

**ANSC3410 – ANATOMY & PHYSIOLOGY OF  
DOMESTIC ANIMALS  
SPRING 2021  
Course Syllabus**



**QEP**

Compass: Navigating Excellence  
through Effective Communication

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<b>Instructor:</b>	Dr. Perse McCrae
<b>Office Hours:</b>	Monday & Wednesday 11:00 am – 12:00 pm or by appointment
<b>Office Location:</b>	RAS 105
<b>Telephone:</b>	432-837-8205
<b>Email Address:</b>	<a href="mailto:Persephone.mccrae@sulross.edu">Persephone.mccrae@sulross.edu</a>
<b>Class Schedule:</b>	Lecture: Monday, Wednesday, Friday 10:00-10:50 am Laboratory: Tuesdays at 1-2:50 pm (L01) OR 3-4:50 pm (L02)
<b>Classroom Location:</b>	Lecture: RAS 130 Laboratory: RAS 132
<b>Required Texts:</b>	Functional Anatomy & Physiology of Domestic Animals. 4 <sup>th</sup> Ed. 2009. Reece, Wiley-Blackwell.

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**Section I. Introduction**

Welcome to Anatomy & Physiology of Domestic Animals! This course is designed to expand upon the basic principles of anatomy and physiology of farm animals. Individual body systems will be discussed, with an emphasis placed on the integration of body systems for optimal health. To better understand these topics, we will assess and discuss emerging scientific literature. This allows you to choose topics and animal species that interest you, all while you learn to think scientifically and critically. As many of you are interested in working in industry or the veterinary field, this class has a strong emphasis placed on clinical, real-world applications. Through this course you will apply your knowledge of physiology to case studies that assess the health of different domesticated animal species.

**Section II. Course Design: Communication Infused**

To be successful in college and beyond, many sources (e.g., Morrealle & Pearson, 2008) indicate that communication competencies are essential. Sul Ross recognizes that the current generation of undergraduate university students should receive training to navigate a global world as competent communicators in various contexts and channels of communication.

Through our Quality Enhancement Plan (QEP) called *Compass*, Sul Ross aims to equip you to navigate excellence in the 21<sup>st</sup> century by developing your communication skills across multiple courses. This [insert program/discipline/course name] course is designed to enhance your communication skills. Therefore, this course has the following QEP Student Learning Outcome:





### Section III. QEP Student Learning Outcome

QEP SLO: The student will create works that exhibit skill in prepared and purposeful communication (written, oral and visual).

### Section IV. Course Objectives

1. Students will demonstrate knowledge of domestic animal anatomy and physiology at the introductory level.
2. Be able to discuss species differences as related to various organ systems structure and function.
3. Understand the integration of organ systems in the function of the total body.
4. Be able to critically assess scientific literature in the field of animal physiology.

### Section V. Student Learning Outcomes

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. Demonstrate the ability to communicate through written, spoken, and graphical methods

### Section VI. Marketable Skills

1. Knowledge of techniques and equipment for planting, growing, and harvesting food products (both plant and animal) for consumption, including storage/handling techniques.
2. Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
3. Understanding the implications of new information for both current and future problem solving and decision-making.
4. Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
5. Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions. Communicating finding in both oral and written form at a level appropriate for the needs of the audience.

### Section VII. Course Requirements and Grading

Requirement	Points Possible	Grading Scale
Quizzes (20 points each X 5)	100	<div style="border: 1px solid black; padding: 5px;">           Entire Course            A = 895-1000            B = 795-894            C = 695-794            D = 595-694            F = &lt; 595         </div>
Laboratory assignments (20 pts each X 14)	280	
Critical article review	100	
Midterm Exams (135 pts X 2)	270	
Final Exam	250	
<b>Possible Points</b>	<b>1000</b>	

## Section VIII. Course Assignments

**Quizzes:** There will be 5 quizzes throughout the semester. Quizzes will be available for a 12-hour period online and you will have 30 minutes to complete each quiz. Quizzes require application of material discussed in lecture and studying is required to do well. **Due: variable, see class schedule.**

**Laboratory assignments & participation:** Labs will be held on a weekly basis to supplement your learning and knowledge. **Attendance is mandatory unless you have received prior approval or a valid doctor's excuse.** Labs will include some degree of dissection – please notify me within the first week if this is an issue for you. You will be required to complete booklets during the lab time and hand it in at the beginning of the following class. **Due: Wednesdays at the beginning of lecture.**



