



Equine Nutrition

AGRI 5379

Fall 2017 Syllabus

Part 1: Course Information

Instructor Information

Instructor: Jessica Suagee-Bedore, Ph.D.

Office Hours: Appointment only, schedule by email.

Office: Pirkle Engineering Technology Center, Room 450C.

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Office Telephone: 936.294.1216

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Course Information

Course meeting time: MWF from 9-9:50

Course location: Pirkle 300B

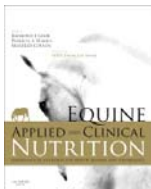
Course Description

This course focuses on the nutritional management and nutrient requirements of horses at varying stages of life. Lectures will present information on the equine digestive tract, types of feeds provided to horses, commercial feed production and regulation, and current research topics.

Textbook & Course Materials

Course packet, Eagle Graphics

Text (Optional)



Geor, R. J., Harris, P. A., Coenen, M. (2013). *Equine Applied and Clinical Nutrition* (1st ed). Atlanta, GA: Elsevier, Inc.
ISBN: 978-0—7020-3422-0

Available at Amazon.com.

Course Structure

This course will be delivered face-to-face in three weekly, 50 minute lectures. In Blackboard (<http://shsu.blackboard.edu>), you will access additional course materials and resources. Post lecture quizzes will be given on Blackboard. Examinations will be given via Blackboard, but will occur during the lecture

period. Print copies will be made available for those without laptops, smartphones, or tablets.

Technical Requirements

You must have access to a personal computer or a computer in which you have administrative rights so that you may install necessary plugins as the need arises (Java, Applet, etc.). See the Technical Requirements website, <http://online.shsu.edu/campus/support-desk/index.html#system-requirements>, for full recommendations on system and browser requirements.

- Internet connection (DSL, LAN, or cable connection is desirable to provide uploads of 1 mbps and downloads of 2 mbps)
- Preferred web browser: **Safari, Chrome, Internet Explorer, Microsoft Edge**
- An active SHSU Student Username and Password
- Purchase of TopHat software.

Technical Assistance

The team at SHSU Online provides technical support for Blackboard through a variety of methods.

Website: Technical Support, <http://online.shsu.edu/campus/support-desk>

Phone: 936-294-2780 or toll free 1-877-759-2232

Email: blackboard@shsu.edu or you can chat with a technician while inside your Blackboard course.

Below are some helpful resources if you wish to explore on your own.

- New students should start with the [Online Student Orientation](http://distance.shsu.edu/current-students/orientation.html)
<http://distance.shsu.edu/current-students/orientation.html>
- A list of other helpful services can be found on the [Student Resources](http://distance.shsu.edu/current-students/resources.html) page
<http://distance.shsu.edu/current-students/resources.html>
- Blackboard Learn™ provides a variety of video tutorials at [Student Videos](https://help.blackboard.com/en-us/Learn/Reference/Blackboard_Learn_Videos/Student_Videos)
https://help.blackboard.com/en-us/Learn/Reference/Blackboard_Learn_Videos/Student_Videos



Part 2: Course Objectives

This course focuses on the nutritional management and nutrient requirements of horses at varying stages of life. Lectures will present information on the equine digestive tract, types of feeds provided to horses, commercial feed production and regulation, and current research topics. The student will be able to:

- Apply the equine body condition scoring system to a variety of horses and use the BCS system to classify horses as healthy or unhealthy
- Identify the parts of the equine digestive system and summarize the function of each
- Summarize and compare the roles of hay and concentrates in equine diets
- Critique the nutritional content of common feedstuffs
- Summarize feed manufacturing processes, identify required components of feed labels, and explain the purposes of government control of horse feeds
- Summarize the nutritional requirements of horses at various life stages and levels of work
- For each classification of horse (maintenance, work, growth, lactation), evaluate the nutritional quality of commonly fed rations and implement ration balancing procedures to develop appropriate diets
- Implement procedures for locating scientific journal articles, evaluate the role of nutritional supplements based on the scientific principles of nutrition
- Read and review current literature in equine nutrition
- Complete a graduate research project from a list of possible projects



Part 3: Unit Outline/Schedule

This course will consist of **three** major learning units. At the end of each lecture there will be an open notes quiz available on Blackboard. Schedule is subject to change.

Unit I: Nutritional foundations.

1. Course introduction, overview of equine nutrition
2. Overview of equine digestion, terminology, classifications of horses and feed
3. Chemistry of carbohydrates
4. Chemistry of fats and proteins
5. Energy production pathways
6. Digestion of carbohydrates
7. Digestion of fats, proteins, micronutrients
8. Laboratory analyses, reading a forage analysis, basic calculations
9. Feeding starch and sugar to horses
10. Feeding fat to horses
11. Feeding protein
12. Vitamins
13. Minerals
14. Nutritional calculations
15. Integrated metabolism
16. EXAM 1: September 29th

Unit II: Feedstuffs.

17. Water
18. Feed ingredients and types of complimentary feeds
19. Feed regulations and feed manufacturing
20. Fresh forages
21. Preserved forages
22. Alternative roughages
23. Balancing forages and complimentary feeds
24. Complete feeds
25. Nutraceuticals
26. Exam 2: October 23rd

Unit III: Feeding management.

