FOOD ANIMAL

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 (http://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/)
- **Degree:** Bachelor of Science
- **Specializations:** Animal Biology (http://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS_BS/ANS_BS01/) | Equine (http://catalog.ufl.edu/UGRD/colleges-schools/UGAGL/ANS_BS/ANS_BS02/) | Food Animal (p. 1) | Integrative Animal Sciences (http://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

This specialization is for students who wish to focus on food animal production with an emphasis on beef, dairy, or meat science. Career preparation can be strengthened through electives. By choosing appropriate electives, students can earn certificates, a minor, or a dual-major in other fields.

Through proper selection of electives, students may emphasize beef, dairy, or meat science. Career preparation can be strengthened through electives.

By choosing appropriate electives, students can earn a minor or a dual major in agribusiness management, extension education or agricultural operations management while completing the degree requirements for the equine or food animal specialization.

Critical Tracking

Critical Tracking records each student's progress in courses that are required for progress toward each major. Please note the critical-tracking requirements below on a per-semester basis.

Equivalent critical-tracking courses as determined by the State of Florida Common Course Prerequisites (https://cpm.flvc.org/advance-search/) may be used for transfer students.

Semester 1

- Complete 2 of 6 critical-tracking courses, excluding labs: BSC 2010 and BSC 2010L, BSC 2011 and BSC 2011L, CHM 2045 and CHM 2045L, MAC 1147, STA 2023, and AEB 2014 or ECO 2013 or ECO 2023
- 2.0 GPA required for all critical-tracking courses
- 2.0 UF GPA required

Semester 2

- Complete 1 additional critical-tracking course, excluding labs
- 2.0 GPA required for all critical-tracking courses
- 2.0 UF GPA required

Semester 3

- Complete 2 additional critical-tracking courses, excluding labs
- 2.0 GPA required for all critical-tracking courses
- 2.0 UF GPA required

Semester 4

- Complete 1 additional critical-tracking course, excluding labs
- 2.0 GPA required for all critical-tracking courses
- 2.0 UF GPA required

Semester 5

- Complete all critical-tracking courses, including labs
- Complete ANS 3006 and ANS 3006L
- 2.0 GPA required for all critical-tracking courses
- 2.0 upper division GPA required
- 2.0 UF GPA required

Semester 6

- Complete ANS 3043 or ANS 3319C
- 2.0 upper division GPA required
- 2.0 UF GPA required

Semester 7

- Complete ANS 3043 or ANS 3319C
- 2.0 upper division GPA required
- 2.0 UF GPA required

Semester 8

- Complete ANS 4931 and ANS 4941
- 2.0 upper division GPA required
- 2.0 UF GPA required

Model Semester Plan

To remain on track, students must complete the appropriate critical-tracking courses, which appear in bold. These courses must be completed by the terms as listed above in the Critical Tracking criteria.

This semester plan represents an example progression through the major. Actual courses and course order may be different depending on the student's academic record and scheduling availability of courses. Prerequisites still apply.

Course	Title	Credits
Semester One		
BSC 2010 & 2010L	Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory (**Critical Tracking**; State Core Gen Ed Biological and Physical Sciences)	4
ENC 1101	Expository and Argumentative Writing (State Core Gen Ed Composition (http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext); Writing Requirement)	3
MAC 1147	Algebra and Trigonometry (**Critical Tracking**; State Core Gen Ed Mathematics)	4
State Core Gen Ed Humanities (http://catalog.ufl.edu/UGRD/academic-programs/general-education/#genedcoursestext)		3
	Credits	**14**

Semester Two		
Quest 1 (Gen Ed Humanities)		3
AEC 3030C or SPC 2608	Effective Oral Communication or Introduction to Public Speaking	3
BSC 2011 & 2011L	Integrated Principles of Biology 2 and Integrated Principles of Biology Laboratory 2 (**Critical Tracking**; Gen Ed Biological Sciences)	4
ECO 2013	Principles of Macroeconomics (**Critical Tracking**; State Core Gen Ed Social and Behavioral Sciences)	4
ENC 1102	Argument and Persuasion (Gen Ed Composition)	3
	Credits	**17**
Semester Three		
Quest 2 (Gen Ed Social and Behavioral Sciences)		3
Select one:		3
AEC 3033C	Research and Business Writing in Agricultural and Life Sciences (Writing Requirement)	
ENC 2210	Technical Writing	
CHM 2045 & 2045L	General Chemistry 1 and General Chemistry Laboratory (**Critical Tracking**; Gen Ed Physical Sciences)	4
Electives		5
	Credits	**15**
Semester Four		
MCB 2000 & 2000L	Microbiology and Microbiology Laboratory (Gen Ed Biological Sciences)	4
STA 2023	Introduction to Statistics 1 (**Critical Tracking**; Gen Ed Mathematics)	3
Gen Ed International		3
Elective		3
	Credits	**13**
Semester Five		
ANS 2934	Careers in Animal Sciences	2
AEB 3133	Principles of Agribusiness Management	3
ANS 3006 & 3006L	Introduction to Animal Science and Introduction to Animal Science Laboratory (**Critical Tracking**)	4
ANS 3440	Principles of Animal Nutrition	4
ANS 3634C	Meats	3
	Credits	**16**
Semester Six		
AGR 4231C	Forage Science and Range Management	4
ANS 3319C	Reproductive Physiology and Endocrinology in Domestic Animals (**Critical Tracking**)	4
ANS 3384C	Genetics of Domestic Animals	3
ANS 3404C	Food Animal Nutrition and Feeding	4
ANS 3613C	Value determination of meat animals	3
	Credits	**18**
Summer After Semester Six		
ANS 4941	Full-Time Practical Work Experience in Animal Science (**Critical Tracking**)	3-8
	Credits	**3-8**
Semester Seven		
ANS 3043	Growth and Development of Farm Animals (**Critical Tracking**)	3
Approved Agricultural and Life Sciences elective		3
Approved electives		6
	Credits	**12**
Semester Eight		
ANS 4931	Senior Seminar (**Critical Tracking**)	1
Approved Agricultural and Life Sciences elective		3
Approved electives		6
Electives		2
	Credits	**12**
	Total Credits	**120**

Approved Electives

Code	Title	Credits
ANS 2615C	Introduction to livestock and meat evaluation	3
ANS 3008	Domestic Animal Behavior and Welfare	3
ANS 3239L	Techniques in Equine Science	2
ANS 3246L	Beef Production Practicum	2
ANS 3250L	Dairy Cattle Practicum	2
ANS 3251	Biology and Management of Dairy Cattle	3
ANS 4243	Beef Cow-Calf Management	5
ANS 4605	Animal and Products Evaluation	1
ANS 4623C	Pork Production	3
ANS 4635C	Meat Processing	3
ANS 4701	Physiology of the Mammary Gland and Lactation	2
ANS 4905	Problems in Animal Science	1-3
FOS 2040	Introductory Food Science	3
FOS 4202	Food Safety and Sanitation	2
FOS 4222	Food Microbiology	3-4
FOS 4222L	Food Microbiology Laboratory	2
FOS 4310L	Experimental Foods Laboratory	1
FOS 4311	Food Chemistry	3
FOS 4311L	Food Chemistry Laboratory	1
FOS 4427C	Principles of Food Processing	4
FOS 4722C	Quality Control in Food Systems	3
FOS 4731	Government Regulations and the Food Industry	2

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