

Fundamentals of Marine Sciences
GLY3083C, Sections 04HB and 04H4, Spring 2019
(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 two or 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 introduce the students to 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 day-long field trips to coastal sites.

Course Meeting Times

Lecture: Tuesday and Thursday period 3-4 (9:35 am-11:30 am) (Note: most lectures will be during Period 3)

Lab: Section 04H4 Monday periods 3-4 (9:35 am-11:30 am)

Section 04HB Wednesday periods 5-6 (11:45 am – 1:40 pm)

Course Meeting Locations

Lecture: Williamson Hall (WM) 100

Lab: Williamson Hall (WM) 141

Field Trip Dates

Saturday, March 14

Saturday, April 4

Exam dates

Thursday, February 6

Thursday, March 26

Tuesday, April 21

Course coordinator (contact regarding any logistical questions)

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

Instructor Contact Information

| <u>Course Instructors</u> | <u>Email</u> | <u>Office location</u> | <u>Office Hours</u> |
|---------------------------|------------------------|--------------------------------|---------------------|
| Peter Adams | adamsp@ufl.edu | Williamson 283 | By appointment |
| Shirley Baker | sbaker25@ufl.edu | 7922 NW 71st St, Gainesville | By appointment |
| Bryndan Durham | b.durham@ufl.edu | Cancer & Genetics Res.Comp.404 | By appointment |
| Ellen Martin | eemartin@ufl.edu | Williamson 362 | By appointment |
| William Patterson | will.patterson@ufl.edu | 136 Newins-Ziegler Hall | By appointment |
| Gustav Paulay | paulay@flmnh.ufl.edu | MUS 228 | By appointment |
| Mike Perfit | mperfit@ufl.edu | Williamson 365 | By appointment |

Course TA (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>

Course Content

| Week | Lecture Topic | Laboratory Exercise |
|----------------------------|---|---|
| 1 (Jan-6) Jaeger | <i>Marine Geology</i> : Course overview, The ocean floor | <i>No Lab Meeting</i> |
| 2 (Jan-13) Perfit | <i>Marine Geology</i> : Marine Tectonics | <i>No Lab Meeting</i> |
| 3 (Jan-20) Jaeger/Adams | Marine sediments; Physical Oceanography- Waves, tides, currents | Lab 1: Geo MapApp, <i>bring laptops</i> |
| 4 (Jan-27)- Adams | <i>Physical Oceanography</i> -Waves, tides, currents | Lab 2: Coastal marine sediment, <i>bring laptops</i> |
| 5 (Feb-3)- Adams | <i>Physical Oceanography</i> -Waves, tides, currents | Lab 3: Science Communication |

EXAM I (February 6th, in class)

| | | |
|----------------------|--|---|
| 6 (Feb-10) Jaeger | Physical Oceanography: Global Sea-level Change | <i>No Lab Meeting</i> |
| 7 (Feb-17) Jaeger | Chemical Oceanography: seawater composition & the carbon cycle | Lab 4: Florida sea level lab; <i>bring laptops</i> |
| 8 (Feb-24) Jaeger | Chemical Oceanography: Nutrient cycling | <i>No Lab Meeting</i> |

SPRING BREAK

| | | |
|-----------------------------|---|-----------------------|
| 9 (Mar-9) Paulay | <i>Marine Biology</i> : Marine ecosystems | <i>No Lab Meeting</i> |
| 10 (Mar-16) Paulay/Baker | <i>Marine Biology</i> : Marine ecosystems | <i>No Lab Meeting</i> |
| 11 (Mar-23) Durham | <i>Marine Biology</i> : Marine ecosystems | <i>No Lab Meeting</i> |

EXAM II (March 26th, in class)

| | | |
|--------------------------|---|--|
| 12 (Mar-30) Patterson | <i>Marine Ecology and Conservation: Life Cycles & Life History Theory</i> | Lab 5: <i>Fundamentals of Otolith Science</i> |
|--------------------------|---|--|

| Week | Lecture Topic | Laboratory Exercise |
|-------------------------|---|-----------------------|
| 13 (Apr-6) Patterson | <i>Marine Ecology and Conservation: Ecosystem Services & Management</i> | <i>No Lab Meeting</i> |
| 14 (Apr-13) Martin | <i>Paleoceanography</i> | <i>No Lab Meeting</i> |
| 15 (Apr-20) | EXAM III (April 21 in class) | <i>No Lab Meeting</i> |

Grading:

3 Exams.....15, 10, 10% (highest exam counts for 15%) = 35%

4 Laboratory Exercises (#2-5)4,7,7,7 % = 25%

Term paper30%

Participation (including field trips)10%

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 | B | 3.0 |
| 80.0 – 82.9 | B- | 2.67 |
| 77.0 – 79.9 | C+ | 2.33 |
| 73.0 – 76.9 | C | 2.0 |
| 70.0 – 72.9 | C- | 1.67 |
| 67.0 – 69.9 | D+ | 1.33 |
| 63.0 – 66.9 | D | 1.0 |
| 60.0 – 62.9 | D- | 0.67 |
| < 60.0 | E | 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>

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

Conduct in Class

- Please be courteous and do not talk during lecture. This can be distracting to other students and the instructor.
- Only approved electronic devices may be used in class. Approved electronic devices are laptop computers and tablets (when used to take notes or otherwise participate in classroom activities) and voice recording devices.
- Cell Phones: Students may have their cell phones out in class if they feel it is important for their safety; however, please do not read, use, or play with your cell phone during class.

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, 392-1575) 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.***”

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:

<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.