**Critical article review:** You will choose a primary scientific paper (NOT a review paper or brief communication) published in a peer-reviewed journal on a topic within the field of animal anatomy and physiology (sign up required). Submission includes a two-page paper (12 pt. Times New Roman font, double spaced) explaining what the goal of the study was, how the authors conducted the research, what their results indicate and a critical review on how the research was carried out and interpreted. See rubric for all details. **Due: March 15<sup>th</sup>.** *This is a QEP mapped assessment.*

**Exams:** There will be three exams (two midterm exams and a cumulative final) administered in class throughout the semester. The dates of the exams are noted on the syllabus. There will be no make-up exams without prior approval or a valid doctor's excuse. If you need to reschedule an exam, please notify me as soon as possible. **Due: variable, see class schedule.**

## Section IX. Policies

**Attendance:** Attendance is mandatory for all laboratory sections. Attendance is not required for lectures but is strongly recommended.

**Classroom Demeanor:** It is expected that you come prepared for class and treat your peers with respect. I encourage students to speak in class, however, private conversations will not be tolerated.

**Academic Integrity:** The University expects all students to engage in all academic pursuits in a manner that is beyond reproach and to maintain complete honesty and integrity in the academic experiences both in and out of their classroom. **ANY FORM OF ACADEMIC DISHONESTY WILL RESULT IN A GRADE OF ZERO.** The University 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, plagiarism, collusion, and the abuse of resource materials. For more information visit:  
[https://www.sulross.edu/sites/default/files/sites/default/files/users/docs/stulife/student\\_conduct\\_discipline.pdf](https://www.sulross.edu/sites/default/files/sites/default/files/users/docs/stulife/student_conduct_discipline.pdf)

**Late Work:** It is expected that ALL assignments will be submitted on time. Valid absences include 1) medical emergencies with 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 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.**

## **Section X. Notes on University Programs and Services**

**SRSU Disability Services.** Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Rebecca Greathouse Wren, LPC-S, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message and we'll get back to you as soon as we can during working hours), or email [rebecca.wren@sulross.edu](mailto:rebecca.wren@sulross.edu). Our office is located on the first floor of Ferguson Hall (Suite 112), and our mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas, 79832.

**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 Smarthinking, 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 information to verify students' identities and to protect students' information.

**Technical Support.** SRSU 24/7 Blackboard Technical Support: Toll Free: 888.837.6055.  
Email: [blackboardsupport@sulross.edu](mailto:blackboardsupport@sulross.edu)

## **Section XI. SRSU Safety Pledge - One University/One Community**

As a partner in each campus community, the faculty, staff, and students agree to the following statements in relation to the COVID-19 virus:

- I will wear a face covering, wash my hands, and disinfect my workspaces to protect others from the potential spread of this virus.
- I promise to follow social distancing guidelines as a way to mitigate the risk of transmission to others both professionally and personally.
- I will monitor my health and report any potential agree to follow the guidelines set forth in this document or as described by Sul Ross State University to protect the public health.

▸ I understand that my actions may impact the larger community and could affect my academic progress or professional attainment at Sul Ross State University.

Failing to meet these expectations may be subject to corrective action under university disciplinary policies. Changes or recommendations to the guidelines based on evolving guidance from federal, state, or local agencies will be communicated to the university community.


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**TENTATIVE LECTURE SCHEDULE:**

*\*This information should be treated as an outline – there may be alterations in sequence of topics.*

<b>Date</b>	<b>Topic</b>	<b>Chapter</b>	<b>Assignment Due</b>
<b>January 11</b>	Introduction, structures & function	Chapter 1	
<b>January 13</b>	Structures & function		
<b>January 15</b>	Neurophysiology	Chapter 4	
<b>January 18</b>	<b>MLK day: NO CLASS</b>		
<b>January 20</b>	Neurophysiology		<b>LAB #1 DUE</b> <b>QUIZ 1 OPENS AT 8AM, CLOSSES AT 8PM</b>
<b>January 22</b>	Neurophysiology		
<b>January 25</b>	Neurophysiology		
<b>January 27</b>	Review day		<b>LAB #2 DUE</b>
<b>January 29</b>	Endocrinology	Chapter 6	
<b>February 1</b>	Endocrinology		
<b>February 3</b>	Endocrinology		<b>LAB #3 DUE</b>
<b>February 5</b>	Endocrinology		
<b>February 8</b>	Review day		
<b>February 10</b>	Bones, joints & synovial fluid	Chapter 7	<b>LAB #4 DUE</b> <b>QUIZ 2 OPENS AT 8AM, CLOSSES AT 8PM</b>
<b>February 12</b>	Bones, joints & synovial fluid		
<b>February 15</b>	Bones, joints & synovial fluid		
<b>February 17</b>	Review day		<b>LAB #5 DUE</b>
<b>February 19</b>	Muscle physiology	Chapter 8	
<b>February 22</b>	Muscle physiology		

