Academic Track in the ***MARINE BIOLOGY***

Biological Science Major

**Honors in the Major in Marine Biology**

"Marine biologist" is one of the top three career choices of most students entering college.  It is the study of saltwater organisms, including algae, plants, and invertebrate and vertebrate animals, with respect to a specific aspect of their biology (*e.g*., ecology, physiology, behavior, reproduction).  Students that follow this academic track are generally preparing for academic, government agency, consulting or conservation-oriented careers, some of which require the B. Sc. Degree, and others of which require *a graduate degree (i.e., M.S., Ph.D., or D.V.M.).* A helpful website for understanding career choices is: <http://www.marinecareers.net/>.  The department tracks students into marine biology through the Honors in the Major Program plus a careful selection of marine biology related courses as they fulfill the requirements of the Biological Science Major.

**CURRICULUM:**  To begin the Honors in the Major in Marine Biology Program students must have 1. Junior standing and a 3.2 GPA on all course work and a 3.2 GPA in courses required for the major, and 2. completed BSC 2010 and 2011 and their labs. It is also recommended (but not required) that students have completed CHM 1045 and 1046 plus their labs, before beginning in the program. Students typically apply at the end of their sophomore year (term 4).

Students in the program are required to take Honors Seminar in Marine Biology (BSC4937), Ecology (PCB3043), Conservation Biology (BSC3052), Marine Biology (BSC3312), and either Advanced Invertebrate Zoology (ZOO3205) or Biology of Fishes (ZOO4454C). Highly recommended is the Experimental Biology (BSC3402L) section offered by Dr. Levitan during fall semsters, which involves marine research in the field, Animal Behavior (ZOO4513), and Paleontology (GLY3610C). Students are also encouraged to take Evolution (PCB4674) as early as possible (and therefore its prerequisite Genetics course as soon as possible).

The usual course of study would be to take Marine Biology in spring of sophomore year and apply for the Marine Biology Honors Program during that semester. During the following summer and throughout the junior year students participate in research experiences, either as a DIS or as a volunteer in a lab at FSU, or while taking a marine science course or participating in an REU internship at another university. Students take the Honors Seminar in Marine Biology in the fall of the junior year and can take Advanced Invertebrate Biology or Biology of Fishes in the summer of either the sophomore or junior year.

**Elective Courses:**

The following represents a list of other recommended elective courses offered by the department that are applicable to marine biology. Students should determine which elective courses to take based on educational interests and career goals.

BSC 3402L Experimental Bio Lab (Marine only) (2)

ZOO 4454C Bio. of Fishes (4) Biology of Elasmobranch Fishes(in Bimini)(3)     )

ZOO 3205/L   Adv. Invert. Zoo.(2)/Lab (2) BSC 4473   Introduction to Scientific Diving

ZOO 4343C Biol. of Lower Vertebrates (4) PCB 3043L – Ecology Laboratory (2)

ZOO 4513 Animal Behavior (4) MCB 4403/L   Prokaryotic Biology (3)/Lab (2)

BSC 4900 D.I.S. (Marine only) (3) BSC 4933r Selected Topics (all field courses)

**Additional Recommended Electives Offered Outside of the Department of Biological Science:**

Department of Earth, Ocean, and atmospheric Sciences\*:

OCB 4903         Estuarine and Coastal Ecology OCE 4011         Principles of Oceanography (3

OCB 5930         Coral Reefs OCE 4930         Marine Pollution

\* These courses do not count towards the biological science major

**BIOLOGICAL SCIENCE FACULTY** with expertise in marine biology.

Scott Burgess: Population biology of coastal marine invertebrates

Don Levitan Population biology of marine organisms, reproductive strategies and mating success

Janie Wulff Ecology and evolution of marine organisms of coral reefs, seagrass meadows, & mangroves

**FSUCML FACULTY**

Felicia Coleman Life history strategies of reef fishes; fisheries management, Dean Grubbs Elasmobranch ecology and conservation, Sandra Brooke Ecology of deep-sea corals, Chris Koenig Reef fish behavior and ecology, Chip Cotton Life history strategies of deep water fishes.