

## Animal Sciences and Agricultural Education

### ASCI 61. Dairy Cattle Production (3)

Prerequisite: ASCI 1 (may be taken concurrently). Principles and practices of milking, feeding, breeding, evaluating, housing, health, behavior, and management of dairy cattle. (2 lecture, 3 lab hours)

### ASCI 68. Pre-Vet Orientation (1)

Detailed information for students preparing for veterinary school including course requirements, admission policies, application procedures, interview sessions, and career opportunities in vet medicine.

### ASCI 71. Meat Science (3)

Prerequisite: ASCI 1 (may be taken concurrently). Basic meats course covering topics from harvest to consumption. Discussion of meat quality versus quantity, general food safety, and meat preparation. Lab will demonstrate all aspects of modern meat industry practices including harvest, fabrication, and further processing. (2 lecture, 3 lab hours)

### ASCI 81. Introduction to Livestock, Meat, and Dairy Evaluation (3)

Introductory course in evaluating livestock, meat, and dairy cattle. Utilizes visual and performance data in establishing the economic value of animals representing the beef, sheep, swine, dairy, and horse industries. (2 lecture, 3 lab hours)

### ASCI 91. Poultry Production (3)

Prerequisite: ASCI 1 (may be taken concurrently). Management principles and practices of commercial poultry production. Nutrition, reproduction, environmental management, health, and processing of broilers and layers. (2 lecture, 3 lab hours)

### ASCI 121. Advanced Beef Management (3)

Prerequisite: ASCI 21. Prevailing and alternative management systems and techniques of beef production in the United States and California including economic analysis. (2 lecture, 3 lab hours)

### ASCI 131. Advanced Swine Management (3)

Prerequisite: ASCI 31. A comprehensive study of the swine industry. Laboratory exercises designed to improve the management decision ability of students. (2 lecture, 3 lab hours; field trips)

### ASCI 151. Advanced Horse Management (3)

Prerequisite: ASCI 51. Advanced principles of horse management, reproduction, breeding systems, nutrition, facilities, business aspects, exercise physiology, training colts. (2 lecture, 3 lab hours)



### ASCI 152. Equine Nutrition (3)

Prerequisite: ASCI 51. Principles of equine nutrition; digestive anatomy and physiology nutrient requirements; feed formulation, nutritional management, and diseases.

### ASCI 153. Stable Management (3)

Prerequisite: ASCI 51. An overview of horse farm and stable management theories and applications. The impact of management practices on the animal, on the environment, and on economic viability is considered. (2 lecture, 3 lab hours)

### ASCI 161. Advanced Dairy Farm Management (3)

Prerequisite: ASCI 61. A comprehensive study of daily industry management strategies and practices. Exercises involve recognition of problems and recommendation of solutions associated with managing commercial dairy operations. (2 lecture, 3 lab hours; field trips)

### ASCI 162. Dairy and Meat Systems Management (3)

Prerequisite: ASCI 61 or 71. A comprehensive study of technological systems employed in commercial dairies and meat processing facilities. Exercises involve analysis of systems for application in various facilities and evaluation of dairy and meat plant sanitation

systems, HACCP, and production/processing systems. Control of food specific pathogens and their impact on the animal, on food safety, on public health, and on environment. Economic viability is considered. (2 lecture, 3 lab hours)

### ASCI 171. Advanced Meat Science (3)

Prerequisite: ASCI 11 or 71. Basic advanced meats course that covers comprehensive study of the conversion of muscle to meat and factors that affect meat quality. Topics include muscle structure and function and muscle anatomy. Laboratory exercises involve hands-on techniques of harvest, fabrication, and further processing of various products from the major species of production livestock. (2 lecture, 3 lab hours)

### ASCI 172. Meat Technology (3)

Comprehensive study of meat science topics. Emphasis placed on food safety systems including HACCP and current product development efforts in the meats industry. Laboratory exercises are designed to improve student application of HACCP principles and to strengthen understanding of the vast array of new and innovative products on the market. (2 lecture, 3 lab hours)