Laboratory Syllabus
Introduction to Oceanography and Marine Biology
Laboratory
BSC 2311L (1 Credit Hour Online Internet Course)

Instructor Contact Information
Theresa Dabruzzi
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Location: Building 58, room 143

Prerequisites or Co-Requisites
Introduction to Oceanography and Marine Biology (BSC 2311)

Course Description
Laboratory exercises will focus on selected aspects of marine chemistry, geology, and major animal groups. Body forms and key diagnostic characteristics of major animal groups, and adaptation to the physical and chemical environment will be emphasized.

Credit not granted toward a major in Biology or Marine Biology

Course Goals
Upon completion of the course, students will understand basic oceanographic principals and have working knowledge of the basic body forms for major groups of marine organisms. Students will also be able to identify and describe the variety of marine habitats where plant and animal groups are found.

Topics Covered / Student Learning Outcomes:
Program Overview & Online Course Introduction
Student Learning Outcomes:
- Outline necessary technical requirements to participate in this on-line course.
- Download & install necessary components to participate in distance learning
• Establish an online learning community to facilitate student interaction & motivation in a web-based learning environment
• Use asynchronous and synchronous communication to participate in the learning community

Required Text:
Introduction to Marine Biology and Oceanography, Custom Edition for the University of West Florida by Garrison/ Karleskint/Turner/Small (available in campus bookstore only)

Required Materials:
Internet Access
E-mail Account

Grading / Evaluation:

Weekly chapter quizzes and a detailed laboratory notebook will be required to demonstrate student proficiency and expertise in the topics listed above. Students will complete activities related to the student learning outcomes.

Please note that learning materials and exercises become accessible on Wednesday of each week and that all materials due for that section (including the materials needed for that notebook chapter) must be received no later than midnight on the following Tuesday.

Each student will be given 1 opportunity to have a week’s assignment re-opened. This Opportunity may NOT be used on the Midterm or Final Exam.
No Late Assignments Will Be Accepted & No Lessons Will Be Re-opened after you have used your 1 voucher.

Notebooks:

You will have to turn in your notebooks after the Midterm and Final Exams. If you are not able to get to campus you will have to MAIL in your notebook. The due dates are in the Class Schedule. Pay close attention to these due dates. Emailed notebooks will not be accepted.
NO LATE NOTEBOOKS WILL BE ACCEPTED!!

If you wish to have your notebooks mailed back to you it is your responsibility to include return postage.

Notebooks are to be turned in at the Biology Office: Bldg 58 Rm 79
Address to Mail Notebooks:

Theresa Dabruzzi
Department of Biology
University of West Florida
11000 University Pkwy
Pensacola, FL 32514

Grade determination:

Weekly Quizzes  25%
Laboratory Notebook  35%
Midterm Exam  20%
Final Exam  20%

Your lowest quiz grade will be dropped
No late assignments will be accepted under any circumstances

Special Technology Utilized by Students: This course is totally online. All instructional content and interaction takes place over the WWW. See Topic and Student Learning Outcomes above for additional requirements.

Expectations for Academic Conduct/Plagiarism Policy:

Compliance with UWF Policies on Satisfactory Progress: If you have a question regarding the UWF policies for assignment of grades of 'W' or 'I', please visit: http://uwf.edu/registrar/withdrawal.cfm

UWF Incomplete Grade Policy:

http://uwf.edu/registrar/Incomplete%20Grade%20--%20Assignment%20Report.pdf

ASSISTANCE: Students with special needs who require specific examination-related or other course-related accommodations should contact Barbara Fitzpatrick, Director of Disabled Student Services (DSS), dss@uwf.edu, (850) 474-2387. DSS will provide the student with a letter for the instructor that will specify any recommended accommodations.
Weekly Topics

Week 1:

The Scientific Method & Bathymetric Charts and Charting
Student Learning Outcomes:
- List the steps in the scientific method & discuss its use in modern science
- Understand the rational for the method's design
- Order the steps in the method and understand their logical progression
- Become familiar with reading and interpreting bathymetric charts
- Render a 2-dimensional bottom profile from a bathymetric chart transect
- Identify major bottom features from the chart provided
- Use projection techniques to produce a detailed profile

Water Chemistry and the Concept of pH
Student Learning Outcomes:
- Understand the concept of pH and buffer systems
- Describe the effects of adding acid to distilled, fresh water and saltwater
- Discuss how acid rain influences freshwater and marine ecosystems

Week 2:

Ocean Circulation and Currents
Student Learning Outcomes:
- Describe major Coriolis effects on temperature, wind & surface currents
- Describe how factors individually and in combination influence circulation

Predicting Tides and Measuring Waves
Student Learning Outcomes:
- Discuss the importance of tides and waves on marine life
- Identify the major forces producing tides and waves
- Use mathematical equations to describe and predict wave action

Week 3:

Marine Planktonic Organisms
Student Learning Outcomes:
- Identify major marine plankton groups and their defining characteristics
- Identify morphological similarities and differences between groups
- Describe basic life history and distribution of these groups
Sponges and Jellyfish
Student Learning Outcomes
- Identify the major groups of marine sponges and Jellyfish
- List major key morphological characteristics of each group
- Describe basic life history and distribution of these groups

Week 4:

Segmented Worms and Molluscs
Student Learning Outcomes
- Identify the major groups of marine annelids and molluscs
- List key morphological characteristics of each group
- Describe basic life history and distribution of these groups

Arthropods (Crustaceans)
Student Learning Outcomes:
- Identify the major groups of marine crustaceans
- List key morphological characteristics of each group
- Describe basic life history and distribution of these groups

Week 5:

Echinoderms
Student Learning Outcomes:
- Identify the major groups of echinoderms
- List key morphological characteristics of each group
- Describe basic life history and distribution of these groups

Marine Vertebrates
Student Learning Outcomes
- Identify the major groups of echinoderms
- List key morphological characteristics of each group
- Describe basic life history and distribution of these groups