

ANIMAL SCIENCE (ANSC)

ANSC 130 Introduction to Horse Science 2 Hours

An introductory study of equine science including an overview of the horse industry, anatomy, management, reproduction, nutrition, genetics, behavior and disease.

Corequisite(s): ANSC 131

Recent Term(s) Offered: spring 2021; spring 2022; fall 2022; fall 2023

ANSC 131 Horse Science Lab 1 Hour

Laboratory study of equine science including an overview of the horse industry, anatomy, management, reproduction, nutrition, genetics, behavior and disease.

Corequisite(s): ANSC 130

Course Fee: \$35

Recent Term(s) Offered: spring 2021; spring 2022; fall 2022; fall 2023

ANSC 140 Introduction to Animal Science 3 Hours

An introduction to the animal industry on a state, national and global basis, basic principles of reproduction and endocrinology, breeding and genetics, animal products and diseases. Emphasis is placed upon farm animal classification.

Recent Term(s) Offered: spring 2021; fall 2021; spring 2022; fall 2022; spring 2023; fall 2023

ANSC 141 Introduction to Animal Science Laboratory 1 Hour

A laboratory course correlated with AGRI 140. Laboratories are planned to coincide with lecture topics.

Prerequisite(s): ANSC 140 (may be taken concurrently)

Course Fee: \$25

Recent Term(s) Offered: spring 2021; fall 2021; spring 2022; fall 2022; spring 2023; fall 2023

ANSC 232 Basic Equitation 2 Hours

For students with little previous experience in horsemanship. Basic disciplines of hunt seat and stock seat horsemanship and selection, care and use of horses and equipment are included.

Course Fee: \$100

Recent Term(s) Offered: spring 2021; fall 2021; spring 2022; fall 2022; spring 2023; fall 2023

ANSC 240 Livestock Management 2 Hours

A general animal science course offering hands on experience in management of beef cattle, dairy cattle, sheep, swine, and horses.

Prerequisite(s): ANSC 140

Corequisite(s): ANSC 241

Recent Term(s) Offered: fall 2021; fall 2022; fall 2023

ANSC 241 Livestock Management Laboratory 1 Hour

A laboratory course correlated with ANSC 240.

Corequisite(s): ANSC 240

Course Fee: \$25

Recent Term(s) Offered: fall 2021; fall 2022; fall 2023

ANSC 321 Comparative Anatomy 4 Hours

A comparative study of the morphology and relationships of the organ systems of some typical vertebrates.

Prerequisite(s): ANSC 140 and BIOL 120 and BIOL 121

Recent Term(s) Offered: spring 2022; spring 2023

ANSC 330 Horse Production 2 Hours

Principles of animal science as they relate to the horse and equine industry, characteristics of breeds, anatomy, nutrition, genetics, reproduction, behavior, training, health, breeding, management, and marketing concepts are presented. Note: Approval of instructor may be required.

Prerequisite(s): ANSC 140

Corequisite(s): ANSC 331

Recent Term(s) Offered: fall 2021; spring 2023

ANSC 331 Horse Production Laboratory 1 Hour

A laboratory course correlated with ANSC 330.

Corequisite(s): ANSC 330

Course Fee: \$20

Recent Term(s) Offered: fall 2021; spring 2023

ANSC 333 Horse Training 2 Hours

The student is assigned a horse to train. Techniques for halter-breaking, gentling, grooming, lunging, saddling, driving and riding the untrained horse are included. Note: Approval of instructor may be required.

Prerequisite(s): ANSC 232

Corequisite(s): ANSC 334

Recent Term(s) Offered: spring 2022

ANSC 334 Horse Training Laboratory 1 Hour

A laboratory course correlated with ANSC 333.

Corequisite(s): ANSC 333

Course Fee: \$150

Recent Term(s) Offered: spring 2022

ANSC 336 Conformation and Performance Evaluation of Horses 3 Hours (repeatable max of 3 hrs)

Evaluation and selection of horses based on conformation and athletic ability, and oral and written defense of evaluations. The importance of environment, records, genetics, and conformation in selection are discussed. Note: Permission of instructor required.

Recent Term(s) Offered: fall 2023

ANSC 338 Introductory Livestock Evaluation and Selection 3 Hours

Fundamental selection criteria utilized in evaluating beef cattle, hogs, sheep, dairy cattle and horses. Oral and written evaluations are included. Note: Consent of instructor may be required.

Prerequisite(s): ANSC 140

Recent Term(s) Offered: fall 2023

ANSC 340 Meats and Meat Products 3 Hours

A non-technical course designed for the average consumer. The role of meats and meat products in human nutrition; meat substitutes; grading and inspection; identification and selection of wholesale and retail cuts of meat; care and storage of meat products are studied.

Prerequisite(s): ANSC 140

Course Fee: \$100

Recent Term(s) Offered: fall 2021; fall 2022; spring 2023; fall 2023

ANSC 342 Advanced Riding Maneuvers and Collection 3 Hours

Collection of a horse and application of certain advanced maneuver techniques, such as the side pass, spin, lead changed, sliding stops, and jumping.

Prerequisite(s): ANSC 232

Recent Term(s) Offered: None

ANSC 345 Principles of Animal Nutrition 3 Hours

Principles of nutrition basic to animal feeding; chemistry and physiology of nutrition: nutrient requirements for normal body functions.

