheses about marine processes or interactions based on observations in the field or covered in lectures; summarize and interpret data; concisely communicate findings in writing.
- Demonstrate how ecological principles are applied to solving Marine Conservation issues.

IV. Expectations

Each student is solely responsible for reading and following the instructions, guidelines and schedules in this syllabus and on the course webpage or announced in class. Not having read the information in this syllabus or in instructor announcements will not constitute an excuse for missing an assignment, exam, or other assessment. Please set your preferences in Canvas so that you receive timely notifications of course announcements and other information. **Check Announcements in Canvas regularly as e-mail notifications from Canvas do not always go through.**

V. Communication with Instructor

Please send all course-related e-mail correspondence through Canvas, unless asked to do otherwise by the instructor.

When you have a question, check the course syllabus and e-Learning announcements to see if it has already been answered **before** e-mailing your Instructor. Barring unusual circumstances, expect a reply with 24 hours (Monday - Friday). Emails and e-Learning Discussion posts are checked at least once per day, but sometimes not more than that.

VI. Course Resources

A. Textbook and other assignment readings

(RECOMMENDED) Marine Biology: Function, Biodiversity, Ecology by Jeffrey S. Levinton, 2017, Oxford University Press (publisher). 5th edition.

The textbook will be **ON RESERVE** in Marston Science Library. See the Course Reserves link in Canvas for information. The etext can be purchased through an option of your choosing. Earlier versions of the textbook can be used. The textbook readings are recommended to reinforce retention of concepts and applications covered in lecture.

Links to Required journal articles or other readings will provided in the schedule on the front page of the course Canvas site.

B. Course Website (e-Learning Canvas)

Class material including the syllabus, lecture slides, and other information related to the course will be posted on the course e-learning website (https://elearning.ufl.edu/ . **You are responsible for all announcements made in lecture and/or posted on the course website for this class**. NOTE: the class syllabus and schedule will be edited as necessary throughout the semester—both the .pdf version and the schedule on the front page of the Canvas site. Make sure you reference the most recent version. The update date will be noted in the upper right corner of the posted syllabus. For help with e-learning/Canvas, call the UF Computing Helpdesk at 352-392-4357 or click on one of the help tabs along the top of the e-learning website.

VII. Assessments and Grading

A. Exams

There will be two exams during the semester, one at mid-term and one at the end of the semester. Exams will be administered during the normal class meeting times. Each exam will cover material from lecture, homework, in-class activities, comprehension quizzes (if any), and the assigned reading. Exams are expected to be a mixture of multiple-choice, fill-in-the blank, short answer, and essays. **Each student must take the exam when it is scheduled. Each student must bring her/his Gator ID to class on exam days.** All exams and answer sheets will be collected at the end of the exam period.

Exams will be available for review by appointment for one week after the exam date. Exams will **not** be available for review after the semester has ended.

Make-up Exams: No make-up exams will be given without prior permission or documentation of illness. Students who must miss an exam due to a pre-arranged university-approved excused absence (e.g., sports, etc.) must let the instructor know **a minimum of 2 weeks in advance**. These students may be required to take the make-up exam *before* the scheduled in-class exam.

In case of illness on exam day, a letter from the student's primary care provider (e.g., UF Student Health Care Center) is required. Online doctor excuses are not acceptable. This letter must state that the student was unable to complete the exam on the scheduled date (i.e., a letter stating only that the student was seen in a clinic is not sufficient). A personal matter requires a note from the Dean of Students (202 Peabody Hall). These notes must be received within five business days after the exam.

B. Class Participation & Homework

In-class activities include (but are not limited to) discussions, case studies, data analysis, and participation in

group activities. These activities with a point value will typically be announced on the course website, but there may be unannounced activities. **In-class activities require class attendance and cannot be made-up if you miss class.**

C. In-class assessments:
Short, unannounced written assessments of learning will be given throughout the semester.

D. Field trips
One or more mandatory field trips will be scheduled for this course. Dates and times will be announced early in the semester.

E. Extra Credit
Extra credit may be offered at the discretion of the instructor. Any extra credit available will be offered to ALL students in the course.

F. Grading (Note: this may be adjusted, depending whether in-class quiz grades are included)

Assessment	Points	% of Total Points
Exams (2 @ 100 points each)	200	44.4
Participation: attendance & discussion (~10 @ 10 points each)	100	22.2
In-class assessments (10 @ 5 points each)	50	11.1
Field trip exercises and homework (5 @ 10 points each)	100	22.2
TOTAL	450	100

All grades will be posted on Canvas, and it is the responsibility of the student to check their grades to make sure they match the grade issued for that assignment. If there is a discrepancy you must let us know within ONE week of the grade being posted on Canvas.

Grade categories are listed below. **Final scores will NOT be rounded (i.e., 89.99% is not 90%).**

Point Range (%)	Letter Grade
≥ 93.00	A
≥ 90.00	A–
≥ 87.00	B+
≥ 83.00	B
≥ 80.00	B–
≥ 77.00	C+
≥ 73.00	C
≥ 70.00	C–
≥ 67.00	D+
≥ 60.00	D
≥ 57.00	D–
< 57.00	E

The current UF policy for assigning grade points is available at the following undergraduate catalog web page: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx.

G. Special Treatment
Please do not request individual special treatment regarding grading at the end of the semester; **we do not adjust grades for individuals for any reason**. Plan to do well on all exams and other assessments from the beginning of the semester; if you are having difficulty in the class, please let your instructors know *before* the exams rather than after, and as early as possible in the semester.

