

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

**College of Arts and Sciences**  
Department of Biological Sciences  
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Kent Campus  
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## 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.

## Fully Offered At:

- Kent Campus

## Admission Requirements

- Bachelor's degree from an accredited college or university for unconditional admission
- Undergraduate coursework roughly equivalent to a Biology minor.
- Minimum 3.000 undergraduate GPA on a 4.000 point scale for unconditional admission
- Official transcript(s)
- GRE scores (general test)
- Goal statement
- Three letters of recommendation
- A list of up to five potential faculty advisors
- 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

Before admission can be completed, a prospective student must be accepted by a faculty member in the ecology program who will serve as the advisor. 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

Code	Title	Credit Hours
<b>Major Requirements</b>		
BSCI 60103	BIOLOGICAL STATISTICS <sup>1</sup>	3
BSCI 60184	RESPONSIBLE CONDUCT IN RESEARCH AND TEACHING-BIOLOGICAL SCIENCES <sup>2</sup>	2
BSCI 60199	THESIS I <sup>3</sup>	6
BSCI 60391	SEMINAR IN ECOLOGY (repeated each semester)	4-6
Additional Electives (as appropriate)		9-11
Student Seminar Presentation <sup>4</sup>		
Major Electives, choose from the following:		6
BSCI 50370	ECOLOGICAL AND EVOLUTIONARY GENETICS	
BSCI 50371	EVOLUTIONARY BIOLOGY	
BSCI 50372	COMMUNITIES AND ECOSYSTEMS	
BSCI 50373	POPULATION AND COMMUNITY ECOLOGY	
Minimum Total Credit Hours:		32

- <sup>1</sup> Students may substitute a different graduate-level statistics course for BSCI 60103 if deemed appropriate by the students' advisor/guidance committee.
- <sup>2</sup> Students are required to take BSCI 60184 their first semester (or the following fall semester for those starting their studies in the spring semester).
- <sup>3</sup> 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.
- <sup>4</sup> Students are required to present at least one departmental seminar about their research.

## **Graduation Requirement**

Students must complete a minimum 14 credit hours of graded (A-F) courses toward their degree.