

ANSC 4130  
MANAGEMENT OF REPRODUCTION  
SPRING SEMESTER 2014  
SYLLABUS

INSTRUCTOR: Dr. Gary Moss, GM@uwyo.edu  
Office: 410 An Sci/Mol Biol Bldg.  
Phone: 766-5374, 742-0971 (c)  
Office hours: 10-12 am, M-F or by appointment.

CLASSROOM: 106 Animal Sci/Molecular Biol Bldg

CLASSTIME: MW, 2:30 – 5:00 pm

LABORATORIES: Laboratory sessions will be conducted at the University Livestock Center.

TEXTBOOK: None. Selected readings from the published literature will be passed out.  
Suggested sources of background information include:

Evans, G. and W.M.C. Maxwell. 1987. Salamon's Artificial Insemination of Sheep and Goats. Butterworths, Boston.

Hafez, E.S.E. 2000. Reproduction in Farm Animals. Lea and Febiger, Philadelphia.

Gordon, I. 1997. Controlled Reproduction in Sheep and Goats. CAB INTERNATIONAL, New York.

Gordon, I. 1996. Controlled Reproduction in Cattle and Buffaloes. CAB INTERNATIONAL, New York.

**OBJECTIVE OF THE COURSE:** The objective of the course is to introduce methods used to manipulate reproduction in farm animals. Techniques discussed and/or used in laboratory sessions include: palpation, artificial insemination, diagnosis of pregnancy, induction and control of estrus and ovulation, induction of parturition, embryo transfer, evaluation of breeding soundness and certain other management techniques used to optimize reproduction. The integration of these techniques into various livestock management systems will be discussed and you will be expected to make some production projections based on the incorporation of a given technique.

Because of the timing requirements for managing reproduction (animals operate on their own schedule, not on the class schedule developed for the University), plan to spend unscheduled time on various laboratory sessions. Most of the extra time can be arranged to be conducted before 8 a.m. or after 5 p.m. and on weekends. We believe that the extra time is beneficial and essential to enhancing your understanding of the complexities of managing reproduction of farm animals. In addition, 2 students will be asked to help "setup" and "cleanup" on each laboratory session day. A sign up sheet will be passed out to organize these duties.

**GRADING AND ATTENDANCE POLICY:** This is a lecture-discussion-laboratory course

without an official textbook, however numerous handouts/references will be passed out. Your grade will be influenced by attendance and participation in lectures, laboratories and discussion sessions. The laboratory sessions for this course are often initiated a week or more in advance of the laboratory period. Because of the scheduling, it will be impossible to make up laboratory sessions.

Because of the essential nature of the laboratory sessions, your attendance is strongly encouraged. We recognize, however, that on rare occasions you may have to miss a laboratory. Therefore, each of you will be allowed one unexcused absence from a laboratory session. For each additional unexcused absence, your grade will be reduced by 10 points. For either excused or unexcused absences, you are responsible for knowing the material and (or) techniques. Grades will be determined from the following schedule of examinations and assignments.

<u>Assignment or examination</u>	<u>Points</u>
Two one-hour examinations	200
Final Examination	100
Class assignments or quizzes (six given, lowest dropped)	50
Class project	50
Total	400

<u>Grade</u>	<u>Necessary Points</u>
A	360
B	320
C	280
D	240
F	<240

Anyone who practices academic dishonesty will be dealt with according to current University regulations.

If you have a physical, sensory, cognitive, or psychological disability and require accommodations, please let me know as soon as possible. You will need to register with, and provide documentation of your disability to University Disability Support Services (UDSS) in SEO, room 330 Knight Hall. You may also reach them at 766-6189, TTY: 766-3073.

SCHEDULE: The schedule of lectures, laboratory session and examinations follows:

<u>Date</u>	<u>Day</u>	<u>Class topic or procedure</u>	<u>Location</u>
1-13	M	Introduction, Syllabus, Grades, Class structure, E cycle	AB 106
1-15	W	Endocrinology of the Estrous Cycle, Puberty, PPI	AB 106
1-20	M	MLK Day	
1-22	W	Estrus synchronization <b>Quiz 1</b>	AB 106
1-27	M	Day 1 AI class slides & palpation	AB 106
1-29	W	Begin palpation, BCS cows, Blood sample	LC
2-3	M	AI technique, ultrasound	AB 106
2-5	W	Palpation	LC
2-10	M	Pregnancy Testing, PSPB (Tanya Madden)	AB 106
2-12	W	Palpate & AI	LC
2-17	M	Estrus detection film, Mgt of PPI and Puberty	AB 106
2-19	W	Palpate & AI	LC
2-24	M	<b>Quiz 2.</b> Multiple Ovulation, Ovarian Cysts	AB 106
2-26	W	Palpate & AI – AI “ <b>practicum-quiz 3</b> ”	LC
3-3	M	Catch up, Review	AB 106
3-5	W	Equine Reproduction (Doug Zalesky)	AB 106
<b>3-10</b>	<b>M</b>	<b>EXAM 1</b>	
3-12	W	Reproductive Disease Mgt (Don Montgomery)	AB 106
3-17 – 3-21		Spring Break	
3-24	M	Nutrition/Reproduction, Embryo Flush (Scott Lake)	AB 106

3-26	W	Embryo Flush	LC
3-31	M	Vasectomize 2 rams (Ed Van Kirk)	LC
4-2	W	<b>(Quiz 4).</b> Parturition and Induced Parturition	AB 106
4-7	M	<b>(Quiz 5)</b> Out-of Season Breeding	AB 106
4-9	W	Swine AI (Dave Lutterman)	Swine Unit
4-14	M	Swine Repro Mgt (Steve Ford)	AB 106
4-16	W	BSE (Doug Zalesky)	Beef Unit
4-21	M	Swine Embryo collection (Steve Ford)	LC
<b>4-23</b>	<b>W</b>	<b>EXAM 2</b>	AB 106
4-28	M	Class presentations/projects	AB 106
4-30	W	<b>(Quiz 6).</b> Catch-up/Review	AB 106
<b>5-5</b>	<b>M</b>	<b>Final 2:10 – 3:00</b>	AB 106