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

Admission to the Ph.D. in Biological Sciences–Botany has been temporarily suspended as of fall 2017.

Description

Admission to the Ph.D. degree in Biological Sciences–Botany has been temporarily suspended as of fall 2017.

The Ph.D. degree 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

- Bachelor's degree, or higher, from an accredited college or university for unconditional admission
- Undergraduate coursework roughly equivalent to a Biology minor
- Minimum 3.000 GPA on a 4.000 point scale for unconditional admission
- Official transcript(s)
- GRE scores (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
- 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

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:

- Develop the necessary laboratory skills that will allow testing of hypotheses.
- Effectively communicate about science with colleagues as well as those outside of their area of expertise.
- Develop the necessary laboratory skills that will allow testing of hypotheses.

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 the 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 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.