

MOSS LANDING MARINE LABORATORIES

COURSES

MARINE SCIENCES (M Sci)

Note: The following courses are offered at the Moss Landing Marine Laboratories. See Special Programs—Moss Landing Marine Laboratories; see also Geol 109, M Sci 101, 102, 103, and 104 usually recommended for first semesters of full-time students.

The Biology Department will accept only the following Moss Landing Marine Laboratories courses for major credit as indicated. Botany: M Sci 131, 132. Zoology: M Sci 111, 112, 113, 121, 122, 123. Biology elective: M Sci 103, 104.

101. General Oceanography (4)

Prerequisite: college chemistry and biology. An interdisciplinary examination of physical and chemical characteristics of seawater, distribution and effects of ocean currents, geology of the ocean floor and relations of organisms to the marine environment. (3 lecture, 3 lab or field hours)

102. Marine Science Techniques (4)

Prerequisite: college chemistry and algebra. Introductory field and laboratory practice in the use of instruments for collection, analysis, and interpretation of data on the marine environment. (2 lecture, 6 lab hours)

103. Marine Ecology (4) (Former M Sci 161)

Prerequisite: ecology and statistics (or concurrent registration in M Sci 104), or permission of instructor. A field-oriented introduction to the interrelationships between marine and estuarine organisms and their environment with emphasis on quantitative data collection and analysis. (2 lecture, 6 lab or field hours)

104. Quantitative Marine Science (3) (Former M Sci 185T section)

Prerequisite: college mathematics. The mathematical methods for analysis of biological, chemical and physical data from the marine environment; experimental design, parametric and non-parametric statistics. (2 lecture, 3 lab or field hours)

105. Marine Science Diving (3) (Former M Sci 153)

Prerequisite: upper division science major; ability to pass swimming test. Not applicable to Biology major. Skin and SCUBA diving course; five ocean dives include underwater sampling and survey techniques. Successful completion gives NAUI and MLML certification. (1½ lecture, 2½ pool and ocean hours, and 5 Saturdays)

106. Subtidal Ecology (4) (Former M Sci 185T section)

Prerequisite: MLML Diver Certification, M Sci 103, and M Sci 121 or 131. Studies of communities in the sublittoral zone, stressing application of research techniques by the diver; field exercises in sampling, community analysis, and ecological surveys in space and time. Students will present seminars on their research projects. (2 lecture, 6 lab hours)

111. Zoology of Marine Vertebrates (4)

Prerequisite: college zoology; M Sci 103 recommended. Field-oriented study of the natural history, ethology, physiology, identification, and systematics of vertebrates living in or associated with marine, estuarine, and shore communities; interrelationships among organisms within these environments. (2 lecture, 6 lab or field hours)

112. Marine Birds and Mammals (4) (Former M Sci 185T section)

Prerequisite: upper division vertebrate zoology or M Sci 111, or permission of instructor; M Sci 103 recommended. Systematics, morphology, ecology and general biology of marine birds and mammals. (2 lecture, 6 lab or field hours)

113. Marine Ichthyology (4) (Former M Sci 185T section)

Prerequisite: M Sci 111, or permission of instructor. Taxonomy, morphology, and ecology of fishes. Both field and laboratory work concentrate on the structure, function and habits of marine fishes and the ecological interactions of these fishes with their biotic and abiotic surroundings. (2 lecture, 6 lab or field hours)