

ANIMAL SCIENCE



The COS Animal Science Department is dedicated to serving the needs of all students interested in furthering their animal science education at the college level. Our department provides educational opportunities for students seeking job skills needed for employment, transferable credits for transferring to a university, and enhanced skills for advancement in current jobs. The Animal Science Department prides itself on teaching students through hands-on experience, allowing students to handle cattle, sheep, pigs, and horses. The Department stresses quality teaching through formal classroom lecture, discussions, and “learn-by-doing” experience in well-equipped laboratory facilities.

Videos

- Animal Science (<https://vimeo.com/499701406/>)
- Equine Science (<https://vimeo.com/499424190/>)

Contact Information

Animal Science Faculty Contact

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Associate Degrees

- Associate of Science in Animal Science - For Transfer (AS-T) (<https://catalog.cos.edu/areas-study/animal-science/associate-science-animal-science-as-t/>)

- Associate of Science in Animal Science (AS) (<https://catalog.cos.edu/areas-study/animal-science/associate-science-animal-science-not-for-transfer-as/>)

Certificates

- Certificate of Achievement in Animal Science (<https://catalog.cos.edu/areas-study/animal-science/certificate-achievement-animal-science/>)
- Certificate of Achievement in Equine Science (<https://catalog.cos.edu/areas-study/animal-science/certificate-achievement-equine-science/>)
- Certificate of Achievement in Food Safety Management (<https://catalog.cos.edu/areas-study/agricultural-business-management/skill-certificate-food-safety-management/>)
- Certificate of Achievement in Veterinary Assisting (<https://catalog.cos.edu/areas-study/veterinary-assisting/certificate-achievement-veterinary-assisting/>)
- Skill Certificate in Dairy Science (<https://catalog.cos.edu/areas-study/dairy-science/skill-certificate-dairy-science/>)

For a complete list of courses and descriptions visit: COURSES (<https://catalog.cos.edu/course-descriptions/>)

ASCI 001 Introduction to Animal Science

3unit(s)

Hours: 3 Lecture/Discussion Hours:
1 Lab

A scientific approach to the livestock industry encompassing aspects of animal anatomy, physiology, nutrition, genetics and epidemiology. Emphasis on the origin, characteristics, adaptations and contributions of livestock to the modern agriculture industry.

ASCI 002 Livestock Selection/Evaluation

3unit(s)

Hours: 3 Lecture/Discussion Hours:
1 Lab

Detailed analysis of various visual and physical methods of appraising beef, sheep, and swine concerning functional and economic value. Written and oral summaries of evaluation will be learned. Specific reference will be made to performance data and factors determining carcass value.

ASCI 022 Horse Husbandry

3unit(s)

Hours: 3 Lecture/Discussion Hours:
1 Lab

Survey of the equine industry, encompassing the evolution and role of the equine species throughout history, breed selection and development, nutrition, disease, preventative health, reproductive management, basic horsemanship, and stabling alternatives. Laboratory required.

ASCI 103 Feeds and Feeding

3unit(s)

Hours: 3 Lecture/Discussion Hours:
1 Lab

The science of animal nutrition; the fundamentals of digestion and absorption in both ruminants and non-ruminants are discussed. The nutritive value of feedstuffs as they relate to the formulation of livestock rations will be emphasized.

ASCI 104 Livestock Disease and Sanitation

Hours: 3 Lecture/Discussion Hours:
1 Lab

Study of common infectious and non-infectious livestock diseases, with emphasis on proper management, prevention, treatment, and sanitation procedures for cattle, swine, sheep, and horses.

ASCI 110 Swine Science

Hours: 3 Lecture/Discussion Hours:
1 Lab

Study of the principles and practices of purebred and commercial pork production throughout California, the United States and the World. Emphasis is on the importance of breeds, breeding principles, selection, nutrition, environmental management, health, marketing, and record-keeping to ensure scientifically-based management decisions and consumer acceptance. Laboratory required.

ASCI 111 Beef Cattle Science

Hours: 3 Lecture/Discussion Hours:
1 Lab

Study of the principles and practices of purebred and commercial beef cattle production; emphasis on the importance of breeds, breeding principles, selection, nutrition, environmental management, health, marketing and record keeping to ensure scientifically-based management decisions and consumer product acceptance as applied to beef cattle. (C-ID AG-AS 108 L)

ASCI 112 Small Ruminant Science

Hours: 3 Lecture/Discussion Hours:
1 Lab

Survey of sheep and goat industries, including management of commercial, purebred and small farm flocks. This course will cover selection, feeding, breeding, and basic care and husbandry of small ruminants plus marketing of sheep, goats and their products.

ASCI 113 Farm Animal Biology

Hours: 3 Lecture/Discussion Hours:
1 Lab

This course is an introduction to the scientific concepts of farm animal anatomy and physiology. The objective of the course is to familiarize students with major organ systems and species differences of farm animals. Laboratory exercise will include hands-on training of the anatomy and physiology of domesticated farm animals for those students seeking employment or advanced degrees in the animal sciences.

