Course description:
The course will review the history of the horse from the prehistoric era to present day, with a focus on the development and contributions of horse breeds in the US and state horse industry. Roles of breed associations, principles of genetics, selection of desired traits, genetic abnormalities associated with specific breeds, and matching breeds to disciplines will be discussed.

Instructor:
Dr. Rhonda M. Hoffman
Professor – Animal Science/Horse Science
E-mail: rhoffman@mtsu.edu        URL: http://www.mtsu.edu/~rhoffman
I will be dividing my time between my offices at the Horse Science Center and the Stark Agribusiness and Agriscience building. Office hours will be posted on each door. I have an open door policy, so if I am in and the door is open, please feel free to come in. If you need a guaranteed meeting time, please make an appointment.

Text:
It is recommended that you purchase a 3-ring binder to keep your notes organized. In addition, the course will be supplemented with literature from breed associations and references to internet sites of interest. The Breeds of Livestock pages posted by Oklahoma State University provide a good start in a search for information on breeds of horses: http://www.ansi.okstate.edu/breeds/horses/ The International Museum of the Horse site may also be useful: http://imh.org/horse-breeds-of-the-world/ Another extensive list of horse breeds may be found on Wikipedia: http://en.wikipedia.org/wiki/List_of_horse_breeds

Course objectives:
The objectives of this course are to help you to be able to do the following:
- Learn to identify and appreciate basic body types, breeds and suitable uses of horses, respective of breed and type.
- Understand principles of inheritance, genetic relationships and selection for desired traits.
- Become familiar with genetic abnormalities, lethals and undesired traits associated with some breeds and breeding programs.
- Understand the roles of breed associations as well as resources available in the US and Tennessee horse industry.
Evaluation procedures:
- Three in-class Exams, including written and visual components, such as identification of horse color, breeds, etc on slides. 600 pts
- Ten Quizzes, 25 pts each (eight for credit). The lowest two quiz scores will be dropped from the average.
- Class project (guidelines to follow) 200 pts

Grading scale:
- ≥ 90% = A
- 86–89% = B+ : 80–85% = B
- 76–79% = C+ : 70–75% = C
- 66–69% = D+ : 60–65% = D
- < 60% = F

Attendance policy:
Attendance for lecture will not be maintained; however, all exam information will be taken directly from lecture materials. If you miss class, it is your responsibility to obtain missed lecture notes and supplemental handouts. While there is a lot of information included in the course handout pack, there is also a lot of additional information that you can get only by attending class. Any additional notes taken during missed class(es) must be acquired from your peers.

Make-up exams and quizzes will not be allowed unless an absence is excused, such as in the case of family emergency, illness (with doctor’s note), university extracurricular activities, or other extenuating circumstances approved by the instructor on a case-by-case basis. If you know that you will miss an exam/quiz, you must let me know prior to and no later than the day of the exam/quiz. If you are sick, please take care of yourself and see your doctor or go to student health services (and bring me a note or receipt dated on the day that you missed).

Make-up exams and quizzes must be completed in a timely manner. It is strongly suggested that you do everything you can to complete what you missed before the next class period if at all possible. I do my best to return graded material to the class in a timely manner, usually by the next class period. It is not fair to the rest of your class to make them wait to receive their exam/quiz grade so that you can complete your missed work. If you do not complete the make-up in a timely manner, you may end up forfeiting the points or be required to take penalty points off of the total possible.

Having worked my own way through college, I am well aware that you may have work commitments; however, your work schedule is not an excuse for missed classes, incomplete or poor quality work. Two lowest quiz scores dropped from the average allow some latitude for unexcused absences.
Classroom policies:
*Cell phones should be turned off or silenced prior to entering the classroom.* Individual conversations and text messaging during lecture periods are disrespectful and disruptive to the rest of the class. Those who are persistently disruptive during lecture may be asked to leave the classroom.

During classes held in the barn or arena (announced in class), you are expected to wear appropriate clothing to ensure your comfort and safety when working around horses. Shoes should cover your feet completely and have a hard or sturdy covering over the toe (i.e. no open-toed or open-backed shoes, no light canvas or cloth shoes).

Discussions involving several horse breeds are a major aspect of this class. Naturally, many of us have a favorite breed as well as an un-favorite. Each breed has positive and negative attributes, and there are always those horses (or owners) that give a particular breed an outstanding reputation…or a very bad one. As a rule, horse owners passionate about their favorite breed tend to be critical of other breeds, and that leads to division in the horse industry overall. That being said, unconstructive criticism or making excessive fun of a particular breed is not helpful in this classroom.

Academic misconduct:
It is expected that all work you complete for this course is your own. The University policy for academic misconduct will be followed. Academic misconduct includes the following behaviors: plagiarism, cheating, fabrication, or facilitating any such act. For purposes of this section, the following definitions apply:

1) **Plagiarism.** The adoption or reproduction of ideas, words, statements, images, or works of another person as one’s own without proper acknowledgment.

2) **Cheating.** Using or attempting to use unauthorized materials, information, or study aids in any academic exercise. The term academic exercise includes all forms of work submitted for credit or hours.

