

# BIOLOGY - M.S.

College of Arts and Sciences  
Department of Biological Sciences  
256 Cunningham Hall  
Kent Campus  
330-672-3613  
kentbiology@kent.edu  
www.kent.edu/biology

## Description

**Admission to the Master of Science degree in Biology has been temporarily suspended as of fall 2017.**

The Master of Science degree in Biology provides an advanced degree for students who have an undergraduate degree in biology or a related life science. The program is offered for working biologists in various professions including educators teaching science at the secondary level.

## Admission Requirements

- Bachelor's degree from an accredited college or university for unconditional admission
- Minimum 3.000 undergraduate GPA on a 4.000 point scale for unconditional admission
- Official transcript(s)
- Goal statement
- Three letters of recommendation
- GRE scores
- English language proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning one of the following:
  - Minimum 587 TOEFL PBT score (paper-based version)
  - Minimum 94 TOEFL IBT score (Internet-based version)
  - Minimum 82 MELAB score
  - Minimum 7.0 IELTS score
  - Minimum 65 PTE score

For more information about graduate admissions, please visit the Graduate Studies admission website. For more information on international admission, visit the Office of Global Education's admission website.

## Program Learning Outcomes

Graduates of this program will be able to:

1. Understand advanced biological concepts beyond the scope of the typical undergraduate degree, and increase the depth of their knowledge through coursework and hands-on experiences.
2. Apply scientific principles and appreciate work outside of their particular field.
3. Effectively communicate about science with colleagues as well as those outside of the student's area of expertise.;
4. Develop the necessary laboratory skills that will allow testing of hypotheses.

## Program Requirements

### Major Requirements

**Admission to the Master of Science degree in Biology has been temporarily suspended as of fall 2017.**

Code	Title	Credit Hours
<b>Major Requirements</b>		
Courses selected in consultation with academic faculty advisor		26
BSCI 60199	THESIS I <sup>1</sup>	6
Students interested in cell-/molecular-/biomedical-/biotechnology-related areas are encouraged to choose from the following:		
BSCI 50158	MOLECULAR BIOLOGY	
BSCI 50142	BIOENERGETICS	
BSCI 50143 & BSCI 60144	EUKARYOTIC CELL BIOLOGY and SELECTED READINGS IN EUKARYOTIC CELL BIOLOGY	
BSCI 50174	IMMUNOLOGY	
BSCI 50432	ENDOCRINOLOGY	
BSCI 50433	MAMMALIAN PHYSIOLOGY I	
BSCI 50434	MAMMALIAN PHYSIOLOGY II	
Students interested in ecology are encouraged to choose from the following:		
BSCI 50163	EVOLUTION	
BSCI 50363	MICROBIAL ECOLOGY	
BSCI 50364	LIMNOLOGY	
BSCI 50368	WETLAND ECOLOGY AND MANAGEMENT	
BSCI 50374	CONSERVATION BIOLOGY	
BSCI 50556	VERTEBRATE ZOOLOGY	
BSCI 50371	EVOLUTIONARY BIOLOGY	
Teachers holding or pursuing K-12 licensure are encouraged to choose from the following:		
BSCI 50163	EVOLUTION	
BSCI 50196	INDIVIDUAL INVESTIGATION	
BSCI 60080	EXPERIMENTAL METHODS IN BIOLOGY	
Minimum Total Credit Hours:		32

<sup>1</sup> After completing 6 credit hours of BSCI 60199, students must register continually for BSCI 60299 until the degree is earned.

### Graduation Requirements

Teachers holding or pursuing K-12 licensure must complete a minimum of 18 credit hours of biological sciences courses toward the degree. Students holding a bachelor's degree without K-12 licensure must complete a minimum of 23 hours of biological science courses toward the degree.

BSCI 50104 may not be used to fulfill degree requirements. Maximum 4 credit hours may be earned through workshops in the sciences and science education.

The Department of Biological Sciences frequently offers special topics classes in specialized areas of interest, which can count towards the degree when part of the approved program of study. Coursework in other fields within the natural and physical sciences may be used to meet credit hour requirements when part of the approved program of study.