

ANIMAL SCIENCES

Not all courses are offered every semester. Refer to the schedule of courses for each term's specific offerings.

More Info (<http://registrar.ufl.edu/soc/>)

Courses at the University of Florida, with the exception of specific foreign language courses and courses in the online Master of Arts in Mass Communication program, are taught in English.

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.

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

CONTACT

352.392.1981 (tel) | 352.392.7652 (fax)

P.O. BOX 110910

2250 Shealy Drive

GAINESVILLE FL 32608

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

Curriculum

- Animal Sciences
- Combination Degrees

Courses

ALS 4932 Special Topics 1-3 Credits

Grading Scheme: Letter Grade

Variable subjects provide content for the study of agricultural topics not offered in other courses.

ANS 2002 The Meat We Eat 3 Credits

Grading Scheme: Letter Grade

Consumer-oriented elective covering meat as a food, its inspection for wholesomeness, meat grading, identification, processing, selection, preparation, and serving. Emphasizes preparation of economical, nutritious and palatable meals centered on meat. (B)

Attributes: General Education - Biological Science

ANS 2005 The Role of Animals in Human History 3 Credits

Grading Scheme: Letter Grade

Surveys the importance of animals through human history, from the Stone Age to the present. The domestication of dogs, cats, major farm animals and some less familiar, such as camels, reindeer, and buffalo and the role they played in different societies and cultures across human history. (H, N)

Attributes: General Education - Humanities, General Education - International

ANS 2615C Meat Selection and Grading 2 Credits

Grading Scheme: Letter Grade

Grading and classifying beef, pork, and lamb carcasses and cuts.

ANS 3006 Introduction to Animal Science 3 Credits

Grading Scheme: Letter Grade

Role of beef cattle, dairy cattle, swine, sheep, poultry, and horses in serving humans. Introduces anatomy and physiology of digestion, growth, reproduction, and the application of genetics to livestock improvement.

ANS 3006L Introduction to Animal Science Laboratory 1 Credit

Grading Scheme: Letter Grade

Laboratory experiences designed to accompany ANS 3006; must be registered for ANS 3006 concurrently or have already completed the lecture course.

Corequisite: ANS 3006 for AL majors only.

ANS 3008 Livestock Behavior and Welfare 3 Credits

Grading Scheme: Letter Grade

Introduces basic principles and applications of animal behavior, including approaches to improve animal welfare through an understanding of animal behavior. Examples are drawn from a wide range of species, but the focus is on applying concepts to understand the behavior and welfare of livestock.

Prerequisite: sophomore or junior standing.

ANS 3043 Growth and Development of Farm Animals 3 Credits

Grading Scheme: Letter Grade

An integration of the physiological, genetic, and nutritional bases of animal growth, development, and body composition with application to livestock production.

Prerequisite: BSC 2010 and BSC 2010L and BSC 2011 and BSC 2011L and ANS3006C or equivalents and AL major.

ANS 3079L Relationship of Form to Function in Horses 2 Credits

Grading Scheme: Letter Grade

Principles of conformation and performance evaluation of horses. Studies the anatomy, physiology, and dynamics of the horse as it affects athletic potential and performance.

ANS 3216 Introduction to Equine Science 3 Credits

Grading Scheme: Letter Grade

For those with an interest in equine sciences but with limited equine experience. Principles of equine selection, care, and utilization.

ANS 3217C Equine Health Management 2 Credits

Grading Scheme: Letter Grade

Principles and practices for planning, implementing, and maintaining equine herd health.

Prerequisite: ANS 3006 and AL-equine major.

ANS 3239L Techniques in Equine Science 2 Credits

Grading Scheme: Letter Grade

Introduces the knowledge, horseback, and management skills required for proper daily horse care and conditioning. Designed for those seeking employment requiring basic horse care skills and for novice horse owners.

Prerequisite: ANS 3216 and AL major.

ANS 3246L Beef Production Practicum 2 Credits

Grading Scheme: Letter Grade

Participate in beef cattle production systems under close supervision of faculty and staff; gain knowledge of best management practices regarding cattle handling, tractor, and equipment use, as well as cattle hauling by participating in experiential learning opportunities.

Prerequisite: sophomore or junior standing;

Corequisite: ANS 4243.

ANS 3250L Dairy Cattle Practicum 2 Credits**Grading Scheme:** Letter Grade

Practical application of the principles of biology and management of dairy cattle. Topics include milking procedures, behavior, cattle handling, records, and computer applications in dairy production; body condition, lameness and hygiene scoring; dairy farm evaluation; on-farm practica and field trips.

Corequisite: ANS 3251.**ANS 3251 Biology and Management of Dairy Cattle 2 Credits****Grading Scheme:** Letter Grade

Biology of dairy cattle and the interrelationship between biology and management. Topics include anatomy and physiology, nutrition, reproduction, genetics, behavior, diseases, dairy products, housing, management, economics, and the environmental impact of dairy production.