<b>February 24</b>	Review day		<b>LAB #6 DUE</b>
<b>February 26</b>	Flex day		<b>QUIZ 3 OPENS AT 8AM, CLOSES AT 8PM</b>
<b>March 1</b>	Exam 1 review		
<b>March 3</b>	<b>EXAM 1</b>		<b>LAB #7 DUE</b> <b>EXAM 1</b>
<b>March 5</b>	Hematology	Chapter 3	
<b>March 8</b>	<b>Spring break: NO CLASS</b>		
<b>March 10</b>	<b>Spring break: NO CLASS</b>		
<b>March 12</b>	<b>Spring break: NO CLASS</b>		
<b>March 15</b>	Hematology		<b>CRITICAL ARTICLE REVIEW DUE</b> 
<b>March 17</b>	Cardiovascular system	Chapter 9	<b>LAB #8 DUE</b>
<b>March 19</b>	Cardiovascular system		
<b>March 22</b>	Cardiovascular system		
<b>March 24</b>	Review day		<b>LAB #9 DUE</b>
<b>March 26</b>	Respiratory system	Chapter 10	
<b>March 29</b>	Respiratory system		
<b>March 31</b>	Respiratory system		<b>LAB #10 DUE</b> <b>QUIZ 4 OPENS AT 8AM, CLOSES AT 8PM</b>
<b>April 2</b>	<b>Good Friday: NO CLASS</b>		
<b>April 5</b>	Exam 2 review		
<b>April 7</b>	<b>EXAM 2</b>		<b>LAB #11 DUE</b> <b>EXAM 2</b>
<b>April 9</b>	Urinary physiology	Chapter 11	
<b>April 12</b>	Urinary physiology		
<b>April 14</b>	Digestive physiology	Chapter 12	<b>LAB #12 DUE</b>
<b>April 16</b>	Digestive physiology		
<b>April 19</b>	Review day		
<b>April 21</b>	Reproductive physiology	Chapters 14 & 15	<b>LAB #13 DUE</b> <b>QUIZ 5 OPENS AT 8AM, CLOSES AT 8PM</b>
<b>April 23</b>	Reproductive physiology		
<b>April 26</b>	<b>Final exam review</b>		
<b>April 28</b>	Flex day		<b>LAB #14 DUE</b>
<b>April 30</b>	<b>FINAL EXAM 10:15am-12:15pm</b>	Cumulative final	<b>FINAL EXAM</b>

## QEP MAPPED CLASS CARDINAL RUBRIC

**Definition:** The process of sending, receiving and interpreting messages through written, oral, or nonverbal communication channels to effectively convey information, and/or by which two or more people reach understanding.

**Framing Language:** Communication is transmitted through a variety of modes (oral, written, or visual). This rubric is specifically designed to evaluate communication in an academic environment to determine that the central message is conveyed, reinforced by multiple supporting materials and purposefully organized. Communication in an academic environment may include: a variety of written works such as academic papers, lab reports, poetry, webpages, personal essays; oral presentations of sufficient length such that a central message is conveyed, supported and purposely organized; visual media, including but not limited to posters, PowerPoints, videos, graphic art, and infographics.



### **Glossary:**

*The definitions below serve to clarify terms and concepts used in this rubric only.*

- **Organization:** The grouping and sequencing of ideas and supporting material. Organizational patterns supporting effectiveness typically include an introduction, one or more identifiable sections in the body and a conclusion. An organizational pattern should be purposeful and make the content easy to follow. Potential patterns might include a chronological pattern, a problem-solution pattern, or an analysis-of-parts pattern.
- **Content Development:** The ways in which a topic is explored and represented in relation to its audience and purpose.
- **Purpose:** The main point/thesis/"bottom line"/"take-away" of a message. A clear purpose is easy to identify. For example, is the message meant to persuade or to inform, to report or to summarize, or to amuse?
- **Academic Language:** Language supporting the effectiveness of a central message is appropriate to the topic, genre/discipline, audience, is grammatically correct, and clear. Language enhancing the effectiveness may also be vivid, imaginative, and expressive.
- **Supporting Material:** In communication, students draw upon sources to extend, develop, define, or shape their ideas. Digital citizenship, the careful consideration of copyright and fair use of images is important. The student considers reliability of communication to include an understanding of accuracy, applicability, currency, liability, and completeness.
- **Technique:** Execution or performance of communication skills given the mode of communication. For example, in writing, technique may include mechanics and use of style; in oral communication, it may include nonverbal cues and use of voice; in visual works, it may include the use of the medium.

