Tropical Marine Ecology Bio 411-511

Course Description

General: The goals of the course are to provide (a) an introduction to the major tropical marine habitats, and (b) provide a strong foundation in the ecological processes that control tropical marine ecosystems. We will survey the varying habitats of tropical marine ecosystems, focusing on organisms that are characteristic of each habitat and the processes that control the abundance and distribution of those organisms. We will introduce all major tropical marine habitats, but the course will focus on coral reefs in general and Caribbean coral reefs in particular. The survey of the Caribbean reef fauna will prepare students for the companion field course, Bio 412/512 (A Field Course in Tropical Marine Ecology). In our treatment of these ecosystems we will emphasize a hypothesis-testing approach, and we will rely heavily on the primary literature for examples used in class.

Meeting Time & Place: Mon ,Wed. & Fri 11:00-11:50 Baldy 110

Course Instructors:	Mary Alice Coffroth 661 Hochstetter Phone: 645-3380 coffroth@buffalo.edu	Howard Lasker 635 Hochstetter Phone: 645-2881 hlasker@buffalo.edu
Office Hours:	Monday 12:00-1:00 Thurs. 2:30-3:30 Or by appointment	Tues. 11:00-12:00 Thurs. 3:00-4:00 Or by appointment
Course Web Page	http:\\www.nsm.buffalo.edu\Bio\Bio511	

Textbooks and Readings: There is one required textbook for the course, *Marine Community Ecology* by Bertness et al. This book has been ordered and should be at the bookstore. Another useful reference text is *The Life and Death of Coral Reefs* by Charles Birkeland and can be purchased through Amazon.com or Barnes and Nobles if you would like a copy. This text will be place on reserved in SEL. In addition to the textbooks, there will be other readings (usually comprehensive reviews and research papers from the primary literature) that will be assigned in class. Copies of these readings will on reserve at SEL.

Course Requirements and Grading: Attendance at all lectures is required. Required readings from the textbook and/or primary literature (see below) will be assigned for each lecture. There will two exams and a paper written in the form of a research proposal.

Grades will be determined as follows:

	Bio 411	**Bio 511**
Mid-term Exam	25%	20%
Final Exam	40%	35%
Class Participation	10%	10%
Term Paper/Proposal	25%	35%

EXAMS: The purpose of the exams is to test the student's mastery of lecture and reading material. There will be two exams, a mid-term and a final during finals week.

TERM PAPER/PROPOSAL: Students in Bio 411 will be required to write a ten page term paper addressing a current problem (i.e. unresolved question) in Tropical Marine Ecology. Students in Bio 511 will be required to develop and write an original research proposal. The guidelines for term paper and proposal development and the format for each are given in the attached hand out and are posted on the course web page. At the end of the handout is a time line for completing the papers. You must meet each of the deadlines listed.

Attendance: Much of the lecture material will go beyond the readings, and thus, regular attendance is mandatory. Attendance will be included in the "participation" portion of your grade. In addition to the attendance, participation in class discussion and demonstration that you have done the required reading will also count toward your participation grade.