GLY3XXXC Introduction to Marine Sciences

New number GLY 3038C

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 Saturday 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 we will build the ocean basins, add the water and salts, determine how the water circulates, and then study how the biota adapt to this environment. We will end the course with an investigation of marine conservation and the role of the ocean in driving and recording global climate change. The laboratory portion of the course will include day-long field-trips to coastal sites such as Anastasia Island and Seahorse Key.

Course Meeting Times

TBA

Course Meeting Locations

TBA

Course Website

Course materials and related information will be posted on the course E-Learning (Sakai) 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:

P.R. Pinet, Invitation to Oceanography, 5th Edition. Jones & Bartlett Publishers (2008). ISBN-10: 0763759937; ISBN-13: 978-0763759933

Attendance Policy

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

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

Week | Lecture Topic Laboratory Exercise or Field Trip Marine Geology: Origin of Ocean No Lab Meeting 1 Basins, Active and Passive Margin 2 Marine Geology: Ocean Crust, Marine Sediment Distribution in the Gulf Marine Sediment of Mexico (I) 3 Marine Sediment Distribution in the Gulf Marine Geology: Coastal Environments and sea level of Mexico (II) 4 Marine Chemistry: Salinity, Global Warming -What Do the Data Carbonate Systematics and Ocean Show? (I) Acidification 5 Marine Chemistry: Geochemical Global Warming -What Do the Data Cycles Show? (II) Marine Chemistry: The Carbon Field Trip I: Little Talbot Island to 6 Cycle and Global Warming Anastasia- Sediment Composition and Distribution Exam I 7 Tracking Thermohaline Circulation (I) Physical Oceanography: Atmospheric Circulation and Surface Circulation 8 Physical Oceanography: Tracking Thermohaline Circulation (II) Geostrophic Circulation and The **Global Conveyor Belt** 9 Marine Biology: Marine Organisms Comparative Morphology of Marine Animals Ecological Physiology: Osmoregulation 10 Marine Biology: Marine **Communities, Species Interactions** by Decapod Crustaceans Marine Biology: Biotic and Physical 11 Field Trip II: Species Diversity and Coupling, Biogeochemical Cycling Ecology at a Coastal Site Exam II 12 Marine Conservation: No Lab Meeting Eutrophication of Estuaries and Coastal Waters Marine Conservation: Global Field Trip III: Conservation Management 13 Change at a Coastal Site 14 Marine Conservation: Sustainable Integrating Geophysical, Oceanographic and Biological Data Sets for Marine Fisheries, Invasive Species **Resource Management** Marine Sciences in the 21st Century 15 Presentations Exam III

Course Content:

Grading:

3 Exams	$\dots 15\%$ each = 45%
9 Laboratory Exercises	5% each = 45%
Participation (including field trips)	10%

Grading Scale

Point Range (%)	Letter Grade	GPA equivalent
≥ 93.00	А	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
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

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 (when used to take notes or otherwise participate in classroom activities) and voice recording devices. Unapproved electronic devices include cell phones, video recorders, digital cameras and MP3 players.

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.