Fundamentals of Marine Sciences

GLY3083C Spring 2025

12381 M | Period 6 - 7 (12:50 PM - 2:45 PM)

12382 W | Period 7 - 8 (1:55 PM - 3:50 PM)

17799 F | Period 7 - 8 (1:55 PM - 3:50 PM)

(Dr. Jorge Lorenzo-Trueba - 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 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. Guest lecturers will 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 field experiences.

Course Meeting Times

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

Lab:

12381 M | Period 6 - 7 (12:50 PM - 2:45 PM) **12382** W | Period 7 - 8 (1:55 PM - 3:50 PM) 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: Saturday, March 29 or Sunday March 30 (Split class; an all-day trip on either of these two days).

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:

- Tuesday, February 11
- Thursday, March 13
- Tuesday, April 22

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

Dr. Jorge Lorenzo-Trueba jlorenzotrueba@ufl.edu Williamson 359 T 2-4

Instructor Contact Information

Additional Course Instructor	<u>Email</u>	Office location	Office Hours
Dr. John M. Jaeger	jmjaeger@ufl.edu	365 Williamson	M 2-3, Th 2-3
Dr. Melissa G. Meadows	melissa.meadows@ufl.edu	522 Carr Hall	By appointment
Dr. Will Patterson	will.patterson@ufl.edu		By appointment

Course TA (contact regarding any laboratory and grading questions)

Rachael Durr, Geological Sciences. Williamson Hall Rm. 261. Email through Canvas.

Email communication

All email correspondence to course instructors must be from your Canvas (preferred) or 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

We will use a basic oceanography text as supporting material. I know some of you did not purchase one as a permanent copy when you took OCE1001. If so, feel free to use this open-source community textbook: https://rwu.pressbooks.pub/webboceanography/

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. I would need a letter from the student's primary care provider in case of illness. This letter must state that the student could not complete the exam on the scheduled date (i.e., a letter stating only that the student was seen in a clinic is insufficient). 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:

 $\underline{https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx}$

Grading:

Three Exams15, 10, 10% (highest exam score counts for 15	5%) = 35%
Five Laboratory Exercises	= 30%
Term paper	=15%
Field trips	
In-class Lecture Exercises.	

If you want to discuss a grade you received on an assignment or exam, you must <u>complete it</u> within 2 weeks of the assignment/quiz being returned.

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. 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, so 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.

Week	Week of	Instructor	Lecture Topic	Laboratory Exercise/Exams
1	1/13/2025	Jaeger	Marine Geology: The ocean floor & Marine Tectonics	
2	1/20/2025	Jaeger	Marine Geology: Marine Sediments and Introduction to Stable Isotopes	Lab 1 : Benthic Habitat Mapping
3	1/27/2025	Jaeger	Marine Chemistry: Seawater composition & the carbon cycle	
4	2/3/2025	Jaeger	Marine Chemistry: Nutrient Cycling	Lab 2: Marine Chemistry and Stable Isotopes
5	2/10/2025	Adams (Feb 13)	Sea level history	Exam 1 , Tu Feb. 11
6	2/17/2025	Adams	Waves and Tides	Lab 3: Sea-level rise
7	2/24/2025	Valle-Levinson (Feb 27) Adams (Feb 25)	Storms I (Feb 25) and Warming Ocean (Feb 27)	
8	3/3/2025	Olabarrieta (March 4)	Storms II (March 4)	Lab 4: Storms
9	3/10/2025			Exam 2 , Th Mar 13
10	3/17/2025		Spring Break	
11	3/24/2025	Meadows	Marine Ecology: Marine ecosystems	
12	3/31/2025	Meadows	Marine Ecology: Marine ecosystems	Field Trip 1, Matanzas Mar. 29
13	4/7/2025	Patterson	Marine Ecology and Conservation: Fisheries and ecosystem-based management	
14	4/14/2025	Patterson	Marine Ecology and Conservation: Invasive species	Lab 5 : Fundamentals of Otolith Science
15	4/21/2025		Exam 3	Exam 3, Tue Apr 22

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 must ensure access to a computer with an Internet connection. Students are expected to have basic knowledge of the use of a computer. In addition, students must have working speakers and microphones 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:

UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services.

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 requiring 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

If you have technical difficulties with your course, please get in touch with 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. The ticket number will document the time and date of the problem. You'll need to email your instructor within 24 hours of the technical difficulty 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.