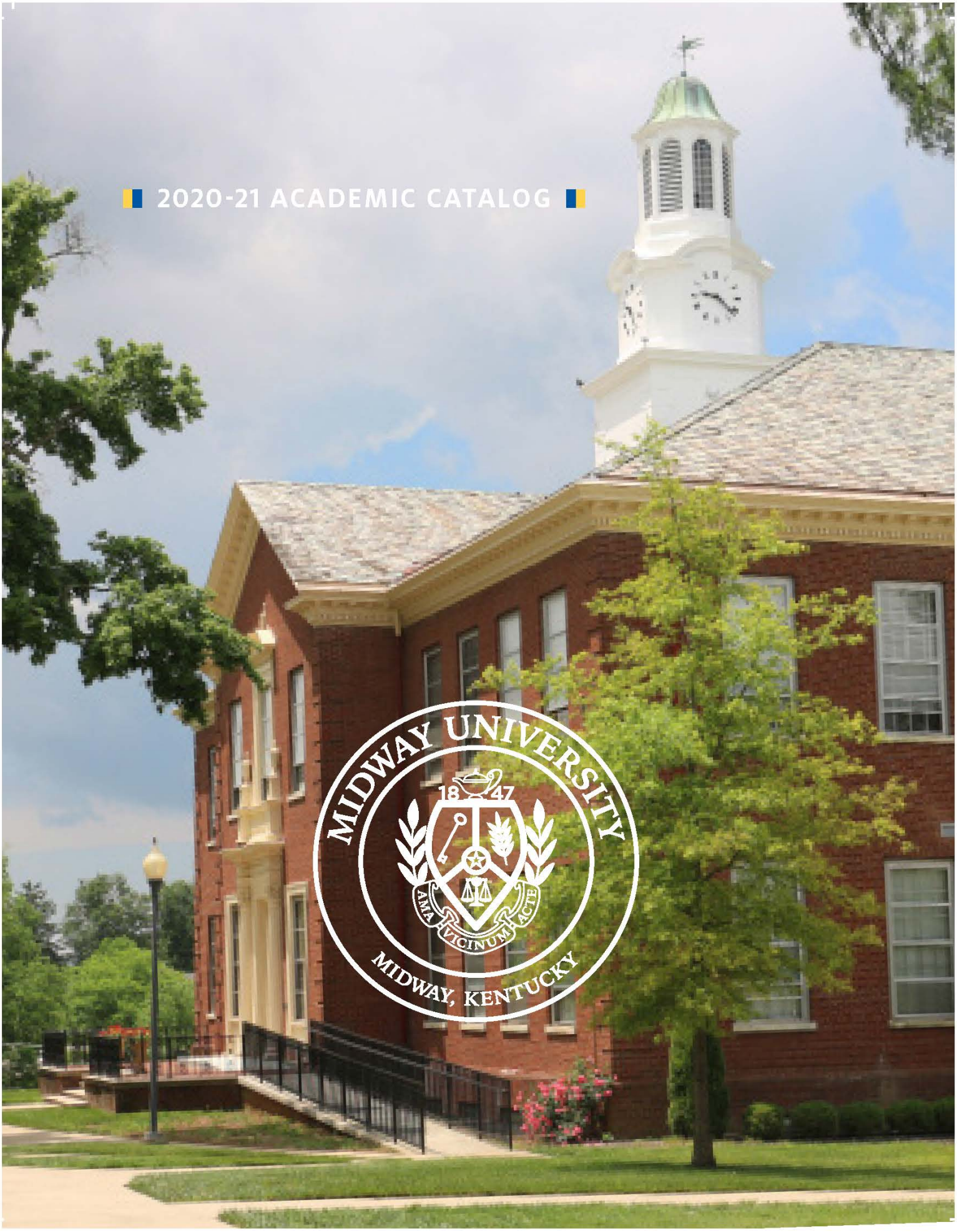
2020-21 ACADEMIC CATALOG



Midway University Course Catalog

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Applicants to the Equine Studies program (EQS) are admitted into Midway University through the Office of Admissions as pre-Equine majors.