3) **Fabrication.** Unauthorized falsification or invention of any information or citation in an academic exercise.

4) **Facilitation.** Helping or attempting to help another to violate a provision of the institutional code of academic misconduct.

Any student suspected of committing academic misconduct may be asked to meet with me to discuss the situation. If you are found responsible for committing an act of academic misconduct, you will be given a failing grade for the semester and reported to the Director of ABAS and the Assistant Dean for Judicial Affairs and Mediation Services for disciplinary action.
Do you have a lottery scholarship?
Do you have a lottery scholarship? To retain Tennessee Education Lottery Scholarship eligibility, you must earn a cumulative TELS GPA of 2.75 after 24 and 48 attempted hours and a cumulative TELS GPA of 3.0 thereafter. You may qualify with a 2.75 cumulative GPA after 72 attempted hours (and subsequent semesters), if you are enrolled full-time and maintain a semester GPA of at least 3.0. A grade of C, D, F, or I in this class may negatively impact TELS eligibility. Dropping a class after 14 days may also impact eligibility; if you withdraw from this class and it results in an enrollment status of less than full time, you may lose eligibility for your lottery scholarship. Lottery recipients are eligible to receive the scholarship for a maximum of five years from the date of initial enrollment, or until a bachelor degree is earned; students who first received the lottery scholarship in Fall 2009 or later will additionally be limited to 120 TELS attempted hours. For additional Lottery rules, please refer to your Lottery Statement of Understanding form, review lottery requirements on the web at http://www.mtsu.edu/scholarships/telsconteligibility_scholarships.shtml or contact the Financial Aid Office at 898-2830.

Reasonable accommodations for students with disabilities:
ADA accommodation requests (temporary or permanent) are determined only by Disabled Student Services. Students are responsible for contacting the Disabled Student Services Office at 615-898-2783 to obtain ADA accommodations and for providing the instructor with the Accommodation Letter from Disabled Student Services.

Important dates for Fall 2011:
August 29: Classes begin.
September 1: Deadline for students to add a class on RaiderNet.
September 5: Labor Day – no classes.
September 9: Deadline for students to drop a course without a grade.
October 15–18: Fall Break – no classes.
November 2: Deadline for students to drop a course with a grade of “W”.
November 24–27 Thanksgiving holiday – no classes.
December 2: Deadline for students to withdraw (all classes) from the University.
December 7: Last day of classes.
December 8: Study Day.
December 9–15 Final exams.
December 17: Commencement.
December 19: Deadline for professors to turn in final grades, 9:00 a.m.

The Fine Print:
The instructor reserves the right to modify the information in this syllabus if deemed appropriate during the course of this class. Any modifications will be announced in class with a reasonable time frame considered for planning purposes.
## Tentative Course Outline:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>August 30</td>
<td>Class introduction</td>
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<td>History of the horse. Disappearance and reestablishment of horses in North America. Importance of horses through history.</td>
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<td>Sept 5</td>
<td>Labor Day — No class</td>
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<td>Body types. Motivation for early development of US horse breeds.</td>
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<td>Principles of genetic inheritance, review of terms and genetic relationships, qualitative and quantitative traits</td>
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<td>Discrete (Mendelian) inheritance, dominant, recessive, epistasis, incomplete dominance, co-dominance</td>
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<td></td>
<td>Breeding systems: linebreeding, inbreeding, outbreeding, cross-breeding, hybrids, heterosis</td>
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<td>Coat color genetics: Basic coat colors and genetic selection.</td>
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<tr>
<td>Sept 29</td>
<td>EXAM 1</td>
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<td>Arabians, Thoroughbreds, Standardbreds</td>
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<td></td>
<td>Coat color genetics: Epistatic traits, dilutions, additive genes, and genetic lethals associated with coat color</td>
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<td>Oct 15–18</td>
<td>Fall Break — No class</td>
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<td>Quarter Horses, Minis</td>
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<td>Genetic abnormalities associated with various breeds or types will be discussed throughout the course.</td>
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<td>Genetics of white and patterned markings. Paints, pintos, Appaloosas</td>
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<td>Oct 27</td>
<td>EXAM 2</td>
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<td>Saddle type and Gaited breeds, Spanish influence</td>
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<td>Warmbloods and keurings. Friesians, Fjords, Icelandic Horses &amp; others</td>
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<td>What breed associations do for you</td>
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<td>Draft horses, Ponies</td>
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<td>Nov 24-27</td>
<td>Thanksgiving Break — No class</td>
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<td>Should we (or not) develop more breeds? (&quot;Labradoodles?&quot;)</td>
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<td>“Designer” horses or more likely, “Grade?” Current issues in the industry</td>
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<td>Dec 6</td>
<td>EXAM 3</td>
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<tr>
<td>Dec 13</td>
<td>FINAL EXAM Tuesday, Dec 13, 8:00–10:00 am. Final Presentations Due.</td>
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### Quiz Dates:

- Sept 8
- Sept 22
- Oct 13
- Nov 3
- Nov 17
- Sept 15
- Oct 6
- Oct 20
- Nov 10
- Dec 1