

## MARINE BIOLOGY & SUSTAINABLE AQUACULTURE



Accredited 100% Online 8 Start Dates a Year

## B.S. in Marine Biology and Sustainable Aquaculture

Do you love the ocean, are passionate about the marine environment, and want a rewarding career working by the ocean? As a Marine Biology and Sustainable Aquaculture student, you will learn the biological connections between the world's oceans, the promise and future of the aquaculture industry, and how we can all contribute to a sustainable marine environment.

Cost: \$470 per credit Military Discount: \$423

### Job Outcomes, Growth\*, & Salary\*\*

Aquaculture Manager

5 \$48k **1** +8



Fish Hatchery Technician

\$ \$35k **1** +6



Zoologist



Marine Scientist





Fisheries Biologist

\$ \$60k **1** +5



- \*Projected 10-year growth
- \*\*National median salary Source: O\*Net

## **Program Features**

- + One-on-one academic and professional advising as our worldclass faculty and trained staff strive to make your professional and academic goals a reality.
- + Unity College is an accredited institution by New England Commission of Higher Education (NECHE).
- + Experiential Online. Experiential programs are delivered 100% online with field work designed with the working professional in mind.
- + Study when and where you want and finish your degree while still working full-time.
- + Make professional connections with leaders in your field.
- + Get job placement assistance through our career services department.
- + Transfer friendly! We will accept up to 90 credits.



# B.S. IN MARINE BIOLOGY & SUSTAINABLE AQUACULTURE

## B.S. in Marine Biology and Sustainable Aquaculture

The B.S. in Marine Biology and Sustainable Aquaculture prepares students for a broad range of careers helping protect, preserve, maintain, and grow marine organisms and environments. This degree provides students with a broad emphasis on both marine biology and aquaculture and encompasses coursework with the rigor to prepare students for further study in graduate school or even starting their own aquaculture enterprise.

## Job Outcomes, Growth\*, & Salary\*\*



#### **Aquaculture Manager**

Median Salary: **\$48k** 

Growth: +8

Aquaculture Managers direct and coordinate the activities of the employees that work in fish hatchery production for corporations, cooperatives, or other owners. They are also responsible for growing fish and shellfish as cash crops or for release into freshwater or saltwater

#### **Marine Scientist**

Median Salary: \$72k

Growth: +5

Marine Scientist research life in the oceans, other saltwater environments, and other wetlands. They are responsible for observing and documenting data on experiments on marine life. They may also be responsible for rehabilitation efforts.

#### **Fisheries Biologist**

Median Salary: \$60k

Growth: +5

Fisheries Biologist are responsible for studying fish and supervising efforts to conserve their natural habitats. They collect samples from wetlands and document their research and data.

\*Projected 10-year growth

\*\*National median salary

Source: O\*Net



Distance Education

## B.S. IN MARINE BIOLOGY & SUSTAINABLE AQUACULTURE UNOFFICIAL CHECKSHE

### Student Name / Total Transfer Credits / Checksheet Date

## Graduates of the B.S. in Marine Biology & Sustainable Aquaculture will be able to:

- + Explain the underlying biological principles and functioning of marine and aquatic organisms at structural levels ranging from molecular to ecosystem.
- + Choose and implement appropriate laboratory and field techniques used in marine organismal observation, research, management, and care, including those in wild, cultured, and farmed settings.
- + Compare and contrast the major types and components of aquaculture systems, species, and factors as they relate to both environmental and systematics sustainability.
- + Create local, regional, and global solutions to environmental problems in marine biology and aquaculture.
- + Critically evaluate information using scientific and quantitative reasoning skills.

Program (	Core
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Program Core
BIOL 203 Ecological Principles: Applications to Conservation and Wildlife
CHEM 101 Chemistry
CHEM 102 Chemistry   Laboratory
MBAQ 105 Introduction to Oceanography
MBAQ 201 Form and Function of Unique Marine Ecosystems
MBAQ 203 Global Diversity of Freshwater and Marine Resources Used in Sustainable Harvest
MBAQ 301 Sustainable Aquaculture Techniques I: Growing Shellfish and Finfish
MBAQ 303 Sustainable Aquaculture Techniques II: Crustaceans and Pathobiology
MBAQ 307 Ichthyology and Fish Health
MBAQ 310 Marine Mammal and Seabird Biology
MBAQ 315 Diversity of Marine and Aquatic Vegetation
MBAQ 401 Field Research in Marine Biology and