ANS 3319C Reproductive Physiology and Endocrinology in Domestic Animals 4 Credits**Grading Scheme:** Letter Grade

Principles of reproduction in avian and mammalian farm animals including factors related to the estrous cycle, pregnancy, lactation, semen-production, artificial insemination, pregnancy diagnosis, and environmental factors affecting reproduction.

Prerequisite: ANS 3006 and BSC 2010 and BSC 2010L or equivalents.**ANS 3384C Genetics of Domestic Animals 3 Credits****Grading Scheme:** Letter Grade

Basic principles of Mendelian, population, and quantitative genetics as applied to improvement of domestic animals. Selection, inbreeding, and crossbreeding strategies for genetic improvement of livestock.

Prerequisite: ANS 3006 and BSC 2011 and BSC 2011L or equivalents.**ANS 3404C Food Animal Nutrition and Feeding 3 Credits****Grading Scheme:** Letter Grade

Studies the basic nutrient requirements of food animals, primarily beef cattle and swine, at specific stages of growth, production, and reproduction; and how scientific methods and experimentation are applied to animal nutrition.

Prerequisite: ANS 3440.**ANS 3405 Equine Nutrition and Feeding Management 2 Credits****Grading Scheme:** Letter Grade

The influence of growth, reproduction, and work on the nutrient requirements of horses and the application of that information to the planning of life cycle feeding programs.

Prerequisite: ANS 3440.**ANS 3440 Principles of Animal Nutrition 4 Credits****Grading Scheme:** Letter Grade

The nutrients required by animals, their functions interrelationships, and processes of utilization; feedstuff composition and their use in diet and ration formulation.

Prerequisite: CHM 2045 and CHM 2045L, or equivalent.**ANS 3613L Livestock and Meat Evaluation 2 Credits****Grading Scheme:** Letter Grade

Basic principles of livestock evaluation, grading, and pricing of meat animals, carcasses and meat cuts.

Prerequisite: ANS 3006.**ANS 3634C Meats 3 Credits****Grading Scheme:** Letter Grade

Integrated studies of the science and technology involved in the utilization of meat animals for food with focus on animal growth, carcass cutability, wholesomeness, palatability, and merchandising of red meat.

ANS 3934 Careers in the Livestock Industry 2 Credits**Grading Scheme:** Letter Grade

Careers in the livestock industry. Interactive exposure to employment opportunities in the animal sciences.

ANS 4212L Techniques in Farrier Science 1-2 Credits**Grading Scheme:** Letter Grade

How to evaluate and to trim the horse's hoof and to develop a working knowledge of corrective farrier techniques.

ANS 4218L Horse Psychology and Training 3 Credits**Grading Scheme:** Letter Grade

Horse behavior, instinct and senses as they relate to training. Principles of training the young foal; ground work, liberty training, and starting the young yearling under saddle; and principles of performance training.

ANS 4231 Practicum in Horse Management and Training Technique 1 Credit**Grading Scheme:** Letter Grade

Practicum in horse management and training technique

ANS 4234 Horse Enterprise Management 2 Credits**Grading Scheme:** Letter Grade

Management principles essential to the planning and operation of commercial horse enterprises.

Prerequisite: AEB 3133 and AGR 4231C and ANS 3217C and ANS 3319C and ANS 3384C and ANS 3405 and ANS 3440.**ANS 4241L Intermediate Horse Training 2 Credits****Grading Scheme:** Letter Grade

Continue the training of a recently started under-saddled horse, exhibit horse to potential buyers, and produce annual sealed bid sale.

Prerequisite: AEB 3133 and AGR 4231C and ANS 3217C and ANS 3319C and ANS 3384C and ANS 3405 and ANS 3440.**ANS 4243 Beef Cow-Calf Management 5 Credits****Grading Scheme:** Letter Grade

Development and implementation of management programs for commercial cow-calf and purebred beef cattle enterprises.

Prerequisite: AEB 3133 and AGR 4231C and ANS 3319C and ANS 3384C and ANS 3404C and ANS 3440.**ANS 4245C Beef Background and Feedlot Management 2 Credits****Grading Scheme:** Letter Grade

Management, marketing, and utilization of beef cattle after weaning. Spring break field trip required.

Prerequisite: AEB 3133 and AGR 4231C and ANS 3440 and ANS 3404C and ANS 3613L and ANS 3634C.**ANS 4318C Equine Reproductive Management 3 Credits****Grading Scheme:** Letter Grade

Equine reproduction to include anatomy, the estrous cycle, hormones and pharmacologic manipulation, gametogenesis, embryonic and fetal development, parturition, foal care, assisted technologies, and management strategies.

