

**ANSC 433-200 Honors
REPRODUCTION IN FARM ANIMALS
Spring Syllabus 2010**

Professor: D.W. Forrest	133 Kleberg	845-1543	d-forrest@tamu.edu
Office Hours: Tuesday 2:00-4:00 pm, Wednesday 9:00-11:00 am and by appointment			
Instructor: Ashley Navarrette	422B Kleberg	862-2868	anavarrette@tamu.edu

When you begin this course you should:

- Have a basic understanding of Biology
- Have an interest in farm animals
- Have attained Junior classification

Successful completion of this course requires that you:

- Contribute to class discussion and complete assignments.
- Answer exam questions concerning the principles of reproduction including anatomy, physiology, endocrinology, gamete production, fertilization, pregnancy, parturition, and reproductive disease.
- Demonstrate an understanding of the practical skills involved in semen collection and evaluation, estrus detection, artificial insemination, estrus synchronization, embryo transfer and genetic manipulation, pregnancy determination, control of parturition and reproductive management.

Required Text: Pathways to Pregnancy and Parturition, Senger, 2nd Ed.

Lab Manual: A Laboratory Manual for Animal Reproduction, 4th Ed., Sorensen

Homepage: <http://animalscience.tamu.edu/ansc/433/repro/index.html> (Password: _____)

***Web CT Vista:** <http://elearning.tamu.edu/> (Password= your NEO password)

Copies of Lab Notes are available at Copy Corner.

Lecture and Laboratory Sessions:

<u>Section</u>	<u>Lecture – 021 Kleberg</u>	<u>Lab – 016A Kleberg</u>
200	T,Th 9:35 – 10:25	T 1:00 – 2:50

Lecture: Consists of three take home exams, a reproductive technology project and a comprehensive final exam. If a student has to miss an exam due to an excused absence (as defined by University Regulations), arrangements **MUST** be made in **ADVANCE** with Dr. Forrest to take the exam.

Lab: Consists of a lab practical, lab final, written assignment (Snake oil v. Science), Student Project and weekly quizzes. There will be 10 lab quizzes that are worth 10 points each. Any points that exceed the 90 point allotment for lab quiz grades will be considered extra credit points

Attendance: Seating assignments will be used to record attendance.

GRADING SYSTEM

<u>LECTURE</u>	<u>Possible Points</u>	<u>Your Points</u>
EXAM A	100	_____
EXAM B	100	_____
EXAM C	100	_____
*Lecture Final	100	_____
Student Project	100	_____

LAB

Lab Practical	40	_____
Lab Final	50	_____
Snake Oil Assign.	20	_____
Quizzes	90	_____

Lab Quiz Points

1	2	3	4	5	6	7	8	9	10

EXTRA CREDIT

Field Trip	10	_____
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*Final exam will be optional for students with no more than one unexcused absence during the course.

Grade without the Lecture Final

A \geq 539.5 points

539.5 > **B** \geq 479.5

479.5 > **C** \geq 419.5

419.5 > **D** \geq 359.5

F < 359.5

(Grades are calculated out of 600 points)

Grade with the Lecture Final

A \geq 629.5 points

629.5 > **B** \geq 559.5

559.5 > **C** \geq 489.5

489.5 > **D** \geq 419.5

F < 419.5

(Grades are calculated out of 700 points)

AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT:

ADA is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118 or call 845-1637. For additional information visit <http://disability.tamu.edu>.

ACADEMIC INTEGRITY STATEMENT:

An Aggie does not lie, cheat, or steal or tolerate those who do. More information can be found at www.tamu.edu/aggiehonor/

Any acts of plagiarism will result in a zero for the assignment and a conference with Dr. Forrest.

