

#### **Master of Arts or Master of Science in**

## **Biology**

# Develop the research skills you need to grow your career

Our understanding of the world around us is continually evolving. With our knowledge increasing and constant developments in research technology, the need for skilled and experienced scientists is growing. When you earn your master's degree, you'll be at the forefront of research and innovation — finding answers to life's most complicated questions. With a master's degree in Biology, you can grow your career by becoming a leading expert in your field. UB offers two degree pathways for Biology, so you can tailor your degree to your career goals by pursuing a Master of Arts or a Master of Science in Biology.

#### Master of Arts in Biology

The Master of Arts program is designed for working professionals looking to elevate their careers in education, research, public health, and more. Whether you're looking to enhance your skills in your current role or seeking a promotion in your field, this program allows you to take your career to the next level while offering the flexibility you need to maintain your work-life balance. In this program, you can pursue your degree with or without an internship and even study part time, giving you the flexibility you need to achieve your career goals.

#### Master of Science in Biology

The Master of Science program is designed for those seeking research-based positions, considering pursuing their Ph.D. in Biology, or even applying to medical school. This program requires a thesis featuring your original research. The thesis component is highly sought after by employers in the research field and terminal degree programs.

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#### Curriculum

During your first year, you will complete your core curriculum. After completing your core classes, you can choose one of the three concentrations: Molecular Biology, Biomedical Science, or Ecology and Evolution.

Program Core Requirements		
BIO 445	Advanced Methods in Molecular Biology	
BIO 470	Research Rotation	
BIO 490	Departmental Seminar	
BIO 498	Internship (M.A. Students)	
BIO 499	Master's Research (M.S. Students)	
MATH 423B	Biostatistical Analysis	

Every student must take at least 2 courses from Molecular (minimum of 6 credits).

Molecular Biology (Core Courses)		
BIOL 404	Tissue Culture	
BIO 407	Microbial Genetics	
BIO 421	Advanced Cell Biology	
BIO 479	Bioinformatics	
BIO 443	Advanced Molecular Biology	
BIO 481	Advanced Virology	
BIOL 441	Cell Molecular Immunology	
BIOL 444	General Toxicology	
BIOL 480	Selected Topics	

Every student must take at least 2 courses from Organismal (minimum of 6 credits).

Organismal Biology	
BIOL 402	Evolution
BIOL 423	Advanced Ecology
BIOL 415	Animal Nutrition
BIOL 418	Environmental Health
BIOL 424	Physiological Ecology
BIOL 479	Bioinformatics
BIOL 480	Selected Topics
BIOL 481	Advanced Virology

Biomedical Science (Core Courses)	
BIO 418	Environmental Health
BIO 441	Immunology
BIO 446	Environmental Toxicology
BIO 415	Animal Nutrition

Ecology and Evolution (Core Courses)		
BIO 402	Evolution	
BIO 423	Advanced Ecology	
BIO 424	Physiological Ecology	
BIO 479	Bioinformatics	

Elective Courses: Take 6 or more credits from Organismal or Molecular courses.

#### College of Science and Society

In UB's College of Science and Society, you will collaborate with experienced Biology experts to hone your research skills and set yourself apart in the job market. You'll gain the biological reseach skills necessary to pursue a career in commercial, governmental, and private research industries.

#### **Admission requirements**

- Application
- Official transcript for the last degree earned
- International transcripts must include an official course-by-course evaluation of all academic work from an accredited academic evaluating service
- Resumé
- Two letters of recommendation
  - One letter must be from a professor and the second from an additional professor or employer
- Personal statement
  - In 250-500 words, detail your interest in the Biology program, your relevant academic and personal experience, and how this degree will impact your career goals or its equivalent
- Interview

And the best part? No GRE required!

View all courses offered and read full course descriptions in our course catalog (www.bridgeport.edu/academics/course-catalog).

The University of Bridgeport is accredited by the New England Commission of Higher Education. The University also is accredited by the Connecticut Office of Higher Education.

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