ANIMAL SCIENCE 5326 ANIMAL REPRODUCTION

Instructor: DeMetris Reed, Jr. Spring 2022

Office: RAS 106 Time: Web-delivered

Office Hours: (MT) 1:00-4:00 pm Meeting Place: Web-delivered

Phone: (701) 781-2844

Email: demetris.reed@sulross.edu

This web-delivered course will be accessible through Blackboard. Class correspondence will be through Blackboard or student's SRSU email account.

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 humans, domestic animals and wildlife.

Course Objectives:

By the end of the course, you will 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 material recognition of pregnancy.
- 11. Parturition.

Marketable Skills for Department of Animal Science:

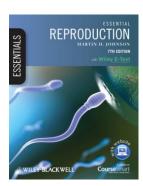
- 1. Knowledge of techniques and equipment for planting, growing, and harvesting food products (both plant and animal) for consumption, including storage/handling techniques.
- 2. Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other 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: Also Pathways to Pregnancy and Parturition will be available beginning Feb.



Essential Reproduction Includes Wiley E-Text, 7th Edition Martin H. Johnson ISBN 978-1-4443-3575-0 March 2013, Wiley-Blackwell Paperback, 392 pages http://www.wiley.com

Amazon: http://www.amazon.com

Barnes & Noble: http://www.barnesandnoble.com

Exams and Grading:

There will be six exams. Exams will cover readings, PowerPoint presentations and study guide materials. Each exam has a value of 100 points (600 points total). There will be 6 assignments. Each assignment is worth 20 points (120 points total). Grade assignment (average of all exams and assignments): A = 100-90; B = 89-80; C = 79-70; D = 69-60 and F = < 60.

Exam and Assignment Schedule:

Exam and Assignment

- 1 Tuesday, February 1.
- 2 Tuesday, February 15.
- 3 Tuesday, March 1.
- 4 Tuesday, March 22.
- 5 Tuesday, April 12.
- 6 Friday, April 29.

Week Calendar (subject to change)

Week Presentation Order of Topics: Readings and Assignments:

1-3	Chapter 1. What is reproduction Chapter 2. Sex Chapter 3. Sexual maturation Exam 1	 Syllabus Textbook - Chapters 1-3 Lecture slides - Chapters 1-3 Assignment 1
4-5	Chapter 5. Sexual selection Chapter 6. Making sperm Exam 2	 Textbook - Chapters 5-6 Lecture slides – Chapters 5-6 Assignment 2
6-9	Chapter 7. Men Chapter 8. Making eggs Spring Break Chapter 9. Women Exam 3	 Textbook - Chapters 7-9 Lecture slides – Chapters 7-9 Assignment 3
10-11	Chapter 10. Sperm and eggs Chapter 11. Fertilization Exam 4	 Textbook - Chapters 10-11 Lecture slides - Chapters 10-11 Assignments 4
12-13	Chapter 12. Initiating pregnancy Chapter 13. Supporting the embryo and fetus Exam 5	 Textbook - Chapters 12-13 Lecture slides - Chapters 12-13 Assignment 5
14-15	Chapter 14. Growing the fetus Chapter 17. Giving birth Exam 6	 Textbook - Chapters 14 and 17 Lecture slides - Chapters 14 and 17 Assignment 6

Sul Ross State University is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is the student's responsibility to initiate a request for accessibility services. Students seeking accessibility services must contact Mary Schwartze, M. Ed., L.P.C., in Counseling and Accessibility Services, Ferguson Hall, Room 112. The mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas. Telephone: 432-837-8691. E-mail: mschwartze@sulross.edu

Students enrolled in distance education courses have equal access to the university's academic support services, such as Smarthinking, library resources, such as 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. The procedures for filing a student complaint are included in the student handbook. 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.