

## ANSC 4304 REPRODUCTIVE PHYSIOLOGY

Instructor: Scott Ericsson  
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Fall 2014  
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, October 1.  
Midterm 2 – Wednesday, November 5.  
Final – Wednesday, December 10 at 8:00 am.

16 week calendar (subject to change)

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