Advisory on Recommended Preparation: ASCI 001 or equivalent college course with a minimum grade of C.

3unit(s)**ASCI 118 Introduction to Dairy Science**

Hours: 3 Lecture/Discussion Hours:
1 Lab

Equivalent Course: DSCI 101

Survey of the dairy industry; supply of milk and milk products and their uses; emphasis on the history, development and projections of the dairy industry in the US. Covers general information on the economics of dairying; dairy facts and trends; dairy animal selection, culling, fitting, showing, and judging; pedigree evaluation; basic dairy feeds and feeding; fundamentals of bovine reproduction; basic dairy management skills; requirements for and opportunities in dairy industry employment. (C-ID AG-AS 112L)

ASCI 119 Breeding and Selection of Dairy Cattle

Hours: 3 Lecture/Discussion Hours:
1 Lab

Equivalent Course: DSCI 104

Principles of selection, reproduction, and management of reproduction and breeding in dairy cattle. This course covers both theory and practice of dairy cattle judging, semen evaluation and handling, and artificial insemination.

Advisory on Recommended Preparation: DSCI 101 or equivalent college course with a minimum grade of C.

ASCI 123 Horse Production

Hours: 3 Lecture/Discussion Hours:
1 Lab

The course is designed to give students a broad basis of information for decision making in the management and operation of a horse herd from broodmare health to foaling. Herd health, stallion, mare and foal handling, cost of production, reproductive efficiency, artificial insemination and marketing will be evaluated. The use of equine software and technology will also be used in the class.

ASCI 124 Equine Training

Hours: 3 Lecture/Discussion Hours:
1 Lab

This course is designed to give students hands-on experience in training horses of different ages safely and under control. The course provides the theory and concepts for appropriate decision-making for equipment and equine conditions that affect learned and innate behaviors. Considerable time will be spent on ground work and proper methodologies of equine behaviors to create a solid foundation for equine performance.

ASCI 126 Meat Science

Hours: 3 Lecture/Discussion Hours:
1 Lab

This course is an introduction to the meat industry with a special emphasis on meat products and value added meat processing techniques. It includes concepts of food safety and sanitation, grading and inspection along with preservation and marketing strategies to meet current consumer demands.

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ASCI 130 Equine Evaluation

Hours: 3 Lecture/Discussion Hours:

1 Lab

Students will study methods of communication and use analytical thinking in the appraisal of equine breeds at halter and in performance classes. Appraisals will include information about horse classes, order of placement, and organization of reasoning. Students will justify appraisals in front of an official judge. The relationship of equine anatomy and physiology on competitive performance will be considered.

ASCI 140 Beginning Equitation

Hours: 3 Lecture/Discussion Hours:

1 Lab

Riding both bareback and under saddle, this class is designed to teach the beginning student introductory riding techniques. Students will learn the proper way to catch, groom, saddle, bridle, and mount the horse. Students will learn basic nomenclature for the tack used in equitation as well as the basic anatomy and physiology of the horse which will ensure safe use of the tack for both rider and the horse. Finally, students will learn proper use of natural-aids. In summary, this course will teach students and their horses to walk/jog safely and in a controlled manner.

ASCI 141 Intermediate Equitation

Hours: 3 Lecture/Discussion Hours:

1 Lab

The students will learn the proper way to catch, groom, saddle, bridle, mount, and ride the horse. The class will focus on proper natural-aids and balance in order to correctly maneuver the horse through different gaits, training methods and obstacles. This class will allow students to lope their horses, executing proper leads and lead changes. The students will learn how to ride in a group setting safely and in a controlled manner.

ASCI 202 Applied Food Safety Management

Hours: 3 Lecture/Discussion Hours:

1 Lab

Overview of the government entities regulating food safety for the US Federal Government. Basic understanding of pathogenic organisms and how to identify/test them from a farm perspective, plant perspective, and packing perspective. Understanding and implementing HACCP and PCQI in an applied agricultural setting from farm to fork.

ASCI 207 Veterinary Terminology

Hours: 3 Lecture/Discussion

Equivalent Course: ASCI 117

This course is designed to acquaint the student with veterinary medical terminology. Emphasis on anatomical, diagnostic, symptomatology, and operative terms relating to individual animal body systems.

ASCI 224 Livestock Merchandising

Hours: 1 Lecture/Discussion Hours:

3 Lab

This course is designed for students to develop skills in preparing and marketing beef cattle, sheep, and swine for competition at intercollegiate livestock competitions. Additionally, the students can gain exposure to showing Dairy cattle. Students may also have the opportunity to help with the Tulare County Fair or Great Western Livestock Show. This course may be repeated three times.

3unit(s)**Animal Science**

McKeith, Russell

B.S., Southern Illinois University

M.S., University Of Georgia

M.S., Texas A&M University

Pitigliano, Kimberly

B.S., California State University, Fresno

M.Ed., National University

Thompson, Kyle, Ph.D.

B.S., California State University, Fresno

M.S., Oklahoma State University, Stillwater

Ph.D., Oklahoma State University, Stillwater

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