

Syllabus OCB 3043L Marine Biology & Oceanography Lab; Spring 2007

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In order to take this lab, **you must either be currently enrolled in the OCB 3043 Marine Biology & Oceanography lecture or have previously passed the course** (a passing grade is a 'C' or better). It is also required that you have passed General Biology I and II.

You are required to read the respective manual before class. Lab manuals are available online at http://www.jochmnet.de/fiu/OCB3043L_LM.html. Note that the order of the manuals on the web page may not be in the order of the labs on the syllabus, so make sure that you have the correct manual for the upcoming lab.

You will maintain a lab journal to keep track of all you have done for this course. All experimental procedures, measurements (raw data), and final results (calculations based on raw data) shall be recorded in this journal. This is to remind you of what you have done, any mistakes that occurred, and interesting observations, which you will need to write up the lab reports.

A large portion of your grade will be based on a research paper. A first draft will be due two classes before the final draft. You may use sources on the Internet as a reference, but the Internet pages must be properly cited.

Other assignments are to be handed in as hardcopy at the beginning of the lab. You will also provide an electronic copy. Late assignments will be deducted 10% per day, including weekends. **No assignment will be accepted five days after it is due.**

Plagiarism is not allowed and may be grounds to expel you from the university. That means you are not allowed to cut and paste (or some other method of copying) text into your assignments! If you do the calculations in a group, make sure that the writing is your own. Do not just write a statement of results, as there are a limited number of ways to phrase these. If I cannot detect significant differences in writing, I will count it as plagiarism. Also be aware that the university possesses software to detect plagiarism, and we may process your reports by such software to detect potential plagiarism.

Two field trips will be held on weekends. Normally, these will be on Saturday, but Sunday may be added as well for some sections should there be enough students. These field trips take place in lieu of the respective week's lab and are a required part of your coursework. Make sure you note this in your future plans!

You are invited to join us on the boat during the collecting trips for the lab. These trips will be conducted on the Thursday before the second (Nutrients and Bacteria) and sixth (Nutrient Limitation Experiment) labs with a possible third trip before the tenth (Ichthyology) lab. Space is limited and slots will be filled on a first come, first served basis.

Grade Scheme

Participation and attendance:	10%
Lab Journal	10%
Lab Reports:	20%
1) pH, 2) Bacteria, 3) Phytoplankton, 4) Zooplankton, 5) Coastal and Near Shore Ecology, 6) Macro Algae and Invertebrates, 7) Ichthyology, 8) Coral Reef Ecology	
Rough Draft:	10%
Research Paper:	25%
Nutrient Analysis combined with Nutrient Limitation experiments	
Final:	25%

Grade scale: 93-100 A; 90-93 A-; 87-89 B+; 83-86 B; 80-82 B-; 77-79 C+; 70-76 C; 67-69 D+; 63-66 D; 60-62 D-; 0-59 F

Date	Topic	Experiments / Activities	Notes
12 Jan	Scientific Concepts: The Hypothesis	Development and testing of hypotheses; pH of seawater	
19 Jan	Nutrients and Bacteria	Nutrient analyses; phosphate, ammonium, nitrite, silicate	Traditional lab report on pH experiment and scientific method.
26 Jan	Bacteria	Bacteria plate counts and staining	Topic and expectations for research paper will be explained
02 Feb	Phytoplankton Taxonomy and Diversity	Microscopic study and drawing of phytoplankton species from slides and plankton samples	Bacteria lab report due
09 Feb	Zooplankton Taxonomy and Diversity	Microscopic study and drawing of zooplankton	Phytoplankton drawings due
16 Feb	Nutrient Limitation Experiment	Setup of nutrient limitation experiment of phytoplankton growth	Zooplankton drawings due
23 Feb	Nutrient Limitation Experiment – Final Results	Final sampling and analysis of nutrient limitation experiments	
02 Mar	No Class	Work on research paper!	
10 Mar	Coastal and Near Shore Ecology	Field Trip: Dune walk, near shore sponge flat snorkel, and fossilized reef	Meets on Saturday! First draft of research paper due
12 Mar		Last day to drop with a DR grade	
16 Mar	Macro Algae and Invertebrates	Exam different species of macro algae and invertebrates that live among the algae.	Dune report due
23 Mar	Spring Break	No Class	
30 Mar	Ichthyology	Marine fish taxonomy, otolith extraction for age determination and anatomy	Algae report due; Final draft of research paper due
07 Apr	Coral Reef Ecology	Field Trip: Snorkel trip in the Middle Keys	Meets on Saturday!
13 Apr	Final Exam	Final Exam	Fish and coral reef lab report due
20 Apr	No Class	University Exam Study Period	
27 Apr	No Class	University Finals Week	

Sexual harassment policy: FIU is committed to eliminating sexual harassment. In accordance with the FIU Faculty Senate guidelines, this syllabus includes a warning that any misconduct will be reported.

Academic misconduct: FIU will not tolerate any academic misconduct by students. In accordance with the FIU Faculty Senate guidelines, this syllabus includes a warning that any academic misconduct, particularly cheating in exams, will be reported and penalized.