Admission Criteria

To be fully accepted into the Equine Studies major, students must meet the following requirements by the end of the spring semester of the second academic year:

- Have completed Biology and Chemistry in high school with grades of C or above, or have completed Biology 103/104 or Chemistry 150/151 or higher at Midway University with a minimum grade of C in order to demonstrate acceptable levels of scientific knowledge.
- Complete EQS 109 and 111 with a minimum grade of C in order to demonstrate appropriate knowledge of management procedures in the University's equine facilities as well as work ethic, attitude, and ability to work with others. In addition to scheduled class time, students will be required to complete additional hours some afternoons during the week and one weekend a month at the University's equine facilities.
- Complete EQS 165 and 215/216 with a minimum grade of C to demonstrate basic understanding of the equine industry and basic equine anatomy and physiology.
- Demonstrate the ability to handle horses on the ground according to criteria developed by the Equine Studies faculty and staff.
- Cumulative GPA of 2.5 during first year of attendance
- Interview with committee of faculty, staff, and industry professionals.

Program Description

The Equine Studies program at Midway University seeks to prepare students to enter the equine industry. Students have opportunities to work with a variety of horses and to perform multiple tasks in a farm setting, thereby learning basic horse handling techniques as well as barn and farm management principles and practices. Through academic preparation in theories and methods, students acquire the basis on which to make decisions affecting horse care; and through more focused knowledge in science, horse rehabilitation, farm management, and business practices, students prepare for graduate school or for entry-level positions in their choice of professions within the equine industry. Students will also have opportunities to apply the knowledge gained in class through application on the University's farm.

Student Learning Outcomes of Program

Students who graduate with a degree in equine studies will be able to:

- implement and assess safe, ethical, and sustainable equine management practices
- communicate effectively to members of the equine industry, and to utilize emerging technologies related to the global equine industry
- demonstrate awareness of the human-horse bond and of diversity in the competitive and the non-competitive equine industries

- identify and evaluate equine anatomy and physiology and relate form to function and feeding strategy
- possess the practical knowledge, skills, and work ethic to work with a variety of horses
- ethically manage an equine facility
- accept the diversity of the equine industry, and be able to work with people from a variety of backgrounds without prejudgment

Courses

EQS 109 - Equine Farm Operations I

This hands-on practicum will familiarize the student with basic horse husbandry while fostering leadership skills, effective communication, and teamwork. Students will participate in daily work on the farm as part of the course requirements, including some weekends and evenings. This course is required for all pre-equine students in order to be considered for entrance into the Equine Studies program.

Grade Basis: L
Credit hours: 4.0
Lecture hours: 4.0

EQS 111 - Equine Farm Operations II

This course is a continuation of EQS 109. Students will continue to participate in daily work on the farm as part of the course requirements, with more scope of responsibility and emphasis on leadership and communication. Some weekend and evening participation in equine operations activities will be required. This course is required for all pre-equine students in order to be considered for entrance into the Equine Studies program.

Grade Basis: L
Credit hours: 4.0
Lecture hours: 4.0

Prerequisites:

- EQS 109 - Equine Farm Operations I

EQS 165 - Introduction to Equine Studies

This course will introduce students to a variety of aspects of the equine industry, with a heavy focus on career opportunities. Topics covered in this class include evolution of the horse and breed development, horse identification, careers with direct contact with horses, careers which support the equine industry, and the importance of internships, networking, and marketing when pursuing a career. This course is required for all pre-equine students in order to be considered for entrance into the Equine Studies program.

Grade Basis: L
Credit hours: 3.0

Lecture hours: 3.0

EQS 209 - Equine Farm Operations Management I

This practicum is designed to develop students' management skills by utilizing the Midway University equine facilities as a teaching model. Students will be expected to participate in daily equine farm operations management activities and decision-making under the supervision and guidance of an equine faculty or staff member. Some weekend and evening participation in equine operations management is a requirement of this course.

Grade Basis: L
Credit hours: 4.0
Lecture hours: 4.0

Restrictions:

- This course is for students who have been fully accepted into the Equine Studies program and have chosen the Horse Management concentration.

EQS 210 - Topics in Equine Management

This course is a survey of current topics in the equine industry. Topics of this course may include but are not limited to training theory, course design, event management, and history, development and use of specialized equipment. This course may be repeated provided that the content is different.

Grade Basis: L
Credit hours: 1.0
Lecture hours: 1.0

EQS 211 - Equine Farm Operations Management II

This course is a continuation of EQS 209, with emphasis on equine healthcare management and management of farm personnel. Students will continue to participate in farm management activities under the supervision and guidance of an equine faculty member. Some weekend and evening participation in farm operations management is a requirement for this course.