27. Ration balancing basics
28. Nutritional evaluation techniques
29. Maintenance and light work horses
30. Hard keepers
31. Metabolic response to starvation
32. Easy keepers
33. Obesity and Equine metabolic syndrome
34. Aging horses and inflammaging
35. Stallions
36. Growing horses

- 37. Breeding mares
- 38. Lactating mares
- 39. Athletes
- 40. Donkeys and mules
- 41. Ponies and drafts
- 42. Final Exam (Exam 3): Wednesday, December 6th 9:30 – 11:30



Part 4: Grading Policy

Graded Course Activities

The course will consist of three, online, unit exams, post-lecture assessments, and assignments. Grades will be determined based on the average of each category, with the lowest 5 quizzes, and lowest 1 assignment dropped.

Percentage	Item	Description
40%	Examinations	Two midterms and a final will be given. Exams may be cumulative, but will focus mostly (at least 85%) on material covered leading up to that exam. The final exam will be cumulative and will be weighted equally across material covered during the semester.
20%	Assignments	Assignments may include, but are not limited to, discussion board posts, ration formulation, diet evaluation, problem solving, and body condition and topline scoring. Some lectures will include a small assignment, which may be graded for participation, correctness, or adequacy of critical evaluation, depending on the nature of the assignment.
40%	Graduate research project	Could include: developing a research proposal, writing a series of extension fact sheets, developing marketing materials for a new equine nutrition product, writing a literature review, or other relevant projects of equivalent work.
100%		

*Appropriate modifications can be made to grading scheme as deemed necessary by the instructor.

Late Work Policy

Pay close attention to deadlines-there will be no make-up assignments, quizzes, exams, or other course materials accepted beyond the due date without instructor approval and advanced notification. The instructor will NOT be responsible for sending reminders of open and close dates/times for learning units, quizzes, or exams. Computer technical difficulties or internet malfunctions will not be considered as excuses for missed assignments.

Letter Grade Assignment

Final grades assigned for this course will be based on the percentage of total points earned and are assigned as follows:

Letter Grade	Percentage	Performance Level
A	90-100%	Excellent Work
B	80-89%	Good Work
C	70-79%	Average Work
D	60-69%	Poor Work
F	0-59%	Failing Work



Part 5: Course Policies

Attendance

1. Regular and punctual attendance is expected of each student in the Department of Agricultural Sciences at Sam Houston State University.
2. Excused absences must be documented by the student with a letter of confirmation from the sponsoring student organization, professor or doctor. Exemptions will include participation in departmental activities when prior approval is attained from the Department Chair.
3. No exams or assignments will be given at alternative times unless arrangements are made with the professor/instructor before the scheduled activity occurs.

ALL correspondence to the student will be via the student's SHSU email account and Blackboard (Bb).

Participation

Students are expected to participate in all activities as listed on the course syllabus or assigned during the semester.

Code of Conduct

As a member of a community dedicated to learning, inquiry, and creation, the students, faculty, and administration of Sam Houston State University live by principles that require all members to be conscientious, respectful, and honest. Students should also understand that honest conduct reaches far beyond just academic honesty.

You will find that your overall success in distance education courses can come from building a strong rapport with your classmates and instructor. This starts with demonstrating netiquette (online etiquette) by respecting others' opinions, perspectives, and values through all the course communication.

Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. **Cellular phones should be set to vibrate before class begins. If a student is caught texting during lecture they will be asked to leave the classroom. A student must dismiss themselves from the classroom if they need to receive an incoming or make a call- please inform the instructor prior to the class beginning.**

Students are prohibited from eating in class, using tobacco products, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with University policy.

Completing Assignments

All assignments for this course will be submitted electronically through Blackboard unless otherwise instructed. All quizzes and tests must be completed by the assignment due date and time. **No make-up or re-take opportunities will be granted.** Any special circumstances must be arranged with the instructor prior to the due date.

Understand When You May Drop This Course

It is the student's responsibility to understand when he/she may need to consider unrolling from a course. Refer to the SHSU Academic Calendar for dates and deadlines concerning registration.



Required Policies at SHSU

The following are mandatory policies and procedures practiced by Sam Houston State University and can also be found at <http://www.shsu.edu/syllabus/>.

Academic Dishonesty

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

Treat the online assessment as you would a face to face exam. You may only use resources that your instructor specifically says are allowable. If there are none listed, then that means you must study and only use your own knowledge gained. Specifically, this means no use of text material, web search, cell phone, assistance from a friend, etc. **If, upon review of the video and audio, and a student is caught engaging in an academic dishonest activity they will be given a zero (0) on the eQuiz/eExam/assignment of the associated activity and subject to dismissal and/or F in the course and subject to disciplinary actions from Dr. Bedore and the University.**

Accusations of academic dishonesty, proceedings, and subsequent disciplinary actions are addressed in The Texas State University System, Board of Regents policy on [Academic Honesty, Chapter VI, Subsection 5.3, "Academic Honesty"](#) and in the University's [Academic Policy Statement 810213](#).

Student Absences on Religious Holy Days Policy

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examination, for the observance of a religious holy day, including travel for the purpose. Section 51.911(a)(2) defines a religious holy day as: "a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20..." A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University Policy 861001 provide the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe a religious holy day shall present to each instructor

involved a written statement concerning the religious holy day. The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed. This policy is fully addressed in [Academic Policy Statement 861001](#).

Students with Disabilities Policy

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance are expected to visit with the [Services for Students with Disabilities](#) office located in the Lee Drain North Annex and can be contacted by phone at 936-294-3512 (Voice), 936-294-3786 (TDD), or via email at disability@shsu.edu. They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Counseling Center and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Counseling Center. This policy is fully addressed in [Academic Policy Statement 811006](#).

Visitors in the classroom

Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance. Students wishing to audit a class must apply to do so through the Registrar's Office.