

# ANIMAL SCIENCE (PHD)

The Department of Animal Science offers two graduate degrees: Masters of Science (M.S.) and Doctor of Philosophy (Ph.D.). The M.S. degree may be awarded either as a thesis (Plan A) or non-thesis degree (Plan B). The Animal Science department is diverse, with a large variety of student and faculty interests. As a result, each student's program is quite flexible, and is shaped by the student in consultation with their major advisor and Graduate Advisory Committee. Courses elected shall be consistent with the student's objectives and related to the field in which the degree is to be taken. The M.S. and Ph.D. degrees in Animal Science offer several areas of concentration within the Animal Science Field of Study: Animal Genetics and Genomics, Stem Cell and Regenerative Biology, Animal Physiology, Animal Nutrition, Meat Science, and Food Microbiology and Safety. The Ph.D. degree requires demonstrated capabilities for conducting independent research plus related scholarly attributes.

## Location

- Storrs Campus

## Modality

- In Person

## Requirements

### Ph.D. in Animal Science

Each Ph.D. plan of study must include 30 credits of course work beyond the baccalaureate degree or its equivalent, or at least 15 credits beyond the master's degree or other advanced degree in the same or a closely related field of study.

### Required Courses

Ph.D. students must complete ANSC 5601 Experimental Design in Animal Science (or equivalent course in experimental design as approved by the student's Graduate Advisory Committee), one credit of ANSC 5693 Graduate Presentation Skills and two credits of ANSC 5694 Animal Science Seminar and one 3-credit course in data analysis/statistics related to their Area of Concentration that is approved by the student's Graduate Advisory Committee.

Students who have previously completed one credit of ANSC 5693 Graduate Presentation Skills and/or ANSC 5601 Experimental Design in Animal Science or equivalent course in experimental design as approved by the student's Graduate Advisory Committee) and/or one three-credit course in data analysis/statistics related to their Area of Concentration that is approved by the student's Graduate Advisory Committee are exempt from those requirements.

In addition to course work, satisfactory completion of at least 15-credits of GRAD 6950 Doctoral Dissertation Research or GRAD 6960 Full-Time Doctoral Research.

### General Exam

Report on the General Examination, indicating the result of the entire examination and the names of all faculty members participating, must be signed by the members of the Graduate Advisory Committee and submitted to the Office of the Registrar no later than the date of the submission of the Dissertation Proposal (see below).

## Dissertation Proposal

Each student must submit a dissertation proposal. The written dissertation proposal must first be approved by the Advisory Committee, then two copies must be submitted to the Department Head at least two weeks in advance of the dissertation proposal defense for external review. A public presentation of the student's research dissertation proposal is to be held prior to final approval. The dissertation proposal should be submitted to the Office of the Registrar for final approval by the time the student has completed the ninth credit of GRAD 6950 Doctoral Dissertation Research or GRAD 6960 Full-Time Doctoral Research. The approved Dissertation Proposal must be on file in the Office of the Registrar before the public announcement of the oral defense of the dissertation, but it is highly advisable to complete the dissertation proposal 12 to 18-months in advance.

## Final Exam and Doctoral Dissertation Defense

Students must defend their dissertation at a well- advertised, public seminar. Following the presentation, the Advisory Committee will administer a final examination. The format of this examination is at the discretion of the Major Advisor/Advisory Committee, and its purpose is to assess the student's understanding of the area that they have emphasized, their research, and their dissertation.

## Publication

Students must submit at least one first-author, full-length, primary research manuscript, suitable for peer-reviewed publication, to their Major Advisor before defending their dissertation. This requirement does not include reviews, abstracts, or technical papers. In some circumstances, the Major Advisor, in consultation with the Advisory Committee, may modify or waive this requirement.

## Learning Objectives

1. Apply Advanced Knowledge to Independent Research: Students will apply advanced knowledge of animal science to design and conduct independent, original research.
2. Written Communication: Students will write clearly and effectively to communicate research findings and scientific ideas to professional audiences.
3. Oral Communication: Students will present scientific information clearly and professionally to academic and professional audiences.
4. Demonstrate Critical Thinking and Professional Integrity: students will evaluate scientific literature, analyze and interpret research data, and demonstrate ethical and professional conduct in research and scholarship.