Proposal Form For Addition And Revision Of Courses

1. Proposing College / School:
   Department:

2. Course Prefix and Number:
   ANSC 460

3. Effective Term:

4. Course Title:
   Equine Reproductive Techniques

5. Requested Action:
   - [ ] Add a Course
   - [ ] Change a Course
   - [ ] Revise a Course

6. Course Credit:
   Maximum Hours (Repeatability):
   
<table>
<thead>
<tr>
<th>Credit Type</th>
<th>Weekly or Per Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>lecture</td>
<td>weekly 1</td>
</tr>
<tr>
<td>lab</td>
<td>weekly 2</td>
</tr>
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<td></td>
<td></td>
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<td></td>
<td>Total Credit Hours</td>
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</tbody>
</table>

7. Grading Type:
   - [ ] Regular (ABCD/F)
   - [ ] Satisfactory/Unsatisfactory (S/U)
   - [ ] Audit

8. Prerequisites/Corequisites:
   Use "Y" to indicate a prerequisite, "C" to indicate a corequisite, and "MC" to indicate a prerequisite with concurrent:
   P: ANSC 3600

9. Restrictions:
   List specific restrictions above.

10. Course Description:
    Reproductive management and application of modern technologies to enhance reproductive efficiency of the domestic horse.

11. May Count Either:
    (Indicate if this particular course cannot be counted for credit in addition to another)

12. Affected Program(s):
    (Respond "No" if not included in any program; attach memorandum if more space is required)

13. Overlapping or Duplication of Other Units' Offerings:
    (If course is included in any other degree program, is used as an elective frequently by other unit(s), or is in an area similar to that covered by another college/school, attach correspondence with relevant unit)

   - [ ] Applicable
   - [ ] Not Applicable
14. Justification: After five years of teaching this curriculum, it is apparent that the students would benefit from additional lecture time to better prepare them for the laboratory activities.

(Include a concise, yet adequate rationale for the addition/revision of the course, citing accreditation, assessments (faculty, graduate, and/or external) where applicable)

15. Resources: No additional resources will be necessary.

(Indicate whether existing resources such as library materials, classroom/laboratory space, and faculty appointments are adequate to support the proposed addition/revision; if additional resources are required, indicate how such needs will be met, referencing the appropriate level of authorization -- i.e.: Dean -- where necessary; if no additional resources or shifting of resources will be necessary, respond "Not Applicable")

16. Student Learning Outcomes:

- Develop a thorough understanding of mare and stallion reproductive systems
- Understand common problems which decrease reproductive efficiency in the horse and methods to alleviate these problems
- Develop strategies to maximize reproductive efficiency of horses in various breeding systems
- Understand concepts behind and utilization of current and emerging technologies used to enhance reproductive success in horses

(State in measurable terms (reflective of course level) what students should be able to do when they have completed this course)

17. Course Content Outline:

Week; Lecture Topic

1 Introduction, syllabus, objectives
2 Stallion anatomy & physiology
3 Breeding the stallion
4 Semen preservation
5 Diseases and surgery of the male tract; LAB REPORT 1
6 Stallion management; EXAM 1
7 Mare anatomy & physiology
8 Mare estrous cycle
9 Breeding the mare
10 Pregnancy physiology; LAB REPORT 2
11 Pregnancy loss, fertility challenges; EXAM 2
12 Advanced reproductive technologies
13 Pregnancy & Parturition
14 Neonatal care
15 Farm records & management; WRITTEN TERM REPORT FINAL EXAM

Week; Lab Activity

1 Safety test
2 Anatomy, breeding soundness
3 Semen collection
4 Cooled-shipped and frozen semen
5 Castration; injuries & diseases
6 Handling, breeding season management
7 Anatomy, breeding soundness
8 Detecting estrus, hormonal manipulation
9 Natural, artificial insemination
10 Ultrasound assessment
11 Specialized diagnostics
12 Embryo transfer; AUCVM tour
13 Late gestation care, handling dystocia
14 Post-partum care, neonatal diseases
15 Foal handling; breeding records
18. Assignments / Projects:

Exams: Each exam will be comprised of both written and lab practical elements. Exam questions will be drawn from lecture and discussion sessions, text reading and horse skills from the laboratory activities.

Lab reports: Two laboratory reports will be assigned. The first report will detail information from the calculation of daily sperm output and cooled semen handling activities. The second report will include mare estrous cycle records. While information for the reports may be collected in a class activity, the final report is to be completed individually.

Written term report: A written term report will be assigned and due at the time of the final exam. The report will be a minimum of four pages of text, 12 pt font, double spaced, "standard Word" margins, and literature cited. Citations must follow the style and format of the Journal of Animal Science. The report is intended to encourage the student to research a special problem in breeding management, using reference texts, refereed journal articles, conference proceedings and other scientific literature as resources. A minimum of three sources must be used. Potential topics are to be discussed with the instructor prior to the midterm exam. The term paper will be evaluated on relevance of topic, depth of content, use of references, and style as appropriate to the discipline.

