

Biology, PHD

Modality

On Campus

Program URL

<https://biology.georgetown.edu/phd-program/>

The Ph.D. program in Biology introduces graduate students to diverse fields of biological science and provides them with expert guidance to excel in research. The department is invested in training students to become excellent scientists, researchers, science communicators, and instructors. We are a diverse and global community, committed to expanding scientific career opportunities to all.

Academic Policies

Students must meet the minimum GPA average required by the Graduate School and follow academic requirements as outlined in the Program Handbook.

Other Policies

All students are required to spend at least three years in residency on the Georgetown campus and serve as a Teaching Assistant for at least two semesters. Additionally, students must complete five teaching pedagogy workshops offered through the Center for New Designs in Learning and Scholarship.

Students must also submit at least one first-author manuscript for publication in a peer-reviewed journal.

Requirements

Program Requirements

A minimum of 16 course credits are required for the Ph.D. degree. Three of these credits must include BIOL 5050: Graduate Survival Skills. Additionally, students are required to take a course in biostatistics. The remaining credits are electives that can be taken through the Biology Department or the Georgetown University Medical Center.

Required Examinations

During the first full year of study, students are required to pass the Qualifying Examination. The Ph.D. Comprehensive examination must be passed during the third year of study.

Qualifying Examination

The purpose of the Qualifying Examination is to provide students with a formative experience that will help them develop their research skills through the preparation and defense of a grant proposal. The proposed research should help the student define the area of research they would like to pursue for their dissertation. As such, the Qualifying Examination will also help the student and committee identify areas of expertise where additional training may be needed in order to successfully conduct their dissertation research.

Comprehensive Examination

The Comprehensive Examination is intended to assess students' analytic and synthetic abilities in the areas of biology pertinent to their goals as a scientist. There is a written proposal as well as an oral defense to the dissertation committee.

The written portion of the exam is a dissertation proposal that describes the student's plan for conducting their own original research as a Ph.D. student. The student's committee will administer an oral exam related to the written material.

Thorough descriptions of both exams can be found in the Biology Department Graduate Handbook.

Thesis Requirements

By the end of the first year of study, students should select a research area and a mentor who will help them select members of their Ph.D. Dissertation Committee. The committee must have at least four faculty members at the time of the dissertation defense, include at least two members from the Department and at least one member from outside of the department. Members of the dissertation committee should be research-active and eligible to mentor graduate students at their respective institutions. The Ph.D. Dissertation Committee is responsible for the student's academic program, training, and research, as well as conducting the Ph.D. comprehensive examination and dissertation defense.

Students are required to complete at least 50% of their dissertation research within the Biology Department, including time spent doing field work under the direction of a faculty member in the department. Once a student is ready to defend their dissertation, the committee will convene a public oral defense.

The defense of the Ph.D. dissertation is an opportunity for the entire University community to examine the candidate. Thus, the defense is a public presentation of the thesis with open questioning to follow. In the Department of Biology, the candidate is also examined in private by the dissertation committee. The public portion of the defense is part of the examination and should not be trivialized. The private defense should take place immediately following the public examination.