Grade Basis: L
Credit hours: 4.0
Lecture hours: 4.0

Prerequisites:

- EQS 209 - Equine Farm Operations Management I

Restrictions:

- This course is for students who have been fully accepted into the Equine Studies program and have chosen the Horse Management concentration.

EQS 214 - Equine Healthcare Management

Various aspects of healthcare management emphasizing a scientific basis for applied management decisions are addressed in this course. Common pharmaceuticals, their administration, control, and legal aspects to their uses in equine sports are identified. The veterinarian-owner-patient relationship is covered in context with the Veterinary Practice Act with emphasis on accurate communication between owner and veterinarian. Equine nursing management and pain identification are key components to maintaining ethical healthcare decisions. Finally, preventative care emphasizing factors for routine care such as disease control, de-worming and dental work are discussed.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

EQS 215 - Equine Anatomy and Physiology

This course is a general study of the anatomy and physiology of the horse. Students will learn about the skeletal, muscular, cardiovascular, respiratory, digestive, urinary, reproductive and nervous systems. The relation of form to function is emphasized throughout all systems. This course is required for all pre-equine students in order to be considered for entrance into the Equine Studies program.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 165 - Introduction to Equine Studies

EQS 216 - Equine Anatomy and Physiology Laboratory

This is the companion laboratory to EQS 215 and continues the introduction to the various systems of the horse. Students will study the various organs of the systems and their relationships to each other. This course is required for all pre-equine students in order to be considered for entrance into the Equine Studies program.

Grade Basis: L
Credit hours: 1.0
Lab hours: 1.0

Prerequisites:

- EQS 215 - Equine Anatomy and Physiology

EQS 226 - Equine Rehabilitation I

This course is a study of management and scientific theory in the rehabilitation and athletic performance of horses. Included in the course is a discussion of choice and application of the various

therapeutic modalities. Modalities covered include mechanical manipulation, electrophysical agents such as heat and cold, electrical stimulation, infrasound, and ultrasound. Students will be expected to spend time in the equine facility obtaining hands-on experience using therapeutic modalities as part of the course requirements. Prerequisites: EQS 215 and EQS 216.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 215 - Equine Anatomy and Physiology
- EQS 216 - Equine Anatomy and Physiology Laboratory

EQS 251 - Feeds, Feeding and Forages

This is a practical equine nutrition course designed specifically for students interested in management positions. Identification and use of grains, forages, supplemental feeds, and additives will be discussed. In addition, students will learn methods of assessing feed quality, feed value, and price as well as proper storage of feeds. Basic digestive anatomy, digestion, and ration formulation for various classes of horses and feed processing methods will also be discussed. Prerequisites: EQS 215 and EQS 216.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 215 - Equine Anatomy and Physiology
- EQS 216 - Equine Anatomy and Physiology Laboratory

EQS 307 - Equine Reproductive Management

Students will be responsible for identifying, assessing and interpreting scientific principles of equine reproduction and using their assessments to propose management decisions in an equine model. Topics for this course will include horse selection, mare and stallion management, foaling, neonatal care, reproductive diseases and disorders, and lactation. Prerequisites: EQS 215 and EQS 216.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 215 - Equine Anatomy and Physiology
- EQS 216 - Equine Anatomy and Physiology Laboratory

EQS 309 - Topics in Equine Studies

Topics in this course will be presented in a seminar format. Topics will change each time this course is offered and may include, but are not limited to horses in the arts, horse and human interaction, marketing, sales prep, event management, etc. This course, with a different topic, may be repeated.

Grade Basis: L
Credit hours: 1.0
Lecture hours: 1.0

Prerequisites:

- EQS 215 - Equine Anatomy and Physiology

EQS 314 - Writing in Equine Studies

In this course students will complete a sustained research and writing project related to their interests in equine studies. Analysis of the rhetoric and methodologies of research will also occur. Students will also explore other forms of writing appropriate to the equine industry. A grade of C or higher is required. Prerequisites: ENG 101 and ENG 102.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- ENG 101 - College Writing I
- ENG 102 - College Writing II

EQS 318 - Equine Behavior

Normal and abnormal horse behaviors, including stereotypes, will be discussed in this course. Students will learn how behavior affects the raising, training, and management of horses. Behaviors explored will include communicative, injective, sexual, social, aggressive, and abnormal behaviors. The evolution of the horse, its relationship with the environment and how this explains actions and reactions of the horse will also be explored. Prerequisites: EQS 215 and EQS 216.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 215 - Equine Anatomy and Physiology
- EQS 216 - Equine Anatomy and Physiology Laboratory

