

Department of Animal Science and Veterinary Technology

Contact Information

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The Department of Animal Science and Veterinary Technology offers Master of Science degrees in Animal Science and Ranch Management

Research projects in Animal Science have involved, but are not limited to, nutrition, reproduction, physiology/endocrinology, meat sciences, muscle biology, molecular biology, grazing and forage systems, intensive and small-scale animal production systems and/or sustainability, international animal agriculture and quantitative genetics.

Department Faculty

Apple, Jason Professor, Department of Animal Science and Veterinary Technology; Chair; B.S., Oklahoma State University; M.S., Kansas State University; Ph.D., Kansas State University.

Bell, Natasha Assistant Professor, Department of Animal Science and Veterinary Technology; B.S., Texas A&M University; M.S., Stephen F. Austin University; Ph.D., Texas A&M University.

Galloway, Cariann Assistant Professor of the Professional Practice, Department of Animal Science and Veterinary Technology; B.S., Texas A&M University-Corpus Christi; D.V.M., Texas A&M University.

Garcia, Michelle Professor, Department of Animal Science and Veterinary Technology; B.S., University of Missouri-Columbia; M.S., University of Missouri-Columbia; Ph.D., Texas A&M University.

Hilton, Clayton Professor, Department of Animal Science and Veterinary Technology; Jo and Bruce Gunn Endowed Director of Veterinary Technology; B.S., Auburn University; M.S., Auburn University; D.V.M., Auburn University College of Veterinary Medicine.

Hoskinson, Christine Assistant Director of Veterinary Technology, Department of Animal Science and Veterinary Technology; B.S., St. Lawrence University; M.S., Texas A&M University-Kingsville.

Kuvlesky, Jr., William Professor, Department of Animal Science and Veterinary Technology; Associate Dean, Dick and Mary Lewis Kleberg College of Agriculture and Natural Resources; Interim Chair, Department of Rangeland & Wildlife Sciences; Caesar Kleberg Wildlife Research Institute; B.S., Texas A&M University; M.S., University of Wisconsin-Madison; Ph.D., Texas A&M University.

Loftin, Christina Instructional Veterinary Nurse, Department of Animal Science and Veterinary Technology; A.A.S., Colorado Mountain College; B.S., Mississippi State University; M.S., Mississippi State University.

Machado, Tanner Associate Professor, Department of Animal Science and Veterinary Technology; B.S., Colorado State University; M.S., Colorado State University; Ph.D., South Dakota State University.

Machen, Richard Professor, Department of Animal Science and Veterinary Technology; Paul Genho Endowed Chair in Ranch Management, King Ranch Institute for Ranch Management; B.S., Angelo State University; M.S., Texas A&M University; Ph.D., Texas A&M University.

Mathis, Clay P Professor, Department of Animal Science and Veterinary Technology; Robert J. Kleberg, Jr. and Helen C. Kleberg Endowed Chair and Director, King Ranch Institute for Ranch Management; B.S., Texas A&M University; M.S., Texas A&M University; Ph.D., Kansas State University.

McManus, Kyle Lecturer, Department of Animal Science and Veterinary Technology; TAMUK Farm Manager; B.S., Texas A&M University-Kingsville; M.S., Texas A&M University-Kingsville.

Pope, Tiffany Instructional Nurse II, Department of Animal Science and Veterinary Technology; B.S., Purdue University.

Rodgers, Julia Instructional Veterinary Nurse, Department of Animal Science and Veterinary Technology; A.A.S., Vet Tech Institute of Houston.

Sawyer, Jason Associate Professor, Department of Animal Science and Veterinary Technology; B.S., Texas A&M University; M.S., New Mexico State University; Ph.D., New Mexico State University.

Staiger, Ann E Assistant Professor, Department of Animal Science and Veterinary Technology; B.S., Oklahoma State University; M.S., Oklahoma State University; Ph.D., Cornell University.

Stanko, Randy L Professor, Department of Animal Science and Veterinary Technology; B.S., Colorado State University; M.S., Texas A&M University; Ph.D., North Carolina State University.

Animal Science (ANSC)

ANSC 5305 Graduate Research Project **3 SCH (3)**

Designed for project option students and requires completion of research project. Prerequisite: departmental approval. May be repeated for a maximum of 6 semester hours.

ANSC 5306 Thesis **3 SCH (3)**

Designed for thesis option students. The course requires completion of thesis research. Prerequisite: departmental approval. May be repeated for maximum of 6 semester hours.

ANSC 5307 Physiol of Mammalian Reprod **3 SCH (3-0)**

Comprehensive in-depth study of reproductive physiology and endocrinology with primary emphasis on domestic and laboratory animals. Prerequisites: ANSC 3313/BIOL 3408 or equivalent, and 9 semester hours of chemistry/biochemistry.

ANSC 5333 Mammalian Endocrinology **3 SCH (3-0)**

Survey of the endocrine system including endocrine glands and hormones which regulate energy metabolism, water and electrolyte balance, growth and reproduction. Prerequisites: ANSC 4303 or equivalent and 9 semester hours of chemistry/biochemistry.

