**BIOLOGY - M.S.**

College of Arts and Sciences  
Department of Biological Sciences  
www.kent.edu/biology

**Examples of Possible Careers**

### Biological scientists, all other
- 2.2% slower than the average  
- 44,700 number of jobs  
- $85,290 potential earnings

### Biological technicians
- 4.9% about as fast as the average  
- 87,500 number of jobs  
- $46,340 potential earnings

### Secondary school teachers, except special and career/technical education
- 3.8% about as fast as the average  
- 1,050,800 number of jobs  
- $62,870 potential earnings

**Contact Information**

- Program Coordinator: John Johnson | jjohns72@kent.edu  
- 330-672-3849
- Chat with an Admissions Counselor

**Admission to the Biology major has been temporarily suspended as of fall 2017.**

**Fully Offered**

- Kent Campus

*Note*
Source of occupation titles and labor data is from the U.S. Bureau of Labor Statistics’ Occupational Outlook Handbook. Data comprises projected percent change in employment over the next 10 years; nation-wide employment numbers; and the yearly median wage at which half of the workers in the occupation earned more than that amount and half earned less.

**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  
  - Minimum 120 Duolingo English Test 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**

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>BSCI 60199</td>
<td>THESIS I</td>
<td>6</td>
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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 EUKARYOTIC CELL BIOLOGY
- 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BSCI 50163</td>
<td>EVOLUTION</td>
</tr>
<tr>
<td>BSCI 50196</td>
<td>INDIVIDUAL INVESTIGATION</td>
</tr>
<tr>
<td>BSCI 60080</td>
<td>EXPERIMENTAL METHODS IN BIOLOGY</td>
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Minimum Total Credit Hours: 32

1 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.