

ANSC 5324 Animal Physiology

Spring 2023

Time: Web-Delivered | Meeting Place: Web-Delivered through Blackboard

Class correspondence will be through Blackboard or a student's SRSU email account.

Instructor Information

Instructor	Contact	Office Location & Hours
Dr. Hugo Santos	Email: hugo.santos@sulross.edu Phone: 432-837-8210	RAS 108 - MW, 12pm – 2pm or by appointment

General Information

Description

This course covers the basic principles of anatomy and physiology of farm animals. Individual systems will be discussed as well as topics from current scientific discussions and publications. Students will learn topics on cell biology, organ systems and total body interactions.

Expectations and Goals

The course is designed to introduce students to key aspects of animal anatomy and physiology through understanding the function and interaction of systems and body parts.

Student learning outcomes:

1. Knowledge of domestic animal anatomy and physiology at the introductory level
2. Ability to discuss species differences as related to various organ systems structure and function
3. Understanding of integration of organ systems in the function of the total body
4. Ability to critically assess scientific literature in the field of animal physiology

Departmental Projected Learning Outcomes

Student will demonstrate that he/she is able to:

1. Demonstrate the basic skills of interpreting research data gathered in an agricultural context
2. Apply critical thinking skills to mitigate potential challenges in diverse animal sciences and related agricultural industries
3. Develop problem solving skills
4. Demonstrate the ability to communicate through written, spoken, and graphical methods.

Quality Enhancement Plan (QEP) Student Learning Outcomes:

1. The student will demonstrate effective development and expression of ideas in writing
2. The student will exhibit skill in prepared, purposeful oral communication of material or concepts

3. The student will create and deliver visual works that facilitate audience understanding of a central message or purpose

SRSU Library Services

The Sul Ross Library offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu. Off-campus access requires logging in with your LoboID and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or phone (432-837-8123).

SRSU Distance Education Statement

Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website. Directions for filing a student complaint are located in the student handbook.

Reasonable Accommodation Statement

It is the SRSU policy to provide reasonable accommodation to students with disabilities. Accessibility services support for students with physical and psychological disabilities are available at Ferguson Hall 112. To make an appointment regarding disability accommodations, please call 432-837-8203.

Anti-Discrimination Statement

No person shall be excluded from participation in, denied the benefits of, or be subject to discrimination under any program or activity sponsored by Sul Ross State University on any basis prohibited by applicable law, including but not limited to race, color, national origin, religion, sex, age, disability, sexual orientation, or gender identity.

Academic Integrity

Students are expected to submit original work without unauthorized assistance. Academic dishonesty, which includes cheating, unauthorized collaboration, plagiarism, fabrication, multiple submissions, and aiding and abetting, will result in a grade of 0 on the work in question. Subsequent instances of academic dishonesty may result in more serious sanctions.

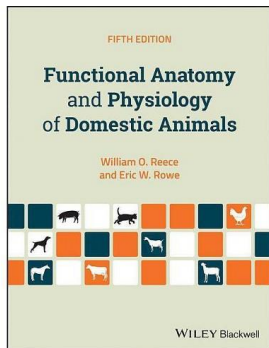
Late Work

It is expected that all assignments will be submitted on time. Valid absences include: 1) medical emergencies with a signed note from a doctor; 2) participation in a SRSU-sanctioned activity with a letter from faculty advisor; or 3) other emergencies or conflicts that are allowed at the professor's discretion. Students are expected to make up missed work within a week of the original due date. Late assignments will be accepted for 4 days following the initial due date and time with a 20% penalty per day late.

Required Text

There are **NO** required textbooks for this course.

Optional: Reece, William, O. and Eric W. Rowe. *Functional Anatomy and Physiology of Domestic Animals*. (4th or 5th Edition). Wiley Global Research (STMS), 2017.



Grading

Your course grade will be based on the following components:

Assignments: Extra material to complement the topics taught will be given throughout the semester. It may include discussions, articles and journal reviews, and case studies.

Physiology in the News: Select either a popular press source or newsworthy publication in which an article on animal physiology is published. Write a 2 to 3-page review of this article, where you provide a short introduction, a summary of what the article says and then a paragraph of your thoughts and opinions on the topic or research presented in the article. You are not required, but are encouraged to utilize other reference material in your article review. The review will be submitted via Blackboard and you must include a copy of the original article with your submission. Automatic 10pt deduction if the original article is not submitted. No email responses will be accepted

Quizzes and Exams: There will be four quizzes on the material discussed throughout the semester. There will be five exams throughout the semester, including the final. The Final Exam will be comprehensive. Additional assignments may be given during the semester. There will be no make-up exams without prior consultation with the course instructor.

Points available	
Exam 1	100 points
Exam 2	100 points
Exam 3	100 points
Exam 4	100 points
Exam 5 -comprehensive	150 points
Assignments	80 points
Quizzes	120 points
Physiology in the News	150 points
Total	900 points

Grading scale (% of total class points):

A = 90-100%

B = 80-89.99%

C = 70-79.99%

D = 60-69.99%

F ≤ 59.99%

Tentative Course Schedule

Week	Topic	Reference Chapter
01/18-20	Structures and Function	Chapter 1
01/23-27	Bones, Joints and Synovial Fluid	Chapter 7 Quiz 1
01/30-02/03	Muscle Physiology	Chapter 8
02/06-10	Muscle Physiology	Exam 1
02/13-17	Hematology	Chapter 3
02/20-24	Cardiovascular System	Chapter 9 Quiz 2
02/27-03/03	Respiratory System	Chapter 10
03/06-10	Endocrinology	Chapter 6 Exam 2
03/13-17	Spring break: No Class	
03/20-24	Endocrinology	
03/27-31	Neurophysiology	Chapter 4 Quiz 3
04/03-07	Neurophysiology	
04/10-14	Urinary Physiology	Chapter 11 Exam 3
04/17-21	Digestive Physiology	Chapter 12
04/24-28	Digestive Physiology	Quiz 4
05/01-05	Reproductive Physiology	Chapters 14-15
05/08-10	Reproductive Physiology	Exam 4
05/12-17	Final Examinations	Final

Subject to Change

This syllabus and schedule are subject to change at the discretion of the instructor. You will be provided information in advance. If you are absent from class, it is your responsibility to check on announcements made while you were absent.