Animal Science 420
Equine Production and Management
Spring 2010 Syllabus

Instructor: M. M. Vogelsang               Phone: 845-1562
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Hours: T 11:15-12:00, R 10:00-12:00, or by appointment

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Course Description

The goal of this course is to provide the upper level undergraduate student with the knowledge and skills for application of current management practices in the area of horse production and management. Emphasis will be placed on reproductive physiology, genetics, exercise physiology and anatomy as these topics pertain to the efficient production of horses.

It is recommended that students have taken introductory or general courses in horse management, animal reproduction, breeding and genetics and animal physiology. Basic horse handling skills are beneficial but proficiency in riding and training are not necessary.

Objectives

1. To provide current information in equine reproduction, genetics, exercise physiology and management.
2. To assist and challenge the student to develop his/her own concepts of the management of equine reproduction, genetic progress, exercise/training of horses for the production of useful, marketable horses for the industry.
3. To provide the student the opportunity to develop some of the skills relevant to management and production of useful, functional, marketable horses.

Learning Outcomes

By the end of the semester, the student should have knowledge of the practices used in management of an equine production (breeding/training) facility. More specifically, the student should be able to

- identify acceptable qualities and criteria for breeding in mares and stallions
- recognize pre-partum characteristics of foaling
- assist mares and foals at parturition and in the post-partum period
- assess level of fitness in horses in performance events
- develop a conditioning program for horses to improve fitness
- understand the importance of specific genetic disorders in the breeding population
- understand basic concepts/relationships of anatomical systems in the horse.
Absence Policy

Roll will be taken daily. More than 3 unauthorized (Student Rules 7.1) absences will result in lowering of your final grade by 1 letter grade. No unauthorized absences are granted. Authorized absences do not excuse the student from any course work. Permission to make up missed work will be granted only for authorized absences arranged in advance of the absence. In case of emergency, illness or death in the family, it is the student’s responsibility to notify the instructor as soon as possible. In case of absences due to illness, the student must present verification from the University Health Center or family doctor. Work missed due to unauthorized absences will not be made up and a grade of zero will be recorded. Work not made up will be given the same grade of zero. For further clarification, see http://student-rules.tamu.edu/rules7.htm

Exams and Grading

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<thead>
<tr>
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<th>Points</th>
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<tbody>
<tr>
<td>Exams (3)</td>
<td>300</td>
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<tr>
<td>Lab Assignments, Project &amp; Attendance</td>
<td>400</td>
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<tr>
<td>Final Exam (comprehensive)</td>
<td>100</td>
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<td>Total:</td>
<td>800</td>
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Letter grades will be given as follows:

- A 90 - 100%
- B 80 - 89%
- C 70 - 79%
- D 60 - 69%
- F Below 60%

Final grades will be calculated as a percentage of 800 possible points.

Assessment of students will include written exams in which students answer questions regarding information from lectures, textbook and handout material, practical evaluations in lab of specific tasks via demonstration of skills, and foaling project report indicating students involvement, participation and comprehension of pre-and post-partum mare and foal care.

Lecture Exam Schedule

- Exam 1 February 24
- Exam 2 April 7
- Exam 3 April 30
- Final exam May 12, 10:30-12:30

Textbook (strongly encouraged)

Additional References (good for horse owner’s library)

Grand Prairie, TX
W. B. Saunders, Philadelphia, PA

Topics to be covered

Reproduction: Current status of breeding technology, mare and stallion anatomy and
physiology, methods for controlling estrous cycle, physiology of pregnancy,
parturition
  Chapters 14, 15, 16
Genetics: Breeding systems, genetic disorders, coat color
  Chapter 17
Exercise physiology: Adaptation of body systems to exercise and to training,
  thermoregulation, aerobic and anaerobic training regimens, evaluation of training
  progress
  Chapter 6, pp260-269; also Chapter 12, pp 435-459
Anatomy: Skeletal and muscular anatomy with respect to movement and soundness,
  foot, tooth
  Chapter 2, 8