EQS 325 - Equine and Comparative Anatomy and Physiology

A study of the anatomy and physiology of the skeleton and joints, digestive, respiratory, cardiovascular, and endocrine and nervous systems. This course is also a comparative study of anatomy and physiological processes among farm species. Prerequisites: EQS 215 and EQS 216 and any Biology course with a laboratory.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 215 - Equine Anatomy and Physiology
- EQS 216 - Equine Anatomy and Physiology Laboratory

EQS 326 - Equine Rehabilitation II

This course is a continuation of EQS 226. Discussion of the various therapeutic modalities will be continued, with the addition of the role of controlled movement and loading in equine rehabilitation. Students will be expected to develop therapeutic and rehabilitative strategies for individual horses within the University's equine facility. Students will be expected to participate in rehabilitation and administration of therapy as part of the course requirements. A portion of this course may include traveling to facilities outside of the University to gain hands-on experience under the supervision of an equine faculty member.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 226 - Equine Rehabilitation I

EQS 327 - Pasture Management

This course focuses on the distribution of various forage crops and their adaptations to soil and climate. Also discussed are selection of forages, seeding rates and mixtures, forage productivity, and weed and pest control. Prerequisites: EQS 215, EQS 216, EQS 251 and any General Education natural science requirement.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 215 - Equine Anatomy and Physiology
- EQS 216 - Equine Anatomy and Physiology Laboratory
- EQS 251 - Feeds, Feeding and Forages

EQS 335 - Integrative Performance Clinical

Students will observe and apply integrative performance skills with emphasis on athletic maintenance. Procedures in care and clinical assessment, record keeping, and communication will be emphasized. This clinical experience will take place primarily at the Midway University equine facilities with opportunities for off-campus observations. Prerequisites: EQS 326 and EQS 356.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 326 - Equine Rehabilitation II
- EQS 356 - Exercise Physiology

EQS 337 - Equine Facilities Management

This hands-on class will provide the student with real life experiences in equine farm management. The student will participate in daily work at outside facilities within the equine industry. The course will also focus on the student's strengths and career goal. Current models are used to evaluate the student's strengths and how to best use in the work place environment. Student will apply the results of their strength assessment towards their career goals. Prerequisite: EQS 209 and EQS 211.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 209 - Equine Farm Operations Management I
- EQS 211 - Equine Farm Operations Management II

EQS 351 - Animal Nutrition

The digestive systems, nutritional requirements, formulated rations, and economical feeding programs for farm animals and selected companion animals are discussed. There will be an exposure to computerized ration balancing techniques, in addition to the principles of ration formulation by hand methods. Prerequisite: EQS 251.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 251 - Feeds, Feeding and Forages

EQS 356 - Exercise Physiology

This course is a comprehensive study of exercise physiology as it relates to anatomy, gait analysis, physiological response to training, and biomechanics. The effect of the rider on performance is also discussed. Prerequisites: EQS 215 and EQS 216 and any General Education natural science requirement.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 215 - Equine Anatomy and Physiology
- EQS 216 - Equine Anatomy and Physiology Laboratory

EQS 395 - Equine Internship

Internship courses allow practical application of classroom knowledge and intentional development of skills applicable to the student's professional growth. The internship experience requires 135 hours of relevant field work at an internship site related to their concentration, in addition to scheduled class meetings. Students will be under the supervision of faculty and site supervisors. Students will be expected to complete reflections and demonstrate learning through a final project or presentation. Internship courses are graded pass/fail. This course is restricted to junior or senior status. Students with more than one concentration will be expected to complete and additional internship related to the second concentration. This course may be repeated once for credit.

Grade Basis: P
Credit hours: 3.0

Restrictions:

- Junior or senior status

EQS 398 - Immersive Internship

This advanced internship course allows for practical application of classroom knowledge and intentional development of skills applicable to the student's professional growth. This internship requires full-time relevant field work at the internship site in addition to purposeful mentoring by a site supervisor and faculty supervisor. Students will be expected to complete reflections and demonstrate learning through assignments and a final project or presentation. Internship courses are graded as Pass/Fail. This course is restricted to Junior/Senior status. This course may not be repeated.