Environmental Professional Core
EVPC 101 Professional Skills
EVPC 201 Environmental Issues: Deforestation, Biodiversity Loss, and Overpopulation OR EVPC 202 Environmental Issues: Energy, Water Scarcity, and Waste
EVPC 301 Environmental Justice OR EVPC 305 Building a Better World: Ethical Decision-Making
EVPC 401 Transformational Leadership
EVPC 490 Transdisciplinary Capstone
General Education Core
BIOL 103 Biology: Foundations of Life
BIOL 104 Biology: Foundations of Life Laboratory
BIOL 105 Biological Diversity, Ecology, and Evolution
BIOL 106 Biological Diversity, Ecology, and Evolution Laboratory
ENVS 201 The Warming Planet: Understanding Climate Change
MATH 101 College Algebra for Environmental Professionals OR MATH 105 Precalculus
MATH 201 Statistics for Environmental Professionals
An Arts course
COMM 101 Writing for Environmental Professionals OF COMM 201 Multimedia Communication for Environmental Professionals
COMM 303 Communicating to Stakeholders OR COMM 403 Environmental Crisis Communication
A Humanities course
A Language course
A Social Science course
General Electives
36 credits of general electives
College Wide Requirements

Aquaculture

A minimum of 120 earned credit hours, 30 credits at the 300 level or above, a minimum of 30 credits earned at

Unity, and an overall cumulative GPA of 2.0 or above



## B.S. IN MARINE BIOLOGY & SUSTAINABLE AQUACULTURE SECOND DEGREE UNOFFICIAL CHECKSHEET

#### Student Name / Total Transfer Credits / Checksheet Date

## Graduates of the B.S. in Marine Biology & Sustainable Aquaculture will be able to:

- **+ Explain** the underlying biological principles and functioning of marine and aquatic organisms at structural levels ranging from molecular to ecosystem.
- + Choose and implement appropriate laboratory and field techniques used in marine organismal observation, research, management, and care, including those in wild, cultured, and farmed settings.
- + Compare and contrast the major types and components of aquaculture systems, species, and factors as they relate to both environmental and systematics sustainability.
- + Create local, regional, and global solutions to environmental problems in marine biology and aquaculture.
- + Critically evaluate information using scientific and quantitative reasoning skills.

Program Core
BIOL 203 Ecological Principles: Applications to Conservation and Wildlife
CHEM 101 Chemistry
CHEM 102 Chemistry Laboratory
MBAQ 105 Introduction to Oceanography
MBAO 201 Form and Function of Unique Marine Ecosystems
MBAQ 203 Global Diversity of Freshwater and Marine Resources Used in Sustainable Harvest
MBAQ 301 Sustainable Aquaculture Techniques I: Growing Shellfish and Finfish
MBAQ 303 Sustainable Aquaculture Techniques II: Crustaceans and Pathobiology
MBAQ 307 Ichthyology and Fish Health
MBAQ 310 Marine Mammal and Seabird Biology
MBAQ 315 Diversity of Marine and Aquatic Vegetation

MBAQ 401 Field Research in Marine Biology and

### **Environmental Professional Core**

**EVPC 101** Professional Skills

<b>EVPC 201</b> Environmental Issues: Deforestation,
Biodiversity Loss, and Overpopulation OR
EVPC 202 Environmental Issues: Energy, Water
Scarcity, and Waste
EVPC 301 Environmental Justice OR
<b>EVPC 305</b> Building a Better World: Ethical
Decision-Making
EVPC 401' Transformational Leadership
<b>EVPC 490</b> Transdisciplinary Capstone
General Education Core
BIOL 103 Biology: Foundations of Life
BIOL 104 Biology: Foundations of Life Laboratory
DOL 104 biology. I buildations of Life Laboratory
BIOL 105 Biological Diversity, Ecology,

### **College Wide Requirements**

and Evolution

**Evolution Laboratory** 

A minimum of 120 earned credit hours, a minimum of 30 credits earned at Unity, and an overall cumulative GPA of 2.0 or above

MATH 201 Statistics for Environmental Professionals

BIOL 106 Biological Diversity, Ecology, and

Aquaculture



## B.S. IN MARINE BIOLOGY & SUSTAINABLE AQUACULTURE

## **Undergraduate Concentrations**



## **Emergency Disaster Management**

Learn how to proceed in the face of disasters to protect our environment.



#### **Renewable Energy**

Explore green technologies, such as wind, solar, geothermal and biomass power.



#### **Environmental GIS**

Develop in-demand Geographic Information Systems (GIS) mapping skills.



#### **Hemp Industry & Science**

Explore the potential of the hemp industry and its products.



## **Environmental Justice & Social Change**

Protect our environment through policies and social change.



#### Wildlife Ecology

Understand how to manage different types of wildlife.



#### **Animal Health & Behavior**

Explore fundamental aspects of animal training and care.



#### **Adventure Ecotourism**

Bring adventure to clients while respecting the environment.



## Marine Biology & Sustainable Aquaculture

Explore all aspects of oceanography, from vegetation to mammals.



#### **Sustainable Business**

Develop sustainable business solutions and strategies for a modern world.



#### **Sustainable Food & Farming**

Learn the systems that create a sustainable food culture.

\*Continued on next page.



## B.S. IN MARINE BIOLOGY & SUSTAINABLE AQUACULTURE

## **Undergraduate Concentrations**



#### **Biomedical Sciences**

Learn the fundamentals of biomedical studies and the science behind health care for humans and animals.



#### **Large Animal Studies**

Learn about the care and management of large animals, including proper health, nutrition, and husbandry for equine and livestock animals.