



ANSC 4304

Reproductive Physiology

Fall 2022

Instructor: Dr. Laura Patterson Rosa
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Office Hours: By appointment

Lectures: Monday, Wednesday, and Friday 11:00 am – 11:50 am RAS 132

Course Description: This course is designed to introduce students to the anatomical and physiological processes of reproduction in domestic animals and wildlife.

Student Learning Outcomes (SLO):

Upon completion of this course, students should be able to understand:

1. Anatomical structure nomenclatures for the female and male reproductive system.
2. Reproductive endocrine glands and hormonal function.
3. What is puberty, how it occurs, when it occurs and what factors influence it.
4. Parts of the estrous cycle, its terminology, and basic concepts.
5. Basic components of the sperm and ova and their functions and the process of fertilization.
6. Environmental and behavioral components of reproduction.
7. Embryonic development and maternal recognition of pregnancy.
8. Parturition and post-partum interval.

Animal Science Marketable Skills:

- Knowledge of techniques and equipment for planting, growing, and harvesting food products (both plant and animal) for consumption, including storage/handling techniques.
- Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
- Understanding the implications of new information for both current and future problem solving and decision-making.
- Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- 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.

Animal Science Learning Outcomes (ASLO):

- Demonstrate the basic skills of interpreting research data gathered in an agricultural context.
- 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.

Accommodations:

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. Alpine students seeking accessibility/accommodations services must contact Mary Schwartze Grisham, M.Ed., LPC, 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 mschwartze@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.

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. 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/catalog/undergraduate-academic-regulations/>

SRSU Library Services:

The Sul Ross Library - Bryan Wildenthal Memorial Library in Alpine 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).

Attendance:

Students MUST arrive promptly to class. If over 25 minutes late to class then student will be considered absent for that day. Documentation of approved absences (personal illness, family emergency etc.) must be presented within 5 days for arrangements to be made to make-up quizzes and assignments. University approved absences for sports and student organizations must be disclosed at least two weeks in advance. Unexcused late assignments will be penalized 25% for the first 24 hours beyond the due date, 50% for 24-48hrs late and will not be accepted thereafter.

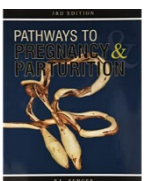
Assessments & Grading:

- Demographics Quiz: 10 points – Demographics and interests. Students must answer quiz to receive the points!
- Group Project Presentation: 130 points
- Written Midterm: 130 points
- Written Final: 130 points
- Attendance: Minus 5 points for every absence

Total = 400 points

Percentage	Letter Grade	Meaning	Points
90% - 100%	A	Excellent	4
80% - 89%	B	Good	3
70% - 79%	C	Average	2
60% - 69%	D	Poor	1
Below 60%	F	Failure	0

For additional information on current Sul Ross State University policies for assigning grade points, please refer to <https://www.sulross.edu/registrar/catalog-and-policies/>



Required text:

Senger, P.L. (2012). Pathways to Pregnancy and Parturition. Current Conceptions Inc. 3rd edition. It is encouraged that you find and reference a reasonably priced used textbook.

Group Project:

As a group, choose one of the scientific articles posted on Blackboard. Article selection will be done during the first week of classes, and at a first come first served basis. Present the article as a PowerPoint, demonstrating the background information, hypothesis/issues, and applications of the respective research. Each group will have 15min for the presentation and 5 minutes for questions/discussion at the end. See rubric for details. This project will be presented in the classroom to your peers and scored based on the rubric.

Important Dates to Remember:

- September 5 – Labor Day – NO CLASS
- October 14 – MIDTERM
- November 11 – Veteran’s Day Holiday – NO CLASS
- November 14 - Last day to withdraw from the 16-week course/term with a grade of 'W'. Drops must be processed and in the university registrar's office by 4 p.m.
- November 23-25 – Thanksgiving Holiday – NO CLASS
- November 28 – Group Project Presentations
- December 6 – FINAL EXAM

Course Schedule (subject to adjustments)

Week and Dates	Monday	Wednesday	Friday
1 (8/22-26)	Introduction	Female Reproductive System	Female Reproductive System Group Article Selection
2 (8/29–9/2)	Male Reproductive System		Reproductive Endocrine System
3 (9/5-9)	NO CLASS: Labor Day	Reproductive Endocrine System	
4 (9/12-16)	Puberty		
5 (9/19-23)	Endocrinology of the Male & Spermatogenesis		
6 (9/26-30)	Mating Behavior		Semen Collection and Transport
7 (10/3-7)	Estrous Cycle		
8 (10/10-14)	MIDTERM EXAM	Estrous Cycle	
9 (10/17-21)	Ovulation and Fertilization		
10 (10/24-28)	Early Embryogenesis and Maternal Recognition of Pregnancy		
11 (10/31-11/4)	Placentation, Gestation and Parturition		
12 (11/7-11)	Lactation		NO CLASS: Veteran’s Day
13 (11/14-18)	Reproductive Management and Technologies		
14 (11/21-25)	Group Meeting Day	NO CLASS: Thanksgiving	
15 (11/28-12/2)	Group Presentations	Group Presentations or NO CLASS	NO CLASS or FINAL EXAM
16 (12/5-9)	FINAL EXAM WEEK		

FINAL EXAM - Tuesday, 12/06 10:15 a.m. – 12:15 p.m.