

AN343
Equine Husbandry
3 Credits

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AN343 Version: 1



Equine Husbandry

Calendar Description

The intent of AN 343 is to provide students in the Animal Science Technology - Equine major with knowledge and skills that enable them to make informed decisions pertaining to the physical well-being of horses in their care. In the Lab portion students apply the knowledge they have gained in AN-132 and AN-341 to train college owned horses for the purpose of resale as a part of AN-366-Student Managed Farm-Livestock II.

Rationale

This course is required for the Equine Science major of the Animal Science Technology program and is a prerequisite to AN 345. It is important to develop basic equine husbandry skills in order to ensure adequate care for horses in any equine business. Good nutrition, hoof care, conditioning, comprehension of soundness, and use of protective equipment are benchmarks for any equine professional in any discipline or equine business.

Prerequisites

AN341

Co-Requisites

AN365

Course Learning Outcomes

Upon successful completion of this course, students will be able to

1. provide adequate nutrition.
2. provide basic hoof care.
3. assess vital signs for animals in their care.
4. demonstrate a basic comprehension of common injuries for performance horses.

5. gain knowledge of how to reduce the risk of injury for horses during performance events, training, transporting and boarding.
6. work in a team environment to train horses or work cattle from horseback.

Resource Materials

Require Textbook(s):

None

Reference Textbook(s):

Agriculture and Agri-Food Canada. (2013). *National Farm Animal Care Council Code of Practice for the care and handling of equines*. Ottawa, Ontario. Equine Canada.

Novak, S., & Shoveller, A. K. (2008). *Nutrition and feeding management for horse owners*. Edmonton, Alberta: Alberta Agriculture and Rural Development.

<https://aaep.org/> (American Association of Equine Practitioners)

Conduct of Course

This course consists of 42 hours of lecture and 56 hours lab. Lecture is delivered in the classroom with the use of PowerPoints, videos and assignments. The lab component is conducted in the Equine Centre and used to further develop practical riding competencies which coincide with the skills required to start colts, handle cattle, competently fit, show or sell horses. Planned seminars, field trips or other activities may occur outside of scheduled class times.

The lecture time involves note taking, videos, guest lectures and discussions. The lab portion involves individual or group work with assigned livestock to complete required tasks. Basic training of a green horse has a large time component to it. Labs are 4 hours per week with lecture as needed. Additional riding times and instruction are available through AN 365-Student Managed Farm-Livestock I. Students are required to keep a notebook and pen in their locker at the arena for note taking. If students have started a colt for SMF they must obtain their instructors permission prior to any unsupervised riding. All working of project horses outside of class time must be done with a buddy system for safety reasons, never advancing past what the instructor has directed. The Stable Management portion consists of a regular Monday organizational meeting and daily chore times as directed in the handout, "Horse Unit Policies". Any deviation from the chore schedule needs to be approved by the instructor. Alteration of the chore schedule for the group should be done as a group at the Monday meetings.

Lab Requirements:

- I) **Clothing:** Students must wear coveralls in the cattle handling labs. Coveralls are not to be worn in the classrooms. Jeans or riding pants are required in the arena. No sweat pants for riding. Students are required to wear helmets while starting colts and they may only be removed once permission is received from the instructor. Should a student wish to continue wearing a helmet for the remainder of the course they are encouraged to do so.
- II) **Footwear:** Students must wear washable, steel toe, non-slip footwear in the cattle facility labs. Students not wearing proper footwear are not allowed in labs. Dirty footwear must be cleaned and disinfected when leaving farm facilities and when entering livestock barns. Boot washes are available for this and must be utilized. Students not adhering to basic hygiene regulations may be excused from lab participation. Students must wear appropriate riding boots during riding labs. Instructors reserve the right to approve or reject footwear, stirrups, or the combination of both in order to ensure rider safety.
- III) **Extras:** Decorative jewelry and related items must not be worn during labs or at any time while working with livestock. Cell phones are not to be used for personal use during labs.
- IV) **Improper conduct in lab is not tolerated.** Students may be asked to leave at the instructor's discretion.

Evaluation Procedures

| | |
|-------------------------|-----|
| Quizzes and Assignments | 20% |
| Lab | 20% |
| Midterm | 20% |
| Final Exam | 30% |

Grade Equivalents and Course Pass Requirements

A minimum grade of D (50%) (1.00) is required to pass this course.

| | | | | | | | | | | | | |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Letter | F | D | D+ | C- | C | C+ | B- | B | B+ | A- | A | A+ |
| Percent Range | 0-49 | 50-52 | 53-56 | 57-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80-84 | 85-89 | 90-94 | 95-100 |
| Points | 0.00 | 1.00 | 1.30 | 1.70 | 2.00 | 2.30 | 2.70 | 3.00 | 3.30 | 3.70 | 4.00 | 4.00 |

Students must maintain a cumulative grade of C (GPA - Grade Point Average of 2.00) in order to qualify to graduate.

Attendance

Classroom and laboratory attendance is considered vital to the learning process and as significant to the students' evaluation as examinations and reports, therefore absenteeism is recorded.

