



## Advanced Equine Exercise Physiology

EQSC 5369

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.

**Email:** jsbedore@shsu.edu

**Office Telephone:** 936.294.1216

**Google Voice:** 936.666.1246

#### Course Information

Course meeting time: MWF from 11:00-12:20

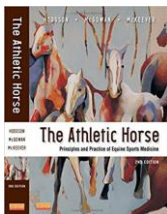
Course location: Pirkle 300A

#### Course Description

This course covers current concepts regarding physiological changes occurring during the fitness and training of horses for athletic endeavors, in addition to current research topics.

#### Textbook & Course Materials

##### Text (Optional)



Hodgson, D, McKeever, K. H. and C. McGowan (2013). *The Athletic Horse, Principles and Practice of Equine Sports Medicine* (2nd ed). St. Louis, MO: Elsevier, Inc. ISBN: 978-0721600758

Available at Amazon.com.

#### Course Structure

This course will be delivered face-to-face in two weekly, 80 minute lectures. In Blackboard (<http://shsu.blackboard.edu>), you will access additional course materials and resources. 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](mailto: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](https://help.blackboard.com/en-us/Learn/Reference/Blackboard_Learn_Videos/Student_Videos)



## **Part 2: Course Objectives**

This course focuses on the scientific basis of fitness and the physiological systems utilized during the training and exercise of horses. Lectures will present information on the physiological systems of the horse, types of exercise, common training regimes, and current research topics. The student will be able to:

- Discuss the adaptations of physiological systems' response to exercise and fitness
- Identify the role of aerobic and anaerobic systems in different types of exercise
- Evaluate and summarize typical training programs for horses
- Identify common research methods and evaluate current literature



## Part 3: Unit Outline/Schedule

This course will consist of **three** major learning units. Schedule is subject to change.

### Unit I: Physiology of Exercise.

1. Course introduction, overview of performance and sports medicine
2. Comparative aspects of exercise physiology
3. Energetics of exercise
4. Nutrition of the performance horse
5. Hematology, acid-base balance
6. Endocrine and immune responses
7. Thermoregulation
8. Respiratory system
9. Cardiovascular system
10. Muscular adaptations
11. Tendon, ligament, bone adaptations
12. Age and disuse
13. EXAM 1: October 4<sup>th</sup>

### Unit II: Biomechanics.

14. Conformation
15. Biomechanics of locomotion
16. Kinematics of the back and pelvis
17. Functional biomechanics

### Unit III: Practical exercise physiology.

18. Physiologic adaptations to training
19. Training thoroughbred and Quarter horse racehorses
20. Training trotters and pacers
21. Endurance training
22. Training eventers
23. Training working horses
24. Evaluation of performance potential
25. Clinical exercise testing and research methods
26. Exercise Lab
27. Medications
28. Muscular disorders
29. Final Exam (Exam 2): Wednesday, December 6<sup>th</sup> 12-2 PM



## Part 4: Grading Policy

### Graded Course Activities

The course will consist of two, online, unit exams and assignments. Grades will be determined based on the average of each category, with the lowest 1 assignment dropped.

Percentage	Item	Description
40%	Examinations	One midterm and a final will be given. The final exam will be cumulative and will be weighted equally across material covered during the semester.
40%	Assignments	Assignments may include, but are not limited to, discussion board posts, in class discussions, and written work. Assignments may be graded for participation, correctness, or adequacy of critical evaluation, depending on the nature of the assignment.
20%	Research paper	A 5 page paper on the topic of student's choosing. Relevant to exercise physiology and containing peer reviewed references. Can be targeted to either the lay audience or scientific.
<b>100%</b>		

\*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](mailto: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.