

MARINE BIOLOGY (MBI)

Studies in marine biology will serve as a basis for work or further study in many areas of marine science. The marine biology major provides students with the biological and ecological tools to develop a basic understanding of marine ecosystems. Classroom, laboratory and field experiences work together to allow students to apply learned techniques and concepts in real world situations both locally and in marine environments. These studies are taught from a Christian and Lutheran perspective in order to understand that our Lord is responsible for initiating and sustaining these systems.

A student majoring in Marine Biology may not also major or minor in Biology.

Course of Study

A. A major in Marine Biology consists of a minimum of 45 credits comprised of 30 core credits and 15 elective credits.

1. Core Courses: BIO 201, 202, 283, 310, 331, 360, 380, MBI 280

2. At least 15 credits from the following elective courses: BIO 275, 321, 322, 324, 341, 481, 498.

B. Collateral Requirements

1. Core collateral requirements: CHE 161, 162, 168, 169, 221, MAT 221, PHY 201 or 202

2. At least 12 credits from the following collaterals: ANT 181, 201, 202, 203, 301, 320, CHE 210, 222, 228, 310, 350, ESS 182, 300, MAT 222, 223, PHI 201, PHY 201, 202, 301, 302, 303, 304.

C. An approved field experience in marine biology is required and may be satisfied by one of the following: One semester in residence at an approved marine field station or one approved internship.

*Currently approved field stations are the Discovery Bay, Jamaica; Motte Marine Laboratory, Florida, Orpheus Island Research Station, James Cook University, Australia and St. George's University, Grenada.

D. A minor in Marine Biology consists of at least 23 credits in biology and marine biology and includes:

1. Core Courses: BIO 201, 202, 283 and MBI 280

2. At least 8 credits from the following biology courses: BIO 310, 321, 322, 324, 331, 341, 360, 380, 465, 481, 492.

Course Descriptions

MBI 280 Introduction to Marine Science. 4 cr.

Students will explore basic biological and physical principles and processes that support marine ecosystems. The ecology and diversity of coral reefs, turtle grass beds, mangrove swamps as well as offshore communities will be incorporated into active learning modules in both the classroom and lab. The dynamic interaction between man and these fragile systems will be assessed around the world using web based tools 3 lec, 3 hrs. lab.

MBI 283 Marine Biology. 3 cr.

An introduction to marine ecology for science and non-science majors in a unique field and laboratory environment on the island of Jamaica. Field trips will include coral reef, estuary,-and tide pool communities. Offered during vacation breaks, (Additional fees and instructor approval are required for this course.) - This course would be cross-listed with currently offered course BIO 283

MBI 490 Marine Biology Internship. 1-3 cr.

By arrangement with department and internship coordinator.

MBI x91 Special Topics. 1-4 cr.

This course is a seminar in current marine biological topics. It may be repeated for different topics. This course may require laboratory participation. Prereq: Instructor approval.

MBI 199-499 Independent Study. 1-3 cr.

By arrangement with department.

MBI 498 Independent Research. 1-3 cr.

By arrangement with the department.