VIII. Academic Honesty

All students registered at the University of Florida have agreed to comply with the following statement:

> *"I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."*

In addition, on all work submitted for credit the following pledge is either required or implied:

> *"On my honor I have neither given nor received unauthorized aid in doing this assignment."*

If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines at: https://catalog.ufl.edu/ugrad/current/advising/info/student-responsibilities.aspx and

https://sccr.dso.ufl.edu/students/student-conduct-code/

IX. Attendance

Attendance is mandatory. If you are absent from class when a quiz or other activity requiring your participation occurs, you will receive a zero quiz and/or participation grade unless the absence is *excused*. An absence is considered *excused* if there is an *acceptable reason* according to UF policy (https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx). Examples of acceptable reasons are medical illness, religious holidays, military obligation, and the twelve-day rule. For religious holidays, students are required to notify the instructor **prior** to the absence, but documentation of the religious holiday is not required. In all other cases, the following policies apply: It is your responsibility to notify the instructor of an excused absence and to provide documentation of an acceptable reason. Otherwise, the absence will be considered *unexcused*. Whenever possible, notify the instructor by email prior to the absence. When this is not possible (e.g., due to unexpected emergency or illness), the instructor should be notified as soon as possible.

X. Time Commitment

The UF College of Liberal Arts and Sciences expects that each student will devote 3-4 hours per week per credit-hour to each course, including time in lectures and labs. Because ZOO4962: Marine Ecology is 3 credits, each student should therefore expect to devote 9-12 hours per week to this course. A recommended time allocation is below.

Activity	Hours per Week
Lectures	3
Homework	2-3
Textbook Readings	2-3
Review and Study	2-3

If you find yourself spending more than 12 hours per week on average on these activities, discuss this with your course instructor to see if you can refine your study habits. If you find yourself spending less than 9 hours per week on average, you may have difficulty learning and comprehending the material, and this might be reflected in poor performance on assessments (i.e., low grades).

XI. Conduct in Class

Use of electronic devices in class to take notes or otherwise participate in classroom activities is approved. Approved electronic devices are laptop computers, cell phones, smart phones, tablets, and voice recording devices. Other uses of these devices or the use of unapproved devices will be considered disruptive. If a student's conduct disrupts the teaching and learning atmosphere, that student will be asked to leave the class and may not be able to participate further.

XII. Accommodations for Students with Disabilities

Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at: http://www.dso.ufl.edu/drc/. Note that the student should provide documentation of a requirement for accommodation **by the second week of classes**. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

XIII. Counseling Center

Many students experience test anxiety and other stress related problems. Please take advantage of the many resources and systems of support available through the UF Counseling and Wellness Center (3190 Radio Road, 352-392-1575, https://counseling.ufl.edu/).

XIIII. Class schedule

Lecture topics for this course are listed below. This is a tentative schedule; the dates and coverage of specific topics are subject to change. Homework assignments are submitted through Canvas. Homework assignments (not shown in schedule below) will be scheduled and announced as they become available. Specific sections of text book readings will be specified each week. The schedule on the Canvas course page will be updated as necessary. NOTE: schedule is subject to change.

Wk	Day	Date	Topic and/or activity	Assignments & recommended reading
1	T	8 Jan	Introduction to Marine Ecology The oceanic environment: physical	Read: Syllabus
	Th	10 Jan	The oceanic environment: chemical	Read: Ch. 2, 4
2	T	15 Jan	The oceanic environment: biodiversity	Read: Ch. 7, 8
	Th	17 Jan	Primary production and chemosynthesis	Read: Ch. 10
3	T	22 Jan	Marine herbivores and detritivores	Read: Ch. 10 (cont.)
	Th	24 Jan	Predators, parasites, and pathogens	Read: Ch. 10 (cont.) **HW1: review questions**

4	T	29 Jan	Competition, recruitment, and succession	Read: TBD
	Th	31 Jan	Population regulation	Read: TBD
5	T	5 Feb	**No class due to field trip on Saturday Feb 16**	
	Th	7 Feb	Dispersal and settlement	Read: Ch. 5 **HW2: review questions**
6	T	12 Feb	Biogeography; Spatial and temporal considerations	Read: TBD
	Th	14 Feb	Introduction to nearshore systems; Estuaries	Read: Ch. 14
	Sat	16 Feb	**Field trip to Guana Tolomato Matanzas National Estuarine Reserve**	
7	T	19 Feb	In-class work on field data and discussion	
	Th	21 Feb	TBD and exam review	**HW3: Trip report**
8	T	26 Feb	**Exam 1**	
	Th	28 Feb	Salt marshes	Read: TBD
9	T	5 Mar	**SPRING BREAK**	
	Th	7 Mar	**SPRING BREAK**	
10	T	12 Mar	**No class due to March 23 field trip**	
	Th	14 Mar	Fossil and Living Reefs	Read: Ch. 15
11	T	19 Mar	Intertidal zones	Read: Ch. 14
	Th	21 Mar	Introduction to Marine restoration	Read: TBD
	Sat	23 Mar	**Field trip to Cedar Key and Lone Cabbage Reef**	
12	T	26 Mar	In-class work on field data, and discussion	
	Th	28 Mar	Intro: Conservation threats to oceanic biodiversity	Read: Ch. 17 **HW4: Trip report**
13	T	2 Apr	Conservation threats: Overexploitation	Read: Ch. 18
	Th	4 Apr	Overexploitation, continued	
14	T	9 Apr	Conservation threats: pollution and invasions	Read: Ch. 19
	Th	11 Apr	Conservation threats: climate change	Read: TBD
15	T	16 Apr	Conservation: Solutions	Read: TBD
	Th	18 Apr	Conservation: Marine Reserves	Read: TBD **HW5: review questions**
16	T	23 Apr	**Exam 2**	