

ANSC 4304 REPRODUCTIVE PHYSIOLOGY

Instructor: Scott Ericsson
Office: RAS 110
Office Hours: (MW) 1:00-4:00 pm
Phone: (432) 837-8260
Email: ericsson@sulross.edu

Fall 2016
Time: MWF 9:00-9:50
Meeting Place: RAS 132

Class materials and grades will be accessible through Blackboard.

Course Description:

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

Program Learning Outcomes:

Student will demonstrate that he/she is able to:

1. Recognize and be able to utilize animal breeds from a variety of domestic species
2. Comprehend the role of nutrition in the production of food animals
3. Understand the processes involved in producing meat products from a variety of domestic food animals
4. Select breeding animals using genetic information

Course Objectives:

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

- The different structures and nomenclatures for the parts of the female and male reproductive system.
- The functions of the reproductive endocrine glands and hormones.
- The different parts of the estrous cycle.
- The hormonal changes during the estrous cycle.
- The basic components of the sperm and ova and their functions and the process of fertilization.
- Parturition and post-partum interval.
- How environment affects reproduction and how it can be managed.
- The components of male reproductive capacity and how these components are affected by other factors.
- What is puberty, how it occurs, when it occurs and what factors influence it.

Text:

There is no required text.

Exams:

There will be two midterms and a final exam. Exams will cover readings, PowerPoint presentations and study guide materials. The final exam will only cover materials scheduled after the second midterm.

Grading:

| | |
|------------------|------------|
| Midterm 1 | 100 points |
| Midterm 2 | 100 points |
| Final | 100 points |
| Total 300 points | |

Grade assignment: A =100-90; B = 89-80; C= 79-70; D = 69-60 and F= < 60.

Exam schedule:

Midterm 1 – Wednesday, September 28.

Midterm 2 – Wednesday, November 2.

Final – Tuesday, December 6 at 8:00 am.

16 week calendar (subject to change)

| <u>Week</u> | <u>Topic</u> |
|-------------|----------------------------------------------|
| 1 | Introduction |
| 2 | Female reproductive anatomy |
| 3 | Female reproductive anatomy |
| 4 | Male reproductive anatomy |
| 5 | Sex determination and development |
| 6 | Endocrine glands and hormones |
| 7 | Estrous cycle and estrus synchronization |
| 8 | Midterm Number 1 |
| 9 | Spermatogenesis |
| 10 | Oogenesis |
| 11 | Early embryonic development and placentation |
| 12 | Parturition |
| 13 | Postpartum reproduction |
| 14 | Midterm Number 2 |
| 15 | Effects of environment on reproduction |
| 16 | Lactation |
| 17 | Male reproductive capacity |
| 18 | Puberty |
| 19 | Thanksgiving break |
| 20 | Companion animals – dog and cat |
| 21 | Final exam |

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: mschwartz@sulross.edu