

# ANSC 5324      Animal Physiology

Spring 2024

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
<b>Dr. Hugo Santos</b>	<b>Email:</b> <a href="mailto:hugo.santos@sulross.edu">hugo.santos@sulross.edu</a> <b>Phone: 432-837-8210</b>	RAS 108 - 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](http://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](mailto: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 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 accommodation, 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.

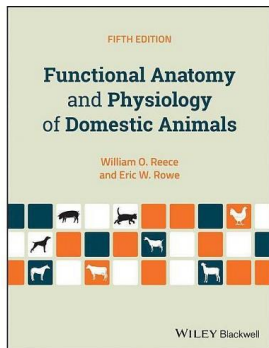
### **Late Work**

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*. (4<sup>th</sup> or 5<sup>th</sup> Edition). Wiley Global Research (STMS), 2017.



## Grading

Your course grade will be based on the following components:

**Assignments:** Reading material and activities will be given throughout the semester to complement lecture topics. It may include quizzes, discussions, critical article reviews, online or over the phone one-on-one meetings, and presentations. Assistance and guidelines on when and how to complete each assignment will be given throughout the semester.

**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.

**Exams:** There will be five exams throughout the semester, including the final. The Final Exam will be comprehensive. 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	100 points
Assignments	200 points
Physiology in the News	100 points
Total	800 points

Grading scale (% of total class points):

A = 90-100%  
F ≤ 59.99%

B = 80-89.99%

C = 70-79.99%

D = 60-69.99%

### Tentative Course Schedule

<b>Week</b>	<b>Topic</b>	<b>Reference Chapter</b>
01/17 – 01/19	Structures and Function	Chapters
01/22 – 01/26	Bones, Joints and Synovial Fluid	1, 7, 8
01/29 – 02/02	Muscle Physiology	
02/05 – 02/09	Muscle Physiology	
<b>02/09</b>	<b>Exam 1 opens</b>	
02/12 – 02/16	Hematology	Chapters
02/19 – 02/23	Cardiovascular System	3, 9, 10
02/26 – 03/01	Respiratory System	
<b>03/01</b>	<b>Exam 2 opens</b>	
03/04 – 03/08	Endocrinology	Chapters
<b>03/11 – 03/15</b>	<b><u>Spring Break: No Class</u></b>	6, 4
03/18 – 03/22	Endocrinology	
03/25 – 03/29	Neurophysiology	
<b>03/29</b>	<b>Exam 3 opens</b>	
04/01 – 04/05	Urinary Physiology	Chapters
04/08 – 04/12	Digestive Physiology	11, 12
04/15 – 04/19	Digestive Physiology	
<b>04/05</b>	<b>Exam 4 opens</b>	
04/22 – 04/26	Reproductive Physiology	Chapters
04/29 – 05/01	Reproductive Physiology	14, 15
<b>05/01</b>	<b>Physiology in the News due</b>	
<b>05/01 – 05/06</b>	<b>Exam 5 opens</b>	

### Subject to Change

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