Animal Science 340
Reproductive Physiology of Domestic Animals
Course Syllabus - Fall 2011

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Plumas Hall 209 Office: (530) 898-6280

Class Schedule: Mon. & Wed. 10:00 – 10:50 Lecture: Plumas 329
Mon. or Wed. 2:00 - 5:00 Laboratory: Farm Classroom #2

Office Hours: Thursday 9:00 am – 11:00 am
Monday/Wednesday 11:00 am – 12:00 pm
Or by appointment


Course Content: The primary objective of this course is to promote an understanding of reproductive processes in domestic animals. The course will emphasize basic and comparative aspects of reproductive physiology to meet the needs of students in agricultural sciences, animal sciences, biology, pre-veterinary medicine, and related fields. Lecture material will provide a fundamental understanding of reproductive mechanisms, including basic anatomy/physiology, endocrinology, cellular signal transduction involved in hormone production and secretion, cyclicity, factors influencing onset of puberty, ovulation, fertilization, gestation and the initiation of parturition. The latest in reproductive technologies (i.e., artificial insemination, estrous synchronization, embryo transfer, embryo sexing, and cloning) will be discussed and demonstrated as applied to animal agriculture.

Course Grading: Comprehensive final
15 Quizzes on-line (20 pts each) 150 pts
15 Lab quizzes 300 pts
Estrous Synchronization Breeding Plans & Presentation 150 pts
Total: 750 pts

Grading Scale: 90% = A; 80% = B; 70% = C; 60% = D; <60% = F

Ground Rules: Quizzes will be given on-line and will cover lecture and reading material. Quizzes will be made available Friday morning between 8:00 to 12:00 pm, you will have 30 minutes to take the exam, answers will not be made available until after everyone has taken the quiz. Makeup-quizzes will be at the discretion of the professor, and under most circumstances will not be granted. Pop quizzes will be unannounced and administered during lecture. For additional information on College of Agriculture policies please see the following link or file posted to Vista. http://www.csuchico.edu/ag/_assets/documents/syllabi/COACommonSyllabusPolicies.pdf

Expected Student Behavior in the Classroom

• Students are expected to turn off all pagers, cell phones and other electronic devices during class time.
• Students are expected to pay attention and participate in class meetings.
• Students may not read other materials (newspapers, magazines) during class.
• Students are to remain in class during the entire session with the exception of breaks. Students are not allowed to come and go during the class session.
• All class participants are expected to exhibit respectful behavior to other students and the instructor.
All students have the right and privilege to learn in the class, free from harassment and disruption.
Inappropriate or disruptive behavior will not be tolerated, nor will lewd or foul language.
The class follows the standards set in the Code of Students Rights and Responsibilities (EM 96-38) and students are subject to disciplinary action for violation of that code.
Be respectful and considerate of other students, instructors and the animals.

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<tr>
<th>Date</th>
<th>Lecture: Assignment/Reading</th>
<th>Lab</th>
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| 1/28 – 1/30  | **Chapter 1: History**  
Chapter 2: Female Anatomy/Physiology | • Sheep reproductive management calendar  
• Ultrasound technology as a management tool  
• Pregnancy Diagnosis - Ultrasound in the ewe  
• CSU Chico Research – Melatonin  
• Lab Quiz 1 |
| 2/4 – 2/6    | **Chapter 2: Female**  
Chapter 3: Male Anatomy/Physiology | • Female reproduction video  
• Female reproductive tract dissections  
• Table top A.I.  
• Lab Quiz 2 |
| 2/11 – 2/13  | **Chapter 3: Male** | • Boar Collection video  
• Boar Semen Collection  
• Swine A.I.  
• Swine reproductive management calendar  
• Lab Quiz 3 |
| 2/18 – 2/20  | **Chapter 4: Embryogenesis of the male and female tract** | • Ram Breeding Soundness exams  
• Ram semen collection  
• Semen analysis lab  
• Lab Quiz 4 |
| 2/25 – 2/27  | **Chapter 5: Endocrinology** | • Breeding Soundness Exam video  
• Breeding Soundness Exams in Bulls  
• Lab Quiz 5 |
| 3/4 – 3/6    | **Chapter 6: Onset of Puberty** | • Equine A.I. – Field Trip  
• Equine reproductive management calendar  
• Lab Quiz 6 |
| 3/11 – 3/13  | **Chapter 7: Reproductive Cycles** | • Artificial Insemination Short Course Wk1  
• Lab Quiz 7 |
| 3/18 – 3/20  | No class | No Lab |
| Spring Break |            |            |
| 3/25 – 3/27  | **Chapter 8: Follicular Phase of the Estrous Cycle** | • Artificial Insemination Short Course Wk2  
• Lab Quiz 8 |
| 4/1 – 4/3    | No Class April 1 – Cesar Chavez Day  
Chapter 9: Luteal Phase of the Estrous Cycle | • Artificial Insemination Short Course Wk 3  
• Lab Quiz 9 |
| 4/8 – 4/10   | **Chapter 10: Endocrinology of the Male and Spermatogenesis** | • Reproductive Management Plans – Assignment  
• Estrus Synchronization programs |
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<tr>
<th>Date Range</th>
<th>Topic</th>
<th>Notes</th>
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<tbody>
<tr>
<td>4/15 – 4/17</td>
<td>Chapter 11: Reproductive Behavior</td>
<td>Lab Quiz 10</td>
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<td>Goat Artificial Insemination</td>
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<td>Goat reproductive calendar</td>
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<td>Lab Quiz 11</td>
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<td>4/22 – 4/24</td>
<td>Chapter 12: Spermatozoa in the Female Tract: Transport, Capacitation</td>
<td>Setup, design and execution of A.I. program –</td>
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<td>and Fertilization</td>
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<td>Beef reproductive management calendar</td>
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<td>Lab Quiz 12</td>
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<td>Lab Quiz 13</td>
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<td>Parturition</td>
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<td>Lab Quiz 14</td>
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<td>5/13 – 5/15</td>
<td>Chapter 15: Puerperium and Lactation</td>
<td>Reproductive Management Presentations</td>
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<td>5/20 – 5/24</td>
<td>Final: Comprehensive Exam</td>
<td>No Laboratory during Finals</td>
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