

ANSC 4304: REPRODUCTIVE PHYSIOLOGY
FALL 2021 Syllabus

Instructor: Wendee L. Payne, PhD
Office: Remote from Lubbock, TX
Phone: (210) 854-8065
Office Hours: 1:00-4:00 PM (MT), M-Th
or by appointment

Spring 2021
Time: Web-delivered
E-mail: wendee.payne@sulross.edu
Meeting Place: Web-delivered

This web-delivered course will be accessible through Blackboard. Class correspondence will be through Blackboard or student's SRSU e-mail account, please check both regularly.

Language:

Given the nature of this course, any and all correspondence with the instructor will include proper, scientific terminology. Slang words for anatomical parts will not be tolerated, and disciplinary action may be taken.

Course Description:

This course provides the student with a solid understanding of the anatomical, cellular and physiological mechanisms that control the endocrine and reproductive systems of livestock animals.

(ANSC) Student Learning Outcomes:

Student will be 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, and
4. Demonstrate the ability to communicate through written, spoken, and graphical methods.

Course Objectives:

By the end of the course, you should be able to understand:

1. The organization and function of the male and female reproductive tract
2. Hormonal regulation of reproduction
3. The onset of puberty
4. The estrous cycle – terminology and basic concepts
5. The follicular phase of the estrous cycle
6. The luteal phase of the estrous cycle
7. Spermatogenesis and oogenesis
8. Reproductive behavior
9. Gamete transport and fertilization
10. Early embryogenesis and maternal recognition of pregnancy
11. Parturition

Marketable Skills for Department of Animal Science:

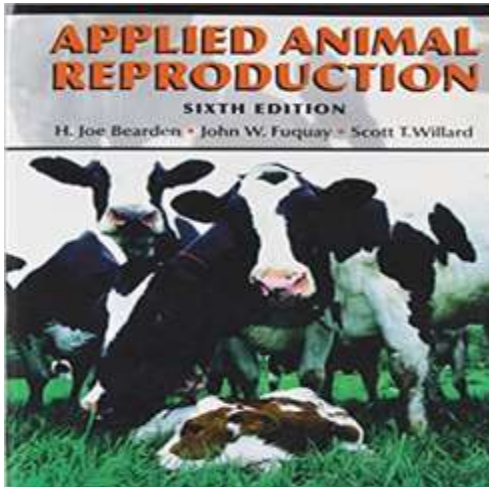
1. Knowledge of techniques and equipment for planting, growing, and harvesting food products (both plant and animal) for consumption, including storage/handling techniques.
2. Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other 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.

Departmental Projected 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.
3. Develop problem-solving skills, and demonstrate the ability to communicate through written, spoken, and graphical methods.

Textbook:

Not required. The below textbook, which is the basis for this course, is not required for this course. However, it is encouraged that you find and reference a reasonably priced used textbook.



Applied Animal Reproduction

6th Edition

H. Joe Bearden, John W. Fuquay, Scott T. Willard

ISBN: 9780131128316

2004

Pearson

Hardback, 456 pages

Methods of Instruction:

This course consists of online lecture sessions to provide the basic concepts related to animal reproduction. Information will be provided in a PowerPoint format, as well as recorded lecture videos; both will be available for downloading from Blackboard.

Attendance and Absences:

Attendance will not be taken. It is the student’s responsibility to log into the associated Blackboard course, and download and study available course materials prior to the exams.

A student who intends to observe a religious holy day should make that intention known to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holiday shall be allowed to take an exam following their return to classes; the exam will be rescheduled for a day and time mutually agreed upon by both the student and the instructor. Should the student fail to complete their rescheduled exam, the instructor reserves the right to award zero points for that exam.

Any student missing exams due to official school functions (i.e. athletics, judging teams, etc.) must make arrangements to make up their exam with the instructor **prior to leaving for their trip.**

Exams and Grading:

4 Hourly Exams worth 100 points each = 400 points

1 Comprehensive Final Exam worth 100 points = 100 points

Students will have the option of dropping their lowest hour exam grade, or, if they have earned an ‘A’ average without dropping any grades, students will be exempt from the final.