Prerequisite: ANS 3319C.**ANS 4320C Applied Ruminant Reproductive Management 4 Credits****Grading Scheme:** Letter Grade

In-depth assessment and application of bovine reproductive management practices that affect the efficiency of reproduction including managerial, physiological, biological, and economical.

Prerequisite: ANS 3319C.

ANS 4382 Equine Genetics 2 Credits**Grading Scheme:** Letter Grade

Examines the underlying mechanisms and inheritance of a number of traits in the horse; includes the impact of domestication on the genome, relationships between breeds, coat color, genetic disease and complex traits of performance and behavior.

Prerequisite: ANS 3384C.**ANS 4388 Canine and Feline Genetics 3 Credits****Grading Scheme:** Letter Grade

Lectures, seminars, and lab exercises on application of genetic principles to canine and feline characteristics provide an in-depth understanding of how these traits are inherited and analyzed. Information on new genomic technologies and their impact on studying specific traits, including coat color and genetic disorders, are discussed.

Prerequisite: ANS 3384C or AGR 3303 or PCB 3063 or equivalent.**ANS 4389L Molecular Techniques in Domestic Animal Genetics 2 Credits****Grading Scheme:** Letter Grade

Studies the principles of basic domestic animal molecular biology techniques and provides hands-on experience through laboratory exercises.

Prerequisite: ANS 3384C.**ANS 4604C Live Animal Evaluation 2 Credits****Grading Scheme:** Letter Grade

Instruction of live animal selection and evaluation, relative to improving the efficiency of meat and animal production.

ANS 4605 Animal and Products Evaluation 1 Credit**Grading Scheme:** Letter Grade

Intensive training in animal and animal products evaluation.

Prerequisite: instructor permission.**ANS 4623C Pork Production 3 Credits****Grading Scheme:** Letter Grade

Principles of modern pork production, including all aspects of swine production management systems (breeding systems, disease control, applied economics, housing, marketing, pork quality, and nutrition in a systems approach), relative to the US/Global pork supply.

Prerequisite: ANS 3440 and ANS 3319C and (ANS 3613L or ANS 4604C).**ANS 4635C Meat Processing 3 Credits****Grading Scheme:** Letter Grade

Basic principles of the use of muscle as food, process technology, meat inspection, regulations, quality control procedures, and marketing aspects.

Prerequisite: ANS 3006 or FOS 3042.**ANS 4701 Physiology of the Mammary Gland and Lactation 2 Credits****Grading Scheme:** Letter Grade

Insight into the endocrinology and physiology of the defining characteristics of mammals: the mammary gland and lactation, focusing on the anatomy and development of the mammary gland with an overview of the biochemical, cellular and molecular processes controlling lactation emphasizing on livestock species.

Prerequisite: BSC 2011 and BSC 2011L and ANS 3319C and AG senior.**ANS 4900 Supervised Extension Experience in Animal Sciences 0-3 Credits****Grading Scheme:** S/U

Firsthand, authentic extension experiences in animal sciences under the supervision of a faculty member. Projects may involve program planning, development, implementation, and evaluation. (S-U)

ANS 4905 Problems in Animal Science 1-3 Credits**Grading Scheme:** Letter Grade

Qualified students are assigned a problem involving care and management of livestock or the investigation of a current topic in animal science.

Prerequisite: instructor permission.**ANS 4911 Supervised Research in Animal Sciences 0-3 Credits****Grading Scheme:** S/U

Firsthand, authentic research in animal sciences under the supervision of a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application. (S-U)

ANS 4915 Honors Thesis Research in Animal Sciences 0-3 Credits**Grading Scheme:** S/U

Independent research in animal sciences leading to an honors thesis, mentored by a faculty member. Projects may involve inquiry, design, investigation, scholarship, discovery or application. (S-U)

Prerequisite: junior standing, upper division GPA of 3.75 or higher and completed honors thesis proposal on file.**ANS 4931 Senior Seminar 1 Credit****Grading Scheme:** Letter Grade

Oral presentation and papers on issues facing the livestock industry.

Prerequisite: AL senior.**ANS 4932 Special Topics in Animal Sciences 1-3 Credits****Grading Scheme:** Letter Grade

Special topics in Animal Sciences.

Prerequisite: Sophomore standing or higher.**ANS 4941 Full-Time Practical Work Experience in Animal Science 2-8 Credits****Grading Scheme:** S/U

Credit is earned on the basis of one hour per month of employment. (S-U)

Prerequisite: prior arrangement with advisor.**ATE 2511 Companion Animal Biology and Management 3 Credits****Grading Scheme:** Letter Grade

Principles and practices of proper selection, care, nutrition, genetics, reproduction, and training of companion animals, with emphasis on dogs, cats, and selected bird species.

VME 4103 Livestock Health/Disease Prevention 2 Credits**Grading Scheme:** Letter Grade

The principal diseases of livestock and practical methods for their prevention and control.

Prerequisite: instructor permission.