MARINE FISHERIES - BS

This program provides educational opportunities in the biological sciences, with emphasis on marine management. Ecology, taxonomy, zoogeography, culture, and general biology of commercial species are emphasized. Course offerings are structured to provide not only a strong basis of formal academic instruction but also considerable hands-on field and collection experience by taking advantage of the coastal location of the University. A strong preparation in the sciences is recommended.

Marine Fisheries graduates are prepared to work as fisheries managers or research biologists for state and federal agencies, ecological consulting firms, and educational institutions. Qualified degree recipients may undertake postgraduate studies in resource management, mariculture, systematics, and fisheries economics.

Program Requirements

First Year
Fall
BIOL 111 Introductory Biology I 1,2 4
CHEM 119 Fundamentals of Chemistry I 4
MARB 101 Succeeding in Science 1
MATH 147 Calculus I for Biological Sciences 3 4
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) 3

Semester Credit Hours 16

Spring
BIOL 112 Introductory Biology II 1,2 4
CHEM 120 Fundamentals of Chemistry II 4
ENGL 104 Composition and Rhetoric 3
MATH 148 Calculus II for Biological Sciences 4 4

Semester Credit Hours 15

Second Year
Fall
CHEM 227 Organic Chemistry I 3
CHEM 237 Organic Chemistry Laboratory 1
MARB 315 Natural History of Vertebrates 3 4
PHYS 201 College Physics 4
POLS 206 American National Government 3

Semester Credit Hours 15

Spring
CHEM 228 Organic Chemistry II 3
CHEM 238 Organic Chemistry Laboratory 1
MARB 311 Ichthyology 1
PHYS 202 College Physics 4
POLS 207 State and Local Government 3

Semester Credit Hours 15

Third Year
Fall
MARB 301 Genetics 1 4
MARB 303 Biostatistics 1 4
MARB 320 Fisheries Techniques 1 4

MARB 435 Marine Invertebrate Zoology 1,5 4

Spring
ECON 202 Principles of Economics 3
MARB 360 Marine Conservation Biology 1 4
MARS 252 Introductory Marine Science Laboratory 1
OCNG 251 Oceanography 3
Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture) 3

Semester Credit Hours 14

Fourth Year
Fall
MARB 423 Mariculture 1 4
MARB 425 Marine Ecology 1 4
MARB 445 Marine Fisheries Management 1,5 3

Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts) 3

Directed electives 6 5

Semester Credit Hours 15

Total Semester Credit Hours 120

All electives must be chosen in consultation with, and approved by, the student’s academic advisor. Unless courses are specifically listed, see University Core Curriculum at http://core.tamu.edu/ for a listing of course options for Communication; Mathematics; Life and Physical Sciences; Language, Philosophy and Culture; Creative Arts; American History; Government and Political Sciences; and Social and Behavioral Sciences. The 3-hour University Core Curriculum requirement for International and Cultural Diversity may be met with courses used to satisfy other degree requirements. The 3-hour University Core Curriculum requirement for Cultural Discourse may be met with courses used to satisfy other degree requirements.

1 Indicates required courses in the Marine Fisheries major. These courses will be used to compute the major GPR.
2 A grade of C or better is required before advancing to upper level courses.
3 Student may choose to substitute with MATH 151.
4 Student may choose to substitute MATH 150 or MATH 152.
5 Designated writing intensive course.
6 Directed Electives must be selected from MARB 300-499 (http://catalog.tamu.edu/undergraduate/course-descriptions/marb).

The total hours may be increased if the student is required to take remedial math, remedial English, foreign language, Cultural Discourse or International and Cultural Diversity courses.