Grading Scale:

A = > 90%

B = 80-89%

C = 70-79%

D = 60-69%

F = < 60%

Exam Schedule:

1 – Friday, September 10, 2021

2 – Friday, October 8, 2021

3 – Friday, November 5, 2021

4 – Tuesday, November 30, 2021

Comprehensive Final Exam –TBD, December 2021

Weekly Calendar (subject to change):

Week	Topic
1-4	Ch. 1: Introduction and Early History Ch. 2: The Female Reproductive System Ch. 3: The Male Reproductive System Ch. 4: Neuroendocrine and Endocrine Regulators of Reproduction Ch. 5: The Estrous Cycle Ch. 6: Spermatogenesis and Maturation of Spermatozoa Exam 1

5-8	Ch. 7: Mating Behavior Ch. 8: Ovogenesis and Fertilization Ch. 9: Gestation Ch. 10: Parturition and Postpartum Recovery Ch. 11: Lactation Exam 2
9-12	Ch. 12: Introduction and History of Artificial Insemination Ch. 13: Semen Collection Ch. 14: Semen and Its Components Ch. 15: Semen Evaluation Ch. 16: Semen Processing, Storage, and Handling Ch. 17: Insemination Techniques Exam 3
13-16	Ch. 18: Synchronization of Estrus and Superovulation with Embryo Transfer Ch. 19: Reproductive Biotechnology Ch. 20: Reproductive Management Ch. 21: Pregnancy Diagnosis Ch. 24: Anatomical and Inherited Causes of Reproductive Failure Ch. 25: Physiological, Toxicological, and Psychological Causes of Reproductive Failure Ch. 26: Infectious Diseases That Cause Reproductive Failure Exam 4 Comprehensive Final Exam

Accommodations:

It is the policy of Sul Ross State University to provide reasonable accommodations to students with disabilities. If you would like to seek any accommodations for this course, please contact the Counseling and Accessibility Services Office (Ferguson Hall 112; phone: (432) 837-8203) as soon as possible to ensure that such accommodations are implemented in a timely fashion. Office hours for Counseling and Accessibility Services Office: M-F 8:00 AM to 12:00 PM and 1:00 PM to 5:00 PM.

Academic Integrity:

Keep in mind that your integrity and reputation is among the few characteristics that you solely control. It takes consistent effort to build and maintain a good reputation, but very little to destroy it. Some aspects of academic integrity, such as cheating, are easy to understand. In this class, cheating will result in a score of 0 points on any exam. Should a repeat of the event occur, steps will be taken to have that person dropped from the class and receive a failing grade for the course. In other cases, such as group projects, the lines of integrity may seem blurred. If you ever have a question about what is, or what is not acceptable, ask the instructor.

For more details on this matter, please reference the "Academic Honesty" tab on the *Undergraduate Academic Regulations* page of the University's website.

Distance Education:

Students enrolled in distance education courses have equal access to the University's academic support services, such as Smarthinking, and library resources, such as online databases and instructional technology support. For more information about accessing these resources, visit the SRSU website. For the purpose of this class, students should correspond using either their Sul Ross State University e-mail or Blackboard account, which requires secure login information to verify students' identities and to protect students' information. Students enrolled in distance education courses at Sul Ross State University 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. There are seven interactive television (itv) classrooms at Sul Ross State University's Alpine campus: ACR 204, ACR 206, MAB 205, MAB 308, WSB 101, WSB 107, and WSB 321. Technical support for the Distance Education equipment in the classrooms is provided by OIT staff. To book a Distance Education classroom for use outside the published course schedule, contact the Registrar's Office.

Student Handbook:

A copy of the student handbook can be found at:

https://d1mg6ms3faonj.cloudfront.net/wp-content/uploads/2020/09/student_handbook_2019-2020_revision_12.7.2020.pdf