

# ANIMAL SCIENCES

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Animal Sciences students study reproduction, genetics, nutrition, physiology, growth, behavior, biotechnology, and management of livestock species. They also study animal sourced food processing. Increasingly, Animal Sciences students also take additional courses in communication, education, business economics, environmental science, and data science. Animal Sciences graduates often work with the science and business of producing domestic livestock species or animal-related products. Many Animal Sciences students prepare to pursue veterinary studies or graduate studies for future work with companion animals, livestock, or other species.

## About this Program

- **College:** Agricultural and Life Sciences (<https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/>)
- **Degree:** Bachelor of Science
- **Specializations:** Animal Biology ([https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS\\_BS/ANS\\_BS01/](https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS_BS/ANS_BS01/)) | Equine ([https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS\\_BS/ANS\\_BS02/](https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS_BS/ANS_BS02/)) | Food Animal ([https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS\\_BS/ANS\\_BS03/](https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS_BS/ANS_BS03/)) | Integrative Animal Sciences ([https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS\\_BS/ANS\\_BS08/#text](https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS_BS/ANS_BS08/#text))
- **Credits for Degree:** 120

*To graduate with this major, students must complete all university, college, and major requirements.*

## Department Information

The Department of Animal Sciences creates new solutions to tomorrow's problems in the areas of teaching, research, and extension, by integrating the most modern technologies available with personal expertise and attention to the needs of both students and industry.

More Info (<https://animal.ifas.ufl.edu/>)

## CONTACT

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Map (<http://campusmap.ufl.edu/#/index/0459>)

## Curriculum

- Animal Genetics Certificate
- Animal Sciences
- Combination Degrees

The Animal Sciences major develops fundamental knowledge of livestock animals. Students in the major choose one of the four specializations based on their career goals. The specializations are tailored to meet the needs of preprofessional students, students preparing for graduate school, and students preparing to enter careers in the agricultural industry.

## Specializations

### Animal Biology

The Animal Biology specialization prepares students for professional and graduate programs, including veterinary school. Through lectures and hands-on labs, students learn about the biological and physiological sciences of livestock species. Students get a strong foundation in nutrition, reproduction, growth, genetics, and more.

### Equine

The Equine specialization offers students a comprehensive education in the management, care, and biological and physiological science of horses. Through lectures and hands-on labs in the department's teaching and research facilities, students study equine nutrition, reproduction, genetics and more. This track prepares graduates for successful careers in the equine industry and graduate programs.

### Food Animal

The Food Animal specialization is for students who wish to focus on livestock production and management and processing of animal-sourced foods. Students may choose from coursework relative to beef cattle, dairy cattle, small ruminants, swine, poultry, and/or meat and food safety. Through lectures and hands-on labs in the department's teaching and research facilities, students study nutrition, reproduction, genetics and more. This track prepares graduates for successful careers in the livestock industry and graduate programs.

## Integrative Animal Sciences

The integrative specialization is designed for students who wish to obtain a customized degree in animal sciences with a focus on a discipline or intersection between disciplines. Students work with an advisor to create a plan that is tailored to their career interests and goals. In addition to core animal sciences subjects, students choose a concentration to expand on, including nutrition, reproduction, animal behavior, environmental science, Artificial Intelligence, or One Health. This track is not intended for students planning on applying to professional programs, such as veterinary school.

## Relevant Minors and/or Certificates

Career preparation can be strengthened through minors and certificates offered by UF. The Animal Sciences department offers an Animal Genetics Certificate, which provides students a background in Mendelian, population and quantitative genetic inheritance, in-dept knowledge of genetic improvement and management programs, and the application of genetic principles towards the improvement of the health and production of livestock and domestic animals.

More Info ([https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/AGL\\_UCT15/](https://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/AGL_UCT15/))

The Animal Sciences department does not offer any minors at this time.

## Research

Animal Sciences students are encouraged to participate in research. Undergraduate research provides students with valuable hands-on experiences and important connections with faculty and researchers that can translate into opportunities post-graduation. Students are encouraged to explore what interests them most and what might be beneficial for their academic and career goals. They then should connect with faculty members about opportunities that might be available. Students may speak with an academic advisor about qualifying for academic credit.

### Academic Learning Compact

Animal sciences majors receive a broad education in the healthy production of animals and animal products. Students' knowledge will be developed through formal courses, laboratories and field trips and will be applied in internships, team projects and presentations. Students will develop the ability to apply conceptual knowledge to solve problems in animal production and to make management decisions.

## Before Graduating Students Must

Complete requirements for the baccalaureate degree, as determined by faculty.

## Students in the Major Will Learn to

### Student Learning Outcomes | SLOs

#### Content

1. Describe and explain fundamental concepts, skills and processes in animal sciences.
2. Apply fundamental concepts, skills and processes in animal sciences.

#### Critical Thinking

3. Critically evaluate information (or data) in animal sciences.
4. Solve problems in animal sciences.

#### Communication

5. Effectively communicate in written form in a manner appropriate in animal sciences.
6. Effectively communicate orally in a manner appropriate in animal sciences.

## Curriculum Map

*I = Introduced; R = Reinforced; A = Assessed*

Courses	SLO 1	SLO 2	SLO 3	SLO 4	SLO 5	SLO 6
AEC 3030C						I, R, A
AEC 3033C					I, R, A	
ANS 3006	I	I			R	
ANS 3043	I, R, A	I, R, A	I	R	R	
ANS 3319C	I, R, A	I, R, A	I	I, R	R	
ANS 3384C	I, R, A	I, R, A	I, R, A	I, R, A	R	
ANS 3440	I, R, A	I, R, A	I, R, A	I, R, A	R	

## Assessment Types

- Case studies
  - Lab projects
  - Exams
  - Quizzes and tests
  - Papers
  - Presentations
  - Non-exam course assignments
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