Grade Basis: P
Credit hours: 12.0

Restrictions:

- Junior or senior status
- May not be repeated

EQS 411 - Animal Ethics, Welfare, Rights, and Law

This course will be presented in a survey format. Topics will include ethical concerns regarding the animal rights and welfare movement and the impact of this movement on the equine industry. Prerequisites: EQS 318, PSY 180 or SOC 120.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 318 - Equine Behavior
- PSY 180 - General Psychology
- SCO 120 - Principles of Sociology

EQS 412 - Equine Facility Design

Students will be responsible for identifying design considerations and critically assessing facilities based on presented topics. At a minimum, topics will include farm layout, stable and housing design, manure management, safety and emergency planning, and environmental considerations for equine farms.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

EQS 426 - Equine Rehabilitation III

This course is a continuation of EQS 326. It is a case-based course with emphasis on hands-on application of rehabilitation techniques and therapeutic modalities. This course will require traveling to facilities outside of the University in order to obtain field experience working with athletic horses. All procedures will be performed under the supervision of an equine faculty member.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 326 - Equine Rehabilitation II

EQS 430 - Eastern Medicine

In this course students learn to evaluate the horse using concepts of eastern medical thought. Eastern veterinary medicine will be presented in comparison to the approach of western veterinarians. Topics discussed in this course include but are not limited to acupuncture/acupressure, energy therapies, aromatherapy, and the use of herbal therapies.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

EQS-435 - Equine Nutrition and Pharmacology

This is an advanced nutrition course which focuses on the biochemical aspects of nutrition. Nutrient metabolism as it relates to performance is covered in this course. Current research in equine nutrition will be incorporated into lectures, including application to practical management. Supplements, nutraceuticals, and pharmaceuticals used to aid in performance are also discussed. A class in organic chemistry or biochemistry is highly recommended before taking this course. Prerequisite: EQS 251.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

Prerequisites:

- EQS 251 - Feeds, Feeding and Forages

EQS 492 - Equine Studies Capstone

This course is the culmination of a student's undergraduate educational experience in Equine Studies. It integrates a liberal arts education with competency in the area of emphasis. Students will be expected to complete an independent project related to their interests in science, management, or business. Projects may include, but are not limited to, a research project, business plan, or other project as approved by the instructor.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

EQS 495 - Equine Senior Seminar

This capstone course summarizes the student's educational experience in Equine Studies at Midway University and prepares her for a leadership role in the equine industry. Prerequisite: senior status.

Grade Basis: L
Credit hours: 1.0
Lecture hours: 1.0

EQS 602 - Equine Entrepreneurship

This course provides an understanding of the scope of the equine industry and its economic value to society. The course introduces the management skills necessary for a successful venture development in the equine industry. Students will develop a business plan for a start-up equine venture.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

EQS 612 - Legal Issues and Risk Management in the Equine Industry

Students will learn to identify issues/situations in supervision and management, risks and liability, discrimination, and contracts.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

EQS 613 - Environmental Farm Management

In this class students will develop a working knowledge of agricultural environmental management. Topics include but are not limited to ventilation and manure management, rural development policies, and local land use planning. Soil and water management for pasture and crop production and environmental protection will also be included, as will development of nutrient management plans. These topics will be tied to the NAAEE standards and guidelines as well as to KCAS. (Recommended especially for elementary school teachers and for middle school teachers who teach in schools in which science is not offered every year.) Farm Management Plan: In the final assignment for the course connections with the KCAS will be made. Candidates will describe how each topic in the plan might be addressed at the following levels: elementary, middle school and secondary.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

EQS-622 - Ethics and the Equine Industry

This course provides an introduction to problems of moral philosophy in the equine industry. Ethical philosophies will be examined. Historically important and current theoretical approaches to ethics that provide systematic procedures for answering questions about right and wrong will be examined. The course will consider a variety of important issues such as immigration, animal rights, and euthanasia.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

EQS 632 - Marketing and Promotion

This course will focus on analyzing and producing a variety marketing and communication strategies for different types of equine businesses.

Grade Basis: L

Credit hours: 3.0
Lecture hours: 3.0

EQS 642 - Equine Studies Capstone

Students will develop a literature review and proposal of a question to be explored, select and employ appropriate methodologies to research, analyze, develop conclusions and recommendations, and submit a final capstone paper and present the results orally.

Grade Basis: L
Credit hours: 3.0
Lecture hours: 3.0

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