BIO 412/512 - Field Course in Tropical Marine Ecology

Instructors: Mary Alice Coffroth, Howard Lasker

COURSE OUTLINE

Objectives

The course is an intensive two-week field experience conducted at the Bahamian Field Station on San Salvador, The Bahamas. The goal of the course is to provide an in-depth study of Caribbean marine habitats, the organisms characteristic of those habitats and the processes controlling the abundance and distribution of organisms in these habitats. Particular attention will be paid to coral reef habitats. Through lectures, observations and experiments you will learn the fauna and flora of the habitats and characterize the roles of different ecological processes in these communities.

Course Requirements

The course is conducted over two weeks at the Bahamian Field Station in August prior to the start of on-campus fall classes. During this time you will attend one or two 50 min lectures each day, participate in up to 6 hrs of fieldwork each day and often spend 2-3 hrs in the lab and/or library in the evenings. Journals will be kept of all field observations and species lists compiled. Summaries/analyses of field data will be prepared almost daily. There will be a final exam on the last day at the field station. During the final 4 days of the course, time will be allocated for you to conduct independent research projects. You will choose your project in consultation with the course instructors. You may work either individually or in groups. Prior to the start of the research you will meet with the instructors to get approval of the project as well as present a proposal to the class for comments. Results of the research project will be presented as a written paper and oral presentation. The presentation will be made on-campus in September at which time the written paper will also be turned in.

Grading
Graduate students in BIO 512 will be graded on a different scale than undergraduates in BIO 412; Graduate students will be required to conduct a complete literature survey for their research project, undertake a full statistical analysis of the data, and generate a research report in the format of a manuscript to be submitted for publication. (Students in BIO 412 will be required to submit a final report in the form of a laboratory report with only limited primary literature citations).

Grades will be determined as follows:

- Final Exam: 30%
- Class Participation: 20%
- Homework: 20%
- Research Projects: 30%