Biotechnology: Marine Biotechnology

Associate in Science

MassBay courses are offered days, evenings, weekends, and online. View the complete list of online courses at https://mbccweb.massbay.edu/online/.

Check current course availability at www.massbay.edu/courses

DIVISION OF SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

The goal of the Marine Biotechnology program is to train students to work as technicians in sophisticated field and laboratory marine settings where multiple molecular disciplines converge to solve complex marine problems. The emphasis of this program, however, is to provide extensive and novel research experiences, career mentoring and academic bridging networks for the individual whose career goal is to work in the marine sciences as an independent, doctoral-level investigator. Marine Biotechnology applies technology and molecular biology to marine biological systems, living organisms (e.g. algae, fish or plankton) or derivatives thereof, to make or modify products or processes for specific use such as pharmaceuticals and food. Hence, the program's training entails the integration of molecular biology and marine sciences.

Upon successful completion, the Associate in Science Degree in Biotechnology with a concentration in Marine Biotechnology is awarded.

PROGRAM FOOTNOTES:

Humanities Electives:

Art, Communication, English (EN 103 or higher), Film, Foreign Language, Humanities, Literature, Music, Oral Communication, Philosophy, Photography, Sign Language, Theater Arts,

Social Science Electives:

Anthropology, Economics, Geography, Government, History, LA 200 Media and the Law, LA230 Law and Society, Psychology, Sociology

A grade of C or higher is required for all Biotechnology (BT) courses.

Competency in mathematics is a MassBay graduation requirement. Prior to graduation, students must demonstrate competency at 100-level math. This may be accomplished by an appropriate placement test score or completion of any 100-level mathematics course or higher, except mathematics courses with a MAC prefix.

This program qualifies as an Alternative Transfer Agreement (MassTransfer) with select public institutions in Massachusetts. For more information, visit www.mass.edu/masstransfer.

*Pre-Calculus Mathematics (MA 104) may be substituted.
**In order to fulfill the critical thinking graduation competency,
students must pass the Critical Thinking Challenge Exam or complete
CT100.

First Year Semester 1 BI 110 Principles of Biology I 4 BT 101 Introduction to Biotechnology 3 CH 110 Principles of Chemistry I 4 EN 101 Freshman English I 3 MA 102* College Algebra 3 Credits: 17 First Year Semester 2 BI 120 Principles of Biology II 4 BT 108 Marine Biotechnology I 3 CH 120 Principles of Chemistry II 4 CS 100 Computers and Technology 3 EN 102 Freshman English II 3 Credits: 17 First Year Summer 1 Social Science Elective 3 Credits: 3 Second Year Semester 1 BI 220 Immunology 4 CH 202 Organic Chemistry I 4 Humanities Elective 3 Social Science Elective 3 Credits: 15	COURSE	COURSE TITLE	CREDITS
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