

ANIMAL SCIENCE (MS)

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

Plan A (Research/Thesis) M.S. in Animal Science

Students must complete a minimum of 30 credits, of which a minimum of 21 credits must include advanced coursework, with no more than three of these credits coming from independent studies or ANSC 5692 Research. A minimum of nine credits must include GRAD 5950 Master's Thesis Research or GRAD 5960 Full-Time Master's Research.

Required Courses

ANSC 5693 Graduate Presentation Skills and ANSC 5694 Animal Science Seminar. The plan of study shall consist largely of courses at the 5000 level or above. No more than six credits of coursework at the 3000 or 4000 level may be counted towards the degree.

Final Exam and Thesis Defense

Students must defend their thesis at a public seminar. The defense must be completed no later than one year after completion of coursework or the thesis. 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 thesis.

Publication

Students must submit at least one first-author manuscript, suitable for publication, to their Major Advisor before defending their thesis. In some circumstances, the Major Advisor, in consultation with the Advisory Committee, may modify or waive this requirement.

Plan B (Non-thesis) M.S. in Animal Science

Students must complete a minimum of 30 credits, of which a minimum of 24 credits must include formal coursework, and a minimum of four

credits must include ANSC 5692 Research or ANSC 5699 Independent Study. The research component of the Plan B program can involve library research, assistance on laboratory-based projects, computer or data analysis, or any form of scholarly activity approved by the Major Advisor and the Advisory Committee.

Required Courses

ANSC 5694 Animal Science Seminar. No more than six credits of coursework at the 3000 or 4000 level may be counted towards the degree.

Final Exam

After completion of all required courses and the research component, the student is required to give a formal presentation of their work. The presentation is open to all faculty members in the department and can be scheduled as part of the departmental seminar series. Following the presentation, the Graduate Advisory Committee will administer a final examination. The format of this examination is at the discretion of the major advisor and the Graduate Advisory Committee, and its purpose is to assess the student's understanding of the area that they have emphasized. The final examination must be completed no later than one year after completion of coursework.

Learning Objectives

1. For Plan A (Thesis): Apply scientific knowledge and research methods to investigate and address questions in animal science.
2. Write clearly and effectively to explain and interpret research findings.
3. Present research and scientific ideas clearly and professionally.
4. Analyze and interpret scientific information.
5. Draw sound conclusions.
6. Demonstrate professionalism and ethical conduct in their research.
7. For Plan B (Non-Thesis): Apply core concepts and scientific principles in animal science to address applied or professional problems.
8. Present applied or project-based work clearly and confidently to academic or professional audiences.
9. Evaluate scientific information.
10. Use critical thinking to solve problems.
11. Demonstrate professionalism in their field.