- a. Students having a combination of excused and/or unexcused absence of 20 percent or higher for the scheduled course hours can be required to withdraw and would then automatically receive a "RW" (required withdrawal) for the course, regardless of any other evaluation results. (RW is a failing grade).
- b. An excused absence is one that is verified with your instructor. Verification should be prior to the absence or the next class day following the absence. Verification of the absence may take the form of a note from your doctor/College nurse regarding illness, or a note from another instructor regarding a field trip or other activity, or authorization by your instructor following an in-person meeting. Be sure to contact your instructor and ask what they will require from you as verification for each absence. An unexcused absence is anything NOT verified by the instructor prior to the absence or the next class day following the absence.

NOTE: Any exceptions to the above attendance policy (e.g. timetable conflicts, work-related issues) must be approved in writing by the Department Chair prior to the beginning of the course.

It is the students' responsibility to know their own absentee record.

Normal hours are 8:30 a.m. to 6:30 p.m., with potential for evening courses, exams or extended field trips. Students are expected to be available for classes during these times.

Course Units/Topics

Unit 1: Equine Nutrition

Unit Outcome:

Upon successful completion of this unit, students will be able to choose the best feed ration based on their horse's age, weight and physiological requirements for specific activity levels and stages of reproduction.

Unit Objectives:

1. Estimate your horse's weight by using a measuring tape
2. Select a BCS for your horse using the (Heineke) system
3. Identify the amount of digestible energy found in specified feeds
4. Calculate their horse's DE requirement per day based on their weight and activity level
5. Discuss energy requirements based on activity and physiology of the horse

6. Identify average forage and concentration intakes for certain classes of horses
7. Identify crude protein requirements for horses based on their activity and physiology
8. Select feeding systems for specific regimes, identify which forages are best suited to each
9. Discuss pasture management for horses

Unit 2: Vital Signs

Unit Outcome:

Upon successful completion of this unit, students will be able to conduct basic examinations on horses and differentiate between normal and abnormal vital signs.

Unit Objectives:

1. Describe the normal temperature for a horse
2. Identify normal pulse rate for horses at rest using 3 locations.
 - Maxillary artery
 - Radial artery
 - Digital artery
3. Record respiration
4. Demonstrate how to identify proper gut sounds
5. Describe how to measure a horse's level of hydration
6. Describe healthy mucous membranes and infer condition based on color

Unit 3: Wound Management

Unit Outcome:

Upon successful completion of this unit, students will have a basic comprehension of wound management.

Unit Objectives:

1. List 4 stages of healing
 - Inflammation
 - Debridement
 - Repair
 - Maturation
2. List the steps to be taken for initial wound management and evaluation
3. Classify 4 Types of wounds
 - Puncture wounds
 - Incised wounds
 - Lacerations
 - Abrasions

4. Discuss wound treatment procedures
 - Wound Treatment
 - Debridement
 - Healing
5. Demonstrate a knowledge of correct bandaging techniques

Unit 4: Basic Lameness Assessment

Unit Outcome:

Upon successful completion of this unit, students will understand how to identify which part of the horse may be the source of a lameness.

Unit Objectives:

1. Differentiate between a veterinary lameness examination and performing a cursory lameness exam of your own
2. Describe the process and function of a veterinarian lameness/purchase exam
3. Categorize different conditions/injuries which can cause lameness
4. List and describe injuries and conditions of the foot
5. Differentiate between a primary and a secondary lameness
6. Define unilateral lameness
7. Define bilateral lameness

Unit 5: Hoof Care for Horses (20 hours)

Unit Outcome:

Upon successful completion of this unit, students will be able to perform basic hoof care for their horses.

Unit Objectives:

1. Describe the external anatomy of the horse's hoof
2. Differentiate between faults of the hoof and faults of confirmation
3. Describe the internal anatomy of a horse's hoof
4. Discuss horse shoeing practices commonly found in the horse industry
5. Discuss the correlation between hoof and pastern angle
6. Apply the knowledge gained to trim horse's hooves

Unit 6: Lameness and Common Injuries for Western Performance Horses

Unit Outcome:

Upon successful completion of this unit, students will be able to discuss and have an introductory understanding of common lameness problems within the equine industry.

Unit Objectives:

1. Classify different types of lameness in horses
2. Identify common causes of lameness
3. Describe the treatment options for specific types of lameness
4. Match symptoms to conditions for the following
 - Suspensory ligament injuries
 - Navicular
 - Laminitis
 - Stifle
5. Compile a list of injuries which are most common for each event, arrange the findings in order of occurrence
 - Racing
 - Cutting
 - Jumping
 - Roping
 - Dressage

Unit 7: Conditioning and Equipment for Injury Prevention

Unit Outcome:

Upon successful completion of this unit, students will have gained knowledge to best reduce the risk of injury for performance horses.

Unit Objectives:

1. Compile a list of protective equipment for horses
2. Identify the intended function of listed protective equipment
3. Apply wraps to horses' legs
 - Polo wraps (lab)
 - Standing wraps (lab)
 - Shipping wraps (lab)
4. Identify conditioning exercise for horses and explain their function
 - Suppling
 - Aerobic conditioning
 - Anaerobic conditioning
 - Hydrotherapy for horses
5. Outline which conditioning exercises are most common
6. Identify conditioning



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