Fundamentals of Marine Sciences

GLY3083C Spring 2023

13452 M | Period 6 - 7 (12:50 PM - 2:45 PM)

13453 W | Period 7 - 8 (1:55 PM - 3:50 PM)

22167 F | Period 7 - 8 (1:55 PM - 3:50 PM)

(Dr. John Jaeger - Course Coordinator)

Course Catalog Description

Introduction to the basic disciplines of the marine sciences, including geology, chemistry, physics, biology and conservation, with an emphasis on marine research. Includes three mandatory one-day weekend field trips.

Course Objectives

This course will build on the material covered in Introduction to Oceanography (OCE1001). The goal is to cover the fundamentals and the broad range of disciplines encompassed in Marine Sciences and provide a sense of research opportunities within this field. To achieve this objective this course will be team-taught to provide exposure to expertise in several different disciplines. The laboratory portion of the course will include exercises specific to an instructor's research focus and three virtual field experiences.

Course Meeting Times

Lecture: Tuesday and Thursday period 4-5 (10:40-12:35 pm)

Lab:

13452 M | Period 6 - 7 (12:50 PM - 2:45 PM) **13453** W | Period 7 - 8 (1:55 PM - 3:50 PM)

22167 F | Period 7 - 8 (1:55 PM - 3:50 PM)

Course Meeting Locations

Lecture: Williamson Hall (WM) 100 Lab: Williamson Hall (WM) 215

Field Trip dates

- 1. Day trips (split class)-Feb 11 and Feb. 12, 2023 departing on R/V Hogarth
- 2. Saturday, March 4
- 3. Saturday April 1

Exam dates

There is no final exam for the course. There are three exams that cover the material introduced by the instructor for that time period. They are not cumulative. The exam dates are:

Thursday, February 9 Thursday, March 9 Tuesday, April 25

<u>Course coordinator</u> (contact regarding any logistical questions)

Dr. John Jaeger imjaeger@ufl.edu Williamson 225 Monday 2-3 pm

Instructor Contact Information

Course Instructors	<u>Email</u>	Office location	Office Hours
Dr. Melissa G.		510 Carr Hall	
Meadows	melissa.meadows@ufl.edu		By appointment
Dr. William			
Patterson	will.patterson@ufl.edu	136 Newins-Ziegler Hall	By appointment

<u>Course TA</u> (contact regarding any laboratory and grading questions)

Nicole Greco nicolegreco@ufl.edu Williamson 263 Mon 12:00-1:30

Email communication

All email correspondence to course instructors must be from your ufl.edu account, have your full name in the body of the email, and contain your course and section number in the subject line. Emails not meeting these requirements may not be recognized by our email filters, and thus may not be answered.

Course Website

Course materials, grades, and related information will be posted on the course E-Learning (Canvas) website at http://lss.at.ufl.edu. You are responsible for all announcements made in class and/or posted on the course website for this course.

Required Textbook

Essentials of Oceanography by Tom Garrison (2011, Brooks Cole, ISBN: 0840061552). This is the same textbook that is used for Introduction to Oceanography.

Attendance Policy

Attendance and participation in all lectures, labs, and field trips is required. Notify the instructor ASAP if you have a known schedule conflict. If you miss a lab or field trip due to illness, contact the instructor as soon as you are able to so to make arrangements for make-up work.

Make-up Exams: No make-up exams will be given without prior permission or documentation of illness. In case of illness, a letter from the student's primary care provider is required. 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 (P202 Peabody Hall).

Requirements for class attendance and make-up exams, assignments, and other work are consistent with university policies that can be found at:

https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Grading:

If you would like to discuss a grade you received on an assignment or exam, this must be completed within 2 weeks of the assignment/quiz being handed back.

