**BIOLOGICAL SCIENCES - BOTANY - PH.D.**

College of Arts and Sciences  
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Kent Campus  
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**Description**
Admission to the Doctor of Philosophy (PhD) in Biological Sciences - Botany has been temporarily suspended as of fall 2017.

The Doctor of Philosophy in Biological Sciences - Botany offers research in plant systematics, taxonomy, evolutionary studies, molecular biology, ecology and genetics. The program provides a broad background in botanical sciences and training in research. Graduate students in botany are encouraged to become familiar with cognate disciplines that will enhance their scholarship and research potential; these include biometry, biochemistry, geology, geography and relevant foreign languages.

**Admission Requirements**
Admission to the Doctor of Philosophy (PhD) in Biological Sciences - Botany has been temporarily suspended as of fall 2017.

- Official transcript(s)
- 3.0 GPA
- GRE (general test)
- Goal statement
- Three letters of recommendation
- Acceptance of the student by a faculty advisor
- A list of up to five potential faculty advisors
- Undergraduate coursework roughly equivalent to a Biology minor

**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.

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 their area of expertise.

4. Develop the necessary laboratory skills that will allow testing of hypotheses.

**Program Requirements**

**Major Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BSCI 70184</td>
<td>RESPONSIBLE CONDUCT IN RESEARCH AND TEACHING-BIOLOGICAL SCIENCES</td>
<td>2</td>
</tr>
<tr>
<td>BSCI 70370</td>
<td>ECOLOGICAL AND EVOLUTIONARY GENETICS</td>
<td>2</td>
</tr>
<tr>
<td>BSCI 70371</td>
<td>EVOLUTIONARY BIOLOGY</td>
<td>2</td>
</tr>
<tr>
<td>BSCI 70372</td>
<td>COMMUNITIES AND ECOSYSTEMS</td>
<td>2</td>
</tr>
<tr>
<td>BSCI 80199</td>
<td>DISSERTATION I</td>
<td>30</td>
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</tbody>
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Additional Requirements  
Minimum Total Credit Hours: 60

1. Course is required for teaching assistants. Students who are not teaching assistants do not have to take the course; however, they must complete 2 credits of additional coursework to earn a minimum 60 or 90 credit hours for the degree (depending on the student being post-master’s or post-baccalaureate).

2. Each doctoral candidate, upon admission to candidacy, must register for BSCI 80199 for a total of 30 credit hours. It is expected that a doctoral candidate will continuously register for Dissertation I, and thereafter BSCI 80299, each semester, including summer, until all requirements for the degree have been met.

3. Students with master’s degree are required to earn a minimum 60 credit hours; students with a bachelor’s degree are required to earn a minimum 90 credit hours.

**Total with bachelor's degree: 90 credit hours**  
**Total with master's degree: 60 credit hours**

**Candidacy for the Degree**

- After completing the required coursework, students complete the doctoral program by being admitted to candidacy, by proposing a research project to the faculty, and by completing and defending that research with a written dissertation before a faculty committee.

- **Candidacy Exams:** The student is admitted to doctoral candidacy following successful completion of both written and oral candidacy examinations. These exams are based on prior coursework and coursework taken in this graduate program as determined by the student’s academic Guidance Committee, which must consist of at least three eligible faculty members. The advisor(s) and a majority of members of the Guidance Committee must be members of the appropriate graduate program. This committee is responsible for determining the student’s academic curriculum and for administering the candidacy exams. Following successful completion of candidacy exams, the student registers for dissertation - BSCI 80199 for two semesters and, thereafter, for BSCI 80299 continually until complete.

- **Prospectus:** Following completion of the candidacy exam, the doctoral student must successfully prepare, present and a defend a formal prospectus of the research project before his or her dissertation committee.
• **Dissertation and Final Defense:** The doctoral candidate must complete a dissertation. It is expected that the candidate will present the results of her or his research in a defense open to students and faculty, at which the dissertation will be presented and defended before the dissertation committee, with not more than one negative vote, in order to be recommended to the department and College of Arts and Sciences for degree conferral.