Cardinal Rubric was adapted from the Association of American Colleges and Universities oral communication VALUE rubric, the National Communication Association's Speaking and Listening Competencies for College Students, Texas A&M University's Visual Communication rubric, Otis College of Arts and Design's Fine Arts rubric, Lane Community College Communicating Effectively Rubric, and Stephen F. Austin State University's assessment rubric for Oral and Visual Communication.

## QEP MAPPED CLASS CARDINAL RUBRIC

*Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet formative (cell one) level performance.*

	<b>Exemplary</b>	<b>Satisfactory</b>	<b>Developing</b>	<b>Formative</b>
<b>Organization</b>	Organizational pattern is clearly and consistently observable, skillful, and makes the content of the message cohesive.	Organizational pattern is clearly and consistently observable; contains elements of logical development; contains clear transitions; has a recognizable flow of ideas.	Organizational pattern is intermittently observable; lacks organization; it is sometimes disjointed and/or awkward.	Organizational pattern is not observable; has no discernible organizational structure; contains random unconnected elements.
<b>Content Development</b>	Uses appropriate, relevant, and compelling content to illustrate mastery of the topic, conveying understanding or a useful perspective.	Uses appropriate, relevant, and compelling content to explore ideas within the context. It is clear, accurate and appropriate.	Uses appropriate and relevant content to develop and explore ideas but may have inaccuracies or may be unclear at times. Provides limited insight or information.	Uses appropriate and relevant content to develop simple ideas in some parts of the work. May contain misinformation, or may be confusing or misleading.
<b>Purpose</b>	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work. The purpose of the message is clearly conveyed.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context). The purpose of the message can be discerned with some effort.	Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions). The purpose of the message is vague or unclear.	Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience). The purpose of the message is not at all apparent or is missing.
<b>Academic Language</b>	Communication is grammatically correct. Language choices are imaginative, memorable, compelling, and demonstrate constructive knowledge, connects with audience and flows well. Error free.	Communication is grammatically correct. Language choices are thoughtful and generally effective, demonstrate constructive knowledge, connects with audience and flows well. Limited errors.	Grammar occasionally interferes with communication. Language choices are mundane, commonplace, and partially effective. Language is moderately appropriate to audience. Includes some errors.	Errors in grammar and format. Language choices are questionable and minimally effective. Language is not appropriate to audience. Uses language that sometimes impedes meaning.
<b>Supporting Material</b>	Demonstrates skillful use of a variety of supporting material that are high-quality, credible, relevant sources to develop ideas that are appropriate for the intended message or discipline.	Demonstrates consistent use of credible, relevant sources to support ideas that are appropriate for the intended message or discipline. Though limited, it refers to supporting information or analysis, or establishes credibility or authority on the topic. Generally attributes sources as	Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the intended message or discipline. Makes reference to weak/partial supporting information or analysis. Sources are inconsistently attributed.	Demonstrates an attempt to use sources to support ideas but it insufficiently makes reference to information or analysis that minimally supports the intended message or topic. Fails to attribute sources as appropriate.
<b>Technique</b>	Demonstrates exemplary appropriateness and quality of technique for the chosen mode. For example, skillful execution of genre and disciplinary conventions on written works; skillful oral delivery; exemplary craftsmanship of visual works.	Demonstrates appropriateness and quality of technique for the chosen mode. For example, appropriate execution of genre and disciplinary conventions on written works; or, effective oral delivery; or, notable craftsmanship of visual works.	Attempts to demonstrate appropriateness and quality of technique for the chosen mode. For example, follows expectations of execution of genre and disciplinary conventions on written works; satisfactory oral delivery; satisfactory craftsmanship of visual works.	Marginal demonstration of appropriateness and quality of technique for the chosen mode. For example, attempts to execute basic genre and disciplinary conventions on written works; poor oral delivery; poor craftsmanship of visual works.