Grading Scale

Point Range (%)	Letter Grade	GPA equivalent
≥ 93.00	A	4.0
90.0 – 92.9	A-	3.67
87.0 – 89.9	B+	3.33
83.0 – 86.9	В	3.0
80.0 – 82.9	B-	2.67
77.0 – 79.9	C+	2.33
73.0 – 76.9	С	2.0
70.0 - 72.9	C-	1.67
67.0 – 69.9	D+	1.33
64.0 -66.9	D	1.0
60.0 - 63.9	D-	0.67
< 60.0	Е	0

Note that a "C-" will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: a C- average is equivalent to a GPA of 1.67, and therefore, it does not satisfy this graduation requirement. For more information on grades and grading policies, please visit: http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html

Course Content

Week	Week of	Instructor	Lecture Topic	Laboratory Exercise	Exams
1	1/9/23	Jaeger	Course overview	No Lab Meeting	
2	1/16/23	Jaeger	Marine Geology: The ocean floor & Marine Tectonics	No Lab Meeting	
3	1/23/23	Jaeger	Marine Geology: Marine Sediments	Lab 1 : Mapping the Ocean Floor	
4	1/30/23	Jaeger	Marine Chemistry: Seawater composition	No Lab Meeting	
5	2/6/23	Jaeger	Marine Chemistry: Nutrient Cycling	Lab 2: Field Trip Prep	Exam 1 , Th Feb. 9
6	2/13/23	Jaeger	Marine Chemistry: carbon cycle	Field Trip Data Analysis	
7	2/20/23	TBD	Extreme Storms	No Lab Meeting	
8	2/27/23	TBD	Extreme Storms	Lab 3: Ocean Storms	
9	3/6/23	TBD	Extreme Storms	No Lab Meeting	Exam 2 , Th Mar 9
10	3/13/23		Spring Break	Field Trip 2, Feb 26	
11	3/20/23	Jaeger et al.	Careers in Marine Sciences	No Lab Meeting	
12	3/27/23	Meadows	Marine Biology: Marine ecosystems	Lab 4: Marine Ecology	
13	4/3/23	Meadows	Marine Biology: Marine ecosystems	Field Trip 3, Cedar Key TBD	
14	4/10/23	Patterson	Marine Ecology and Conservation: Fisheries and ecosystem-based management	Lab 5 : Fundamentals of Otolith Science	
15	4/17/23	Patterson	Marine Ecology and Conservation: Invasive species		
16	4/24/23		Exam 3		Exam 3, Tues. April 25

Lab Assignment Late Policy: All laboratory exercises must be turned in when specified. No late work will be accepted without an approved excuse.

Course Technology: Students are required to ensure access to a computer with an Internet connection. Students are expected to have basic knowledge on the use of a computer. In addition, students are required to have working speakers and microphone to complete some assignments.

UF Policies

UF Counseling Services Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:

o UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services. o Career Resource Center, Reitz Union, 392-1601, career and job search services.

Many students experience test anxiety and other stress related problems. "A Self Help Guide for Students" is available through the Counseling Center (301 Peabody Hall, 3921575) and at their web site: http://www.counsel.ufl.edu/.

Honesty Policy

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." Students can work together on assignments, but each much turn in their own unique assignment without copied content between them.

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 (3926999). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines at: http://www.dso.ufl.edu/judicial/procedures/academicguide.html

Accommodation 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/drp/services/.

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.

Software Use All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

Getting Help

Technical Help

In the event that you have technical difficulties with your course, please contact the UF Computing Help Desk either by filling out an online request form or calling (352) 392-4357 - select option 1. The Help Desk is located on the ground floor of the Hub on the UF campus. If your technical difficulties will cause you to miss a due date, you MUST report the problem to the Help Desk and then email your instructor. Include the ticket number that you are given from the Help Desk in an e-mail to the instructor to explain the late assignment/quiz/test.

- Learning-support@ufl.edu
- (352) 392-HELP select option 2
- https://lss.at.ufl.edu/help.shtml

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST email your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources

Please check http://www.distance.ufl.edu/getting-help for additional support:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support.