For lab and term reports, use of proper terminology, spelling, and grammar make up 20% of the assignments’ possible value.

(List all quizzes, projects, reports, activities and other components of the course grade -- including a brief description of each assignment that clarifies its contribution to the course’s learning objectives)

19. Rubric and Grading Scale:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (3 x 100 points)</td>
<td>300</td>
</tr>
<tr>
<td>Lab reports (2 x 25 points)</td>
<td>50</td>
</tr>
<tr>
<td>Written term report (50 points)</td>
<td>50</td>
</tr>
</tbody>
</table>

Grades will be calculated out of 400 possible points:

- Grade Points required
  - A 270-300
  - B 240-269
  - C 210-239
  - D 180-209
  - F <180

(List all components of the course grade -- including attendance and/or participation if relevant -- with point totals for each; indicate point totals and ranges or percentages for grading scale; for S/U grading, detail performance expectations for a passing grade)

20. Justification for Graduate Credit: Not applicable

(Include a brief statement explaining how the course meets graduate educational standards (i.e.: rigorous standards for evaluation, development of critical thinking and analytical skills, etc.))

(Included below are standard statements regarding course policies. If necessary, a statement may be altered to reflect the academic policies of individual faculty members and/or the academic unit or department, provided that there is no conflict with the Student Policy eHandbook, Faculty Handbook, or any existing university policy.)

POLICY STATEMENTS

Attendance: Although attendance is not required, students are expected to attend all classes, and will be held responsible for any content covered in the event of an absence.)
Excused Absences: Students are granted excused absences from class for the following reasons: illness of the student or serious illness of a member of the student's immediate family, the death of a member of the student's immediate family, trips for student organizations sponsored by an academic unit, trips for university classes, trips for participation in intercollegiate athletic events, subpoena for a court appearance, and religious holidays. Students who wish to have an excused absence from class for any other reason must contact the instructor in advance of the absence to request permission. The instructor will weigh the merits of the request, and render a decision. When feasible, the student must notify the instructor prior to the occurrence of any excused absences. In no case shall such notification occur more than one week after the absence. Appropriate documentation for all excused absences is required. Please consult the Student Policy eHandbook for more information on excused absences.

Make-Up Policy: Arrangement to make up a missed major examination (e.g., hour exams, mid-term exams) due to properly authorized excused absences must be initiated by the student within one week of the end of the period of the excused absence(s). Except in unusual circumstances, such as the continued absence of the student or the advent of university holidays, a make-up exam will take place within two weeks of the date that the student initiates arrangements for it. Except in extraordinary circumstances, no make-up exams will be arranged during the last three days before the final exam period begins.

Academic Honesty Policy: All portions of the Auburn University student academic honesty code (Title XIX) found in the Student Policy eHandbook will apply to university courses. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

Disability Accommodations: Students who need accommodations are asked to electronically submit their approved accommodations through AU Access and to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. To set up this meeting, please contact me by e-mail. If you have not established accommodations through the Office of Accessibility, but need accommodations, make an appointment with the Office of Accessibility, 1228 Haley Center, 844-2056 (VITT).
Approvals

Department Chair / Head: Date: 2-21-13

College / School Curriculum Committee: Date: 4-8-13

College / School Dean: Date: 4-9-13

Dean of the Graduate School (for Graduate Courses): Date: 

Assoc. Provost for Undergraduate Studies (for Undergraduate Courses): Date: 

Contact Person: Dale A. Coleman  
Telephone: 844-1512

E-Mail Address: colemda@auburn.edu  
Fax: 844-1519
ANSC 4650 Equine Reproductive Techniques
Summer 2012

Instructor:
Betsy Wagner, PhD PAS
229 Upchurch Hall
844-7503
elw0001@auburn.edu

Office Hours: by appointment
Cell phone: 334-663-2747

Prerequisites: ANSC 3600 Reproductive Physiology

Texts:

Pathways to Pregnancy and Parturition. P.L. Senger. (suggested – this is the text for ANSC 3600)

Handouts and Other Materials:
Additional course materials will be distributed in class. Consider these to be as valuable as your notes and text book in understanding the material and preparing for exams.

All breeding supplies and equipment will be provided. Boots and long pants are required for class sessions at the AU Horse Center.

Course Description:
Anatomy, physiology and endocrinology of equine reproduction; understanding and utilizing advances in reproductive science and technology to enhance domestic equine reproductive efficiency.

