

AGSC COURSE STUDENT LEARNING OUTCOMES

Students will be able to apply regulatory guidelines to address best practices in meat processing.

AGSC 100 - Elements of Livestock Production

Students will be able to identify animal reproductive anatomy and describe breeding practices, and genetic improvement techniques among various livestock species.

Students will be able to identify major parts of gastrointestinal system, distinguish differences in digestion in various species, and categorize various feedstuffs.

Students will be able to describe the production history in the U.S., identify breeds, and describe basic grading systems and principles of management of cattle, swine, sheep, and poultry.

Students will be able to identify basic breeds, describe management practices of horses, and predict horse colors from genetic information.

AGSC 206 - Fundamentals of Animal Nutrition

Students will be able to explain the relationships among organs, tissues, cells, hormones, and enzymes with respect to the physiological processes of nutrient digestion and metabolism.

Students will be able to describe similarities and differences in the digestion physiology of agricultural animals.

Students will be able to explain the chemical nature and functions of various nutrients (water, carbohydrates, proteins, lipids, minerals, and vitamins) and how they are digested and utilized in agricultural animals.

Students will be able to explain the mechanisms of eating, digestion, absorption, metabolism, and excretion of nutrients and the factors that affect these processes.

Students will be able to explain quantitative approaches to calculate nutritional requirements.

Students will be able to explain current methods of measuring the chemical composition and biological value of feed ingredients.

AGSC 255 - Meat Industry, Food Safety, and Quality Systems

Students will be able to describe muscle physiology and how it relates to meat production.

Students will be able to describe all aspects of the meat production industry, including animal rearing, humane animal management, meat processing and preservation, food safety, packaging and distribution, and retail sales of meat products.

Students will be able to explain meat grading and evaluation, including yield and quality USDA grading scores.

Students will be able to identify major foodborne bacteria and their safety issues with meat products.