

BIOLOGICAL SCIENCES - ECOLOGY AND EVOLUTIONARY BIOLOGY - M.S.

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

About This Program

The Biological Sciences - Ecology and Evolutionary Biology M.S. program offers a comprehensive curriculum that combines theory and practice to provide you with a deep understanding of the complex relationships between organisms and their environment. With access to cutting-edge research facilities, experienced faculty and real-world opportunities, you will gain the skills and knowledge needed to make a meaningful impact in the industry. Read more...

Contact Information

- Program Coordinator: **Oscar Rocha** | bscigrad@kent.edu | 330-672-2297
- Connect with an Admissions Counselor: U.S. Student | International Student

Program Delivery

- **Delivery:**
 - In person
- **Location:**
 - Kent Campus

Examples of Possible Careers and Salaries*

Biological science teachers, postsecondary

- 9.3% much faster than the average
- 64,700 number of jobs
- \$85,600 potential earnings

Biological scientists, all other

- 2.2% slower than the average
- 44,700 number of jobs
- \$85,290 potential earnings

Environmental science teachers, postsecondary

- 3.7% about as fast as the average
- 7,600 number of jobs
- \$84,740 potential earnings

Natural sciences managers

- 4.8% about as fast as the average
- 71,400 number of jobs
- \$137,940 potential earnings

* Source of occupation titles and labor data comes 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.

For more information about graduate admissions, visit the graduate admission website. For more information on international admissions, visit the international admission website.

Admission Requirements

- Bachelor's degree from an accredited college or university
- Undergraduate coursework roughly equivalent to the Biology minor
- Minimum 2.750 undergraduate GPA on a 4.000-point scale
- Official transcript(s) - copies of official transcripts can be submitted for initial review of application
- Résumé or curriculum vitae
- Personal statement that clearly explains why the applicant wishes to pursue an advanced degree and describes research experience and interest; statement must include a list of potential faculty mentors
- Three letters of recommendation that comment on chance of success in an advanced degree program, with minimum one from someone who can comment on research aptitude
- 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

Application Deadlines

- **Fall Semester**
 - Priority deadline: December 1
Applications submitted by this deadline will receive the strongest consideration for admission.

Program Requirements

Major Requirements

Code	Title	Credit Hours
Major Requirements		
BSCI 60104	BIOLOGICAL STATISTICS	4
BSCI 60184	RESPONSIBLE CONDUCT IN RESEARCH AND TEACHING-BIOLOGICAL SCIENCES ¹	2
BSCI 60191	SEMINAR IN BIOLOGY (taken 2-4 times)	2-4
BSCI 60370	ECOLOGICAL AND EVOLUTIONARY GENETICS	2
or BSCI 60371	EVOLUTIONARY BIOLOGY	
BSCI 60372	COMMUNITIES AND ECOSYSTEMS	2

or BSCI 60373	POPULATION AND COMMUNITY ECOLOGY	
Additional Electives		12-14
Student Seminar Presentation ²		
<i>Culminating Requirement</i>		
BSCI 60199	THESIS I ³	6
Minimum Total Credit Hours:		32

¹ Students are required to take BSCI 60184 their first semester (or the following fall semester for those starting their studies in the spring semester).

² Students are required to present at least one departmental seminar about their research.

³ After completing 6 credit hours of BSCI 60199, students must register continually for BSCI 60299 until the degree is earned. Students begin research by successfully preparing, presenting and defending a formal prospectus for their research project to their committee. For the thesis and final defense, it is expected that students will present the results of their study in a defense open to students and faculty. The thesis must be presented and defended before the Guidance Committee with not more than one negative vote in order to be recommended to the Department of Biological Sciences and the College of Arts and Sciences for degree conferral.

Graduation Requirements

Students must complete a minimum 14 credit hours of graduate courses beyond BSCI 60198 toward their degree.

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.

Full Description

The Master of Science degree in Biological Sciences - Ecology and Evolutionary Biology provides opportunities to study in areas such as animal behavior, entomology, limnology, microbial ecology, ornithology, systems ecology, systematic and evolutionary biology, environmental physiology, vertebrate ecology and population and community ecology. Although courses of study are tailored to students' interests and needs, the program for all students normally includes training in population, community, ecosystems and evolutionary ecology and statistical theory. Because of the interdisciplinary nature of ecology, students are encouraged to take courses in geology, mathematics, chemistry and other disciplines.