

Academic Track in the Biological Science Major

MARINE BIOLOGY

Marine biology 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 following this academic track are generally preparing for careers in teaching, government, or research. Careers specific to marine biology typically require a graduate degree (i.e., M.S., Ph.D., or D.V.M.). Qualified junior and senior undergraduates can apply to FSU's Certificate Program in Living Marine Resource Ecology (see page 30) to help prepare for advanced careers in marine biology. The certificate program provides students with a background in marine biology through internships, research, and field and lecture courses.

CURRICULUM: Marine Biology (BSC 3312) should be taken as a background course as early as possible following completion of the major prerequisite courses. Conservation Biology (BSC 3052) and General Ecology (PCB 3043) are recommended for all students interested in marine biology. Students who plan to pursue graduate study in marine biology are strongly encouraged to take a Directed Individual Study (BSC 4900) or Research Methods (BSC 4933) course. 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 3402	Experimental Bio Lab (Marine only) (2)	BSC 4940**	Research Intern Marine Bio (3-9)
BSC 4514	Aquatic Pollution Biology (3)	MCB 4403+L	Prokaryotic Biology (3) and Lab (2)
BSC 4900	D.I.S. (Marine only) (3)	PCB 4341C	Adv. Field Bio. (Marine only) (3)
BSC 4931	Sr. Tutorial (Marine only) (1)	PCB 4723	Comp. Animal Physiology (3)
BSC 4933	Selected Topics in Bio.: (Bio. of Fishes (4) or Marine Resource Mngmt. & Ocean Policy (3) only)	ZOO 3203/L	Adv. Invert. Zoology (2) & Lab (2)
		ZOO 4204C	Biol. of Higher Marine Invert. (5)
		ZOO 4343C	Biology of Lower Vertebrates (4)
BSC 4937**	Sem. in Living Marine Res Ecol (1)	ZOO 4513	Animal Behavior (4)

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

OCB 4930	Zooplankton Ecology (3)	OCE 4906*	Directed Individual Study (1-3)
OCE 4011*	Principles of Oceanography (3)	OCE 4906*	Benthic Microbiology (3)

* Does not count towards the biological science major unless the student completes the FSU Certificate Program in Living Marine Resource Ecology.

** Only for students accepted into Marine Certificate Program.

FACULTY: Undergraduate teaching and guidance is a large part of the commitment of our regular faculty in Biological Science. Our faculty value interaction and discussion with undergraduates and encourage individual discussion and research projects by undergraduates. The following faculty have expertise in marine biology.

Lawrence Abele	Molecular systematics and evolution in crustaceans
William Herrnkind	Behavioral and ecological specializations of lobsters and other marine crustaceans
Don Levitan	Population biology of marine organisms, reproductive strategies and mating success
Robert Livingston	Large scale ecological mechanisms of aquatic systems
Michael Meredith	Reception and processing of chemical stimuli in the nervous system of elasmobranchs
Timothy Moerland	Physiology and biochemistry of fishes, temperature adaptation
Janie Wulff	Roles of predators, physical disturbance and competition in shaping sponge faunas

ADJUNCT FACULTY

Felicia Coleman	Life history strategies of reef fishes; fisheries management; marine fishery reserves
Chris Koenig	Reef fish behavior and ecology; marine fishery reserves