

ANIMAL BIOSCIENCES PH.D.

All students must meet the Requirements for the Doctor of Philosophy Degree (<http://catalogue.uvm.edu/graduate/degree/requirements/requirementsforthedoctorofphilosophydegree/>)

OVERVIEW

An interdisciplinary program leading to the Ph.D. degree in Animal Biosciences is offered under the direction of a committee composed of program graduate faculty. The goal of this interdisciplinary program is to provide advanced education and research training in nutrition, metabolism, lactation, reproduction, genetics, and/or animal health. All Ph.D. students will complete a common core of courses as well as specific courses to support their research programs. The program provides the flexibility necessary for students to gain competence in the area of their choice.

SPECIFIC REQUIREMENTS

Requirements for Admission to Graduate Studies for the Degree of Doctor of Philosophy

To be considered for admission, applicants must show promise of ability to pursue advanced study, have adequate preparation in the field, and be fluent in the English language.

Admission requires the following coursework to be completed:

- 2 semesters of chemistry to include general chemistry, organic and/or biochemistry, with labs;
- 2 semesters of biological sciences (e.g., anatomy, biology, physiology, animal sciences, botany, nutrition, food science, cellular and molecular biology, or microbiology); and
- 1 semester of math (precalculus or calculus) or statistics.

The following standards and coursework are recommended for Ph.D. applicants:

- GPA of at least 3.0 or equivalent
- 1 year of undergraduate general chemistry, with lab
- 1 year of undergraduate organic chemistry, with lab
- 1 course in biochemistry, with lab
- 1 course, with lab, in any biological science, with anatomy and/or physiology preferred
- 1 semester of math (precalculus or calculus) and statistics

Minimum Degree Requirements

- The candidate must meet all the requirements as prescribed by the Graduate College for the degree of Doctor of Philosophy.
- Candidates are required to attend and participate in ASCI 301 (<http://catalogue.uvm.edu/search/?P=ASCI%20301>) and ASCI 302 (<http://catalogue.uvm.edu/search/?P=ASCI%20302>) for at least 2 semesters. These candidates must also participate in 1 semester of ASCI 303 ([http://](http://catalogue.uvm.edu/search/?P=ASCI%20303)

catalogue.uvm.edu/search/?P=ASCI%20303) or an equivalent alternative course in research proposal writing.

- In addition, all courses and seminars as established by the Graduate Studies Committee must be satisfactorily met. The student is expected to meet with their committee within the first 2 semesters and then at least annually until the doctoral research is completed and an acceptable dissertation written and defended.
- It is also expected that, at the time of their defense, a Ph.D. student will have at least 2 publications ready to submit, or already submitted, to an appropriate scientific journal. The specific publication expectations will be determined in consultation with the candidate's Graduate Studies Committee.
- All doctoral candidates must acquire appropriate teaching experience prior to the award of the degree. The nature and amount of teaching will be determined by the candidate's Graduate Studies Committee.
- Proficiency in a modern foreign language or computer language and programming is optional at the discretion of the graduate studies committee.

Comprehensive Examination

The comprehensive examination will consist of both a written and oral component. The specific format of the written and oral exams will be determined in consultation with the candidate's Graduate Studies Committee. Both the written and oral exams are typically passed by the end of the third year of candidacy, but absolutely no later than 6 months before the dissertation is submitted. Should the candidate fail the examination, only 1 re-examination is permitted. Success in the comprehensive examination is prerequisite to standing for the Dissertation Defense Examination

Requirements for Advancement to Candidacy for the Degree of Doctor of Philosophy

When a student begins a graduate program, they are not yet a candidate for a graduate degree. To become a candidate for a graduate degree, the student must complete certain academic requirements to achieve the milestone of becoming a candidate for that degree. Advancement-to-candidacy signifies that the student has completed their required coursework, comprehensive exams and other requirements and is ready to move forward to the dissertation phase. University policy requires students to advance to candidacy 6 months before they can submit their dissertation.