**ANSC 433 – HONORS LECTURE
SPRING 2010**

<u>WEEK</u>	<u>DATE</u>	<u>SUBJECT</u>	<u>CHAPTER</u>
1	Jan. 19	Introduction	1
	Jan. 21	Male Reproductive System	3
2	Jan. 26	Male Reproductive System	3
	Jan. 28	Breeding Soundness Evaluation	10 & 11
3	Feb 2	Female Reproductive Tract	2
	Feb 4	Female Reproductive Tract	2
4	Feb. 9	Embryogenesis of Reproductive Systems	4
	Feb. 11	Semen Processing & AI	10 & 12
5	Feb. 16	Regulation of Reproduction	5
	Feb. 18	Regulation of Reproduction (EXAM A due)	5
6	Feb. 23	Onset of Puberty (Project Topic due)	6
	Feb. 25	Reproductive Cyclicity	7
7	March 2	Follicular Phase of Cycle	8
	March 4	Ovulation	8
8	March 9	Luteal Phase of Cycle (Project Outline due)	9
	March 11	Control of Estrus & Ovulation	9
March 15-19 SPRING BREAK!			
9	March 23	Male Endo & Spermatogenesis (EXAM B due)	10
	March 25	Male Endo & Spermatogenesis	10
10	March 30	Reproductive Behavior (Project PowerPoint Slides due)	11
	April 1	Sperm Transport, Capacitation, & AI	12
11	April 6	Fertilization	12
	April 8	Early Embryogenesis & Preg. Recognition	13
12	April 13	Oral Presentations & Written Reports	
	April 15	Embryo Transfer & Assisted Reproductive Technologies	13
13	April 20	Oral Presentations & Written Reports	
	April 22	Placentation & Gestation (EXAM C due)	14
14	April 27	Oral Presentations & Written Reports	
	April 29	Puerperium	15
15	May 4	No Class – Redefined Day	
	May 6	No Class – Reading Day	
	May 7	Final Exam 12:30-2:30 p.m.	

**ANSC 433 HONORS LABORATORY
SPRING 2010**

<u>WEEK</u>	<u>DATE</u>	<u>LOCATION</u>	<u>SUBJECT</u>	<u>Lab Manual</u>
1	Jan 19 - 22		No Labs!!!	
2	Jan 25 - 28	KLCT 016A	Intro & Male Macro & Micro Anatomy	25-34 & 37-44
3	Feb 1 - 4	Beef Center	Semen Collection & BSE	47-55 & 59-65
4	Feb 8 - 11	KLCT 016A	Female Macro & Micro Anatomy	81-87 & 91-100
5	Feb 15 - 18	Beef Center	Estrous Cycle: Natural Service and Artificial Insemination (Snake oil vs science Title & Paragraph Due)	103-109
6	Feb 22 - 25	KLCT 016A	Endocrine Glands & Hormone	13-21
7	Mar 1- 4	KLCT 016A	Synchronization & Detection of Estrus	
8	Mar 8- 11	KLCT 016A	Lab Practical Exam	
	Mar 15 - 19		SPRING BREAK	
9	Mar 22 - 25	KLCT 016A	Superovulation & Embryo Transfer (Snake oil vs science homework due)	
10	Mar 29 – Apr 1	Beef Center & Sheep Center	Pregnancy Determination-Cow & Ewe	125-138
11	Apr 5 – 8	KLCT 016A	Gestation, Parturition and Lactation	113-122 & 141-145
12	Apr 12 - 15	Horse Center	AI & Pregnancy Determination - Mare	
13	Apr 19 - 22	TBA	Assisted Reproductive Techniques	
14	Apr 26 - 29	KLCT 113	Lab Final Exam (evening exam)	
15	May 3 - 6		No Labs !!!!!!	

Lab Attendance & Grading:

- Students with University Excused Absences must contact their assigned TA to receive permission to attend different lab section (during the same week if possible).
- Students will have a maximum of one week to make up a lab quiz due to an Excused Absence.
- A grade of zero will be assigned for any labs that are not completed, and the zero will be used in the calculation of the final lab average.
- **A field study trip** to an equine breeding farm, an embryo transfer company, and (or) a bull stud will be scheduled