ANSC 5335 International Animal Agric **3 SCH (3-0)**

Students will acquire practical knowledge on international trends and developments in animal agriculture production, on small livestock as an increasingly important global source of food and on how to design and execute projects targeted at the rural poor.

ANSC 5336 Envir Physiology of Animals **3 SCH (3-0)**

Principles of domestic animal and wildlife adaptation to tropical and sub-tropical environments. Areas of emphasis will include bioclimatology, physiological temperature regulation mechanisms and nutritional, reproductive and genetic adaptation. Prerequisite: ANSC 4303 or equivalent.

ANSC 5337 Ruminant Nutrition and Physiol **3 SCH (3-0)**

Anatomy, physiology, microbiology and nutrient metabolism of the rumen. Prerequisites: ANSC 4307 and CHEM 2421.

ANSC 5338 Monogastric Nutrition **3 SCH (3-0)**

Digestion and absorption of nutrients in monogastrics to include human, poultry and swine. Emphasis on vitamin and trace mineral nutrition. Prerequisites: ANSC 4307 and CHEM 2421 or equivalent.

ANSC 5351 Advn Range Livestock Productn **3 SCH (3-0)**

This is an interdisciplinary course studying modern beef cattle production, breeding genetics, reproductive physiology, nutrition and economics.

ANSC 5390 Advanced Studies in Animal Sci **3 SCH (3)**

Material offered is determined by the needs of the students. Laboratory and lecture vary according to the subject needs. May be repeated once under a different topic.

ANSC 5395 Advanced Probs in Animal Sci **1-3 SCH (1-3)**

Independent work that may include a laboratory or field problem. Variable credit dependent upon the problem; may be repeated for a total of 6 semester hours. Prerequisite: approval of a staff member who will supervise the problem.

ANSC 5399 Research Topics **1-9 SCH (1-9)**

This course is specifically designed for Plan I students. Required during the research, data analysis, and initial writing stage. Grading for the course will be S for satisfactory or U for unsatisfactory.

Ranch Management (RAMT)

RAMT 5305 Graduate Research Project **3 SCH (3)**

Designed for project option students and requires completion of research project. Prerequisite: departmental approval. May be repeated for a maximum of 6 semester hours.

RAMT 5306 Thesis **3 SCH (3)**

This course is for thesis students. The course requires 6 hours of grades, 3 hours will consist of completion of a thesis proposal and 3 hours will consist of the thesis. Completion of the thesis proposal must occur as a prerequisite to, or be enrolled in during the same semester as the 3 hours of thesis.

RAMT 5350 Practicum in Ranch Management **3 SCH (3-0)**

Students apply tools and techniques learned in other courses to current issues facing the ranching industry. Course requires on ranch study of these current problems integrating tool and techniques learned in other courses using a system approach. Course may be repeated for a maximum of 6 semester hours.

RAMT 5351 Sys Apprch Natrl Res Prblm Sol **3 SCH (3-0)**

Concept of system dynamics applied to solving natural resource management issues. Intensive application of system dynamics approaches and applied application to ranch and wildlife management and other disciplines.

RAMT 5352 Advn Ranch Planning and Analys **3 SCH (3-0)**

This course is an interdisciplinary approach to ranch management. It will include: finance, managerial accounting, management information systems, and natural resource monitoring.

RAMT 5390 TOP: Adv Studies in Ranch Mgt **1-3 SCH (1-3-0)**

Material offered is determined by the needs of the students. Variable credit dependent upon the topic; may be repeated for a total of 9 semester hours under different topics.

RAMT 5695 Advanced Problems in Ranch Mgt **3-6 SCH (3-6)**

Independent work that may include a laboratory or field problem. Variable credit dependent upon the problem; may be repeated for a total of 3 semester hours for thesis option students or 6 semester hours for project option and course-only option students. Prerequisite: approval of a faculty member who will supervise the problem.

Potential graduate students are advised to write the department for current information on program opportunities. The thesis must be completed within seven consecutive years of initial registration. Students seeking the thesis option leading to a Master of Science degree should expect to take a minimum of 30 hours of coursework (24 hours of formal courses plus one section of 5306 for completion of the proposal and a 2nd section of 5306 upon the completion of the thesis). A non-thesis option for the MS degree can be earned by students in Animal Science graduate program with successful completion of minimum of 36 hours of formal coursework. Students must obtain an approved degree plan from their academic advisor prior to courses being accepted toward their degree. Students who received a graduate stipend are expected to be enrolled as a full-time student each semester. Research hours (5399 or 6999) can be taken to fulfill the obligation of being a full-time graduate student; however, research hours do not count toward formal course work hours.

Animal Science, M.S.

A non-thesis option for an MS degree can be earned by students in Animal Sciences graduate program with successful completion of a minimum of 36 hours of formal course work. Students must obtain an approved degree plan from their academic advisor prior to courses being accepted toward their degree.