BIOLOGICAL SCIENCES -
ECOLOGY - M.S.

Description
The Master of Science degree in Biological Sciences—Ecology 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
• Official transcript(s)
• Minimum 3.0 GPA
• GRE scores (general test)
• Goal statement
• Three letters of recommendation
• A list of up to five potential faculty advisors

English Language Proficiency Requirements for International Students: All international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning a minimum 587 TOEFL score (94 on the Internet-based version), minimum 82 MELAB score, minimum 7.0 IELTS score or minimum 65 PTE Academic score. For more information on international admission, visit the Office of Global Education’s admission website. Effective spring 2018.

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. The students also must have completed undergraduate coursework roughly equivalent to a Biology minor.

For more information about graduate admissions, please visit the Graduate Studies 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
[AS-MS-ECOL]

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>BSCI 50370</td>
<td>ECOLOGICAL AND EVOLUTIONARY GENETICS</td>
<td>6</td>
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<tr>
<td>or BSCI 50371</td>
<td>EVOLUTIONARY BIOLOGY</td>
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<tr>
<td>or BSCI 50372</td>
<td>COMMUNITIES AND ECOSYSTEMS</td>
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<tr>
<td>or BSCI 50373</td>
<td>POPULATION AND COMMUNITY ECOLOGY</td>
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<tr>
<td>BSCI 60391</td>
<td>SEMINAR IN ECOLOGY ¹</td>
<td>1</td>
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<tr>
<td>BSCI 60184</td>
<td>RESPONSIBLE CONDUCT IN RESEARCH AND TEACHING-BIOLOGICAL SCIENCES ²</td>
<td>0-2</td>
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<tr>
<td>BSCI 60199</td>
<td>THESIS I ³</td>
<td>2-6</td>
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Additional Program Requirements ² ³ ⁴

Departmental Seminar Presented by Student ⁴

Minimum Total Credit Hours: 32

¹ Students are required to enroll in BSCI 60391 every semester until they graduate.
² Students who will serve as teaching assistants are required to take BSCI 60184 their first semester (or the following fall semester for those starting their studies in spring semester).
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.
⁴ Students are required to present at least one departmental seminar about their research.