Prerequisite(s): ANSC 140 and BIOL 120 and CHEM 107

Recent Term(s) Offered: fall 2021; fall 2022; fall 2023

ANSC 347 Animal Pathology 3 Hours

Distribution, nature, manner of dissemination, methods of control, prevention and eradication of infectious and parasitic diseases of domestic animals are discussed.

Prerequisite(s): ANSC 140 and BIOL 120

Recent Term(s) Offered: spring 2021; spring 2022; spring 2023

ANSC 350 Equine Career Opportunities 2 Hours

A comprehensive study of careers in the Equine industry. Interaction with Equine industry professionals, hands on learning opportunities, and insight into specific career paths will be provided.

Prerequisite(s): ANSC 130 and ANSC 131

Recent Term(s) Offered: None

ANSC 360 Equine Events Management 3 Hours

Fundamentals of managing equine and other livestock events. Involves active participation in preparing for and conducting WKU equine events. Lecture/lab.

Prerequisite(s): ANSC 130 and ANSC 131

Recent Term(s) Offered: None

ANSC 431 Dairy Production 2 Hours

Principles of nutrition and management and their practical application to commercial dairy herds are emphasized.

Prerequisite(s): ANSC 345 and ANSC 140

Corequisite(s): ANSC 432

Recent Term(s) Offered: None

ANSC 432 Dairy Production Laboratory 1 Hour

A laboratory course correlated with ANSC 431.

Corequisite(s): ANSC 431

Recent Term(s) Offered: None

ANSC 437 Physiology of Reproduction in Domestic Animals 2 Hours

Endocrinology and physiology of reproductive systems; anatomical, physiological and biochemical bases of reproduction; factors affecting means of improving efficiency of reproduction, artificial insemination, synchronized estrus and related topics are presented.

Prerequisite(s): ANSC 140 (may be taken concurrently) and BIOL 120 (may be taken concurrently)

Corequisite(s): ANSC 438

Recent Term(s) Offered: fall 2021; fall 2022

ANSC 438 Physiology of Reproduction in Domestic Animal Laboratory 1 Hour

A laboratory course correlated with ANSC 437.

Corequisite(s): ANSC 437

Course Fee: \$50

Recent Term(s) Offered: fall 2021; fall 2022

ANSC 439 Equine Reproduction and Breeding 3 Hours

Reproductive anatomy and physiology of the stallion and mare as they relate to modern breeding practices. Training in semen handling, artificial insemination, and neonatal care.

Prerequisite(s): (ANSC 330 and ANSC 331)

Recent Term(s) Offered: spring 2023

ANSC 440 Advanced Livestock Evaluation and Selection 3 Hours
(repeatable max of 3 hrs)

Genetic and environmental factors involved in selecting beef cattle, hogs, sheep, dairy cattle and horses. Techniques of evaluating the economically important traits of prospective breeding animals are emphasized. Students will participate in intercollegiate competition.

Note: Instructor's consent may be required.

Prerequisite(s): ANSC 338

Recent Term(s) Offered: spring 2022; spring 2023

ANSC 442 Beef Production 2 Hours

History and importance of the beef cattle industry; programs and areas of production, selection, breeding, feeding and management and common diseases are included.

Prerequisite(s): ANSC 345 and ANSC 140

Corequisite(s): ANSC 443

Recent Term(s) Offered: fall 2021; fall 2022; fall 2023

ANSC 443 Beef Production Laboratory 1 Hour

A laboratory course correlated with ANSC 442.

Corequisite(s): ANSC 442

Recent Term(s) Offered: fall 2021; fall 2022; fall 2023

ANSC 446 Animal Breeding 2 Hours

Application of genetic and statistical principles to breeding and improvement of farm animals; the role of selection in changing populations; effect of different mating systems upon improvement of farm animals are investigated.

Prerequisite(s): ANSC 140 and BIOL 120 and AGRI 291

Corequisite(s): ANSC 447

Recent Term(s) Offered: None

ANSC 447 Animal Breeding Laboratory 1 Hour

A laboratory course correlated with ANSC 446.

Corequisite(s): ANSC 446

Recent Term(s) Offered: None

ANSC 448 Animal Feeds and Feeding Practices 4 Hours (repeatable max of 4 hrs)

Livestock feeds and their nutrients; functions of and requirements for nutrients; evaluation of feeds, feeding practices and formulation of rations for all species of livestock are included; techniques involved in nutrition research; readings in current literature are presented.

Prerequisite(s): ANSC 345 (may be taken concurrently)

Recent Term(s) Offered: spring 2021; spring 2022; spring 2023

ANSC 458 Animal Growth and Meat Quality 3 Hours

Comprehensive overview of factors affecting animal growth, carcass composition, and meat quality.

Prerequisite(s): ANSC 140 and BIOL 120

Restriction(s): Enrollment limited to students with a semester level of Junior or Senior.

Recent Term(s) Offered: spring 2023

ANSC 475 Selected Topics in Agriculture 1-3 Hours (repeatable max of 6 hrs)

Special topics acquaint advanced undergraduate students with scientific developments of current interest in agriculture. Appropriate topic titles are assigned. Lecture and assignments vary with credit. May be repeated with change in content. Note: Consent of instructor required.

Recent Term(s) Offered: spring 2021; fall 2021; spring 2022; summer 2022; fall 2022; fall 2023