

EQSC 342: Equine Nutrition

This course provides the student with exposure to equine nutrition and health according to the stage of development, use and training, as well as equine husbandry, ration formulation, feeding practices and digestive disorders.

Objectives/ Rationale:

- Develop an understanding of equine nutrition and health throughout various phases and stages of life
- Recognize and discuss primary anatomical structures and corresponding functions of the equine gastrointestinal tract
- Identify and critique nutrients and common feed sources
- Develop feed rations to meet nutrient requirements
- Identify clinical symptoms of metabolic diseases in equine

Meeting Times: Tuesday and Thursday (TR); 1pm-2:15pm

Meeting Location: EQLB 005

Instructor Information:

Instructor: Landon Sullivan, PAS Office Location: AG/ET 233G

Office Hours: ~9am-9:50am (233G); 2pm-2:50pm (AnSc Lab)

University Email Address: <u>Landon.Sullivan@tamuc.edu</u>

Suggested textbooks and materials:

Materials: 70-page spiral notebook and writing utensil

Text: various; not required

Resources Needed: Students should obtain a 70-page spiral notebook and writing utensil to be utilized in every class.

Instructional Method:

- Notes should be taken daily.
- Daily quizzes will be given with no notice (students should be prepared to take one each class).
- A midterm and final exam may be assigned OR exams following discussions of systems
- Article summaries, power point presentations, field experience, quizzes and other projects may be assigned at any time throughout the course.

Student Learning Outcomes (SLOs):

At the completion of this course, successful students should be able to:

- Discuss the history and evolution of equine and their conversion of cellulose to energy
- List and describe traits of body condition score (BCS) and execute the practice of assigning BCS to determine overall health and condition
- List and describe traits of manure score and execute the practice to determine overall health and condition
- Illustrate, identify and discuss the primary structures and components of the equine gastrointestinal tract
- Discuss Volatile Fatty Acid (VFA) production in the horse
- Discuss glycolysis and gluconeogenesis
- Express your knowledge of an animals need for nourishment
- List the six essential nutrients and briefly convey the primary role/ purpose of each
- Recognize the primary use of the horse (maintenance, work, growth, lactation), and evaluate the nutritional quality of commonly fed rations, as well as implement ration balancing procedures to develop appropriate diets
- List common feed ingredients and the nutritional value of major nutrients in those
- Identify credible sources of information for equine nutrition and health
- Express further knowledge of vitamins; distinguish between fat soluble and water soluble
- Express further knowledge of minerals; distinguish between macro and micro
- Discuss roughages
- Discuss concentrates
- Discuss protein supplements
- Define the following terms in regards to Animal Nutrition: CP, TDN, ME, NE, NPN, DM, ADF, ADIN, Anion, Cation, DDM, NFE, TMR
- Describe the National Research Council
- If a component of the nutritional requirement of an animal requires 15% CP, what would the ration's total parts of soybean and corn be (SBM=45% and C=10%) (10 pts)
- What converts cellulose?

Assessment Techniques:

- Pre-evaluation
- daily quizzes
- course portfolio
- midterm evaluation
- final evaluation

Dress and Conduct:

Students are expected to wear or have immediate access to clothing practical for handling livestock, including but not limited to: boots (shoes that cover and protect entire foot), pants and shirts that protect skin of extremities as well as a hat (caps or some type of lid to protect eyes and cranium).

In the event we travel off campus, students are expected to exhibit courtesy, respect, kindness and grace to all participants and hosts; failure to represent TAMUC in a professional manner during such an event can result in administrative withdrawal from the course or further disciplinary action.

Course Requirements and Grading:

Portfolio: 20%

The Journal grade is the grade of the students' notes (70-page spiral notebook) completed throughout the course. The journal/portfolio will be graded based on the contents of notes presented each day, organization, and overall appearance.

• Rubric for Portfolio: Complete 20%; Chronological Order 20%; Legible 20%; Condition 20%; Submitted Timely 20%

Daily Assignments/ Quizzes: 30%

Daily assignments/ quizzes are assigned each day to review information portrayed in the previous lesson and bring students to a teachable moment for the new/ next lesson.

Mid Term: 10%

A midterm examination may be administered to determine the students' level of knowledge of the information presented in the course.

Final: 10%

A final exam may be administered on the first day of class as well as according to the Texas A&M University in Commerce, Texas approved final exam schedule

Projects: 30%

Article summaries, power point presentations, field experience, quizzes and other projects may be assigned at any time throughout the course

The point outline is tentative and is subject to change at the instructor's discretion. The guideline below is applicable to the actual total amount of points given.

Grading Scale (%)	
90 – 100	A
80 – 89	В
70 – 79	С
60 – 69	D
Below 60	F

Course Policies: Technology and Media

- Cell Phones the use of a cell phone is acceptable during the duration of this course BUT
 <u>noise from a cell phone is not tolerated</u>. Students should expect to be dismissed from
 class upon engaging in talking or texting on cell phone devices
- Lap Tops, Tablets are also welcomed but the majority of notes, daily assignments, quizzes and exams must be handwritten
- Social Media photos and videos recorded during lecture or any field/laboratory exercises are **NOT** to be shared via social media without the direct consent of the instructor. Posting intellectual property can result in severe legal and academic consequences.

TECHNOLOGY REQUIREMENTS LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:

https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.

The Code of Student Conduct is described in detail in the Student Guidebook.

https://inside.tamuc.edu/campuslife/campusservices/studentRights/Code%20of%20Conduct.aspx Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

 $\underline{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf$

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

 $\frac{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf}$

Graduate Student Academic Dishonesty 13.99.99.R0.10

 $\frac{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf}$

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34Safet yOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

Weeks 1-16	Final Exam
	Evolution and History
	Converting Cellulose- energy
	BCS and Manure score
	Anatomy and physiology of gastrointestinal tract
	Exam
	Nutrients
	Feeds and Feeding
	Metabolic Diseases and Nutritional Health
	Final Exam
NOTE:	

NOTE:

In addition to a midterm and final exam, students should take notes daily, be prepared for quizzes daily; additionally, there will be three or more projects assigned throughout the course.

This is a tentative schedule, which is subject to change at anytime during the duration of the semester.