General Course Objectives:
• Develop a thorough understanding of mare and stallion reproductive systems
• Understand common problems which decrease reproductive efficiency in the horse and methods to alleviate these problems
• Develop strategies to maximize reproductive efficiency of horses in various breeding systems
• Understand concepts behind and utilization of current and emerging technologies used to enhance reproductive success in horses

Grading:
Weekly mini-exams (4 x 25 points) 100 points
Final exam, *Friday, June 22, 8 a.m. 100 points
Lab reports (2 x 25 points) 50 points
Written term report (50 points) 50 points
Grades will be calculated out of 300 possible points:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points required</th>
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<tbody>
<tr>
<td>A</td>
<td>270-300</td>
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<tr>
<td>B</td>
<td>240-269</td>
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<tr>
<td>C</td>
<td>210-239</td>
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<tr>
<td>D</td>
<td>180-209</td>
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<tr>
<td>F</td>
<td>&lt;180</td>
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</table>

*Exams:* Four mini-exams, worth 25 points each, will be given on May 18 and June 1, 8, & 15. Exam questions will be drawn from lecture and discussion sessions, text reading and horse skills from the preceding week. A final, cumulative exam will be comprised of both written and lab practical elements.

*Lab reports:* Two laboratory reports will be assigned. The first report will detail information from the calculation of daily sperm output and cooled semen handling activities; this report is due Tuesday, June 12. The second report will include mare estrous cycle records; this report is due Tuesday, June 19. While information for the reports may be collected in a class activity, the final report is to be completed individually.

*Written term report:* A written term report will be assigned. The report will be a minimum of four pages of text, 12 pt font, double spaced, “standard Word” margins, and literature cited. Citations must follow the style and format of the Journal of Animal Science ([http://jas.fass.org/misc/JAS_Instruct_to_Authors_10.pdf](http://jas.fass.org/misc/JAS_Instruct_to_Authors_10.pdf), see page 9). The report is intended to encourage the student to research a special problem in breeding management, using reference texts, refereed journal articles, conference proceedings and other scientific literature as resources. Potential topics are to be discussed with the instructor prior to June 8. The final draft is due on Friday, June 22 at 8 a.m. The term paper will be evaluated on relevance of topic, depth of content, use of references, and style as appropriate to the discipline.

**General Class Rules and Policies**

1. Show up to class. I will worry about you. When possible, email me in advance of your absence.
2. Permission for making up missed exams is granted according to AU policies outline in the *Tiger Cub*. You will have one week from the day you return to class to make arrangements for missed work.
3. Late assignments will automatically be assessed a penalty of 10% of the total possible points for each weekday they are late. For example, an assignment valued at 50 points will be worth a maximum of 45 points when one day late, 40 points when two days late, 25 points when five days late, etc.
4. Questions concerning quiz and exam grades should be asked during the next class period after getting the quiz or exam returned to you. Waiting until the end of the semester is stressful on everybody.
**Academic Honesty Code:**
Students are responsible for reading and understanding Auburn University’s policies and procedures regarding academic misconduct. This can be accessed in the Rules section of http://www.auburn.edu/tigercub. Cheating and plagiarism are considered serious offenses in the class, and students are expected to pursue their academic work with honesty and integrity. If you have any concerns or questions regarding academic dishonesty, please make an appointment to see me during office hours. I would rather spend my time being helpful and proactive than something else.

During exams, cell phones are to be turned off completely and stored in your bookbag (at home would be better). All personal belongings (coats, books, bags, etc.) will be placed at the front or side of the room for you to pick up after turning in the exam. Please respect your classmates by making the test fair for everyone.

**Disability Accommodations**
Students who need accommodations are asked to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. Bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have an Accommodation Memo but need accommodations, make an appointment with The Program for Students with Disabilities, 1244 Haley Center, 844-2096 (V/TT).
<table>
<thead>
<tr>
<th>Date</th>
<th>Daily Topic</th>
<th>Weekly Project</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 18</td>
<td>Introduction; review of general ANSC 3600 concepts;</td>
<td>Lab setup</td>
<td>Senger text</td>
</tr>
<tr>
<td>21</td>
<td>Detecting estrus</td>
<td>Mare evaluation</td>
<td>Blanchard text, chapters 1-5</td>
</tr>
<tr>
<td>22</td>
<td><strong>Lecture:</strong> Mare anatomy, physiology, estrous cycle, fertility</td>
<td>basic</td>
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<tr>
<td>23</td>
<td>Evaluating breeding soundness</td>
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<tr>
<td>25</td>
<td>Stallion handling and management</td>
<td></td>
<td></td>
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<tr>
<td>May 28</td>
<td>Memorial Day – No class</td>
<td>Advanced mare</td>
<td>Blanchard text, chapters 6-9, 17, 19</td>
</tr>
<tr>
<td>29</td>
<td><strong>Lecture:</strong> Normal and abnormal pregnancy, parturition &amp; dystocia, assisted reproductive technologies</td>
<td>techniques</td>
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<tr>
<td>30</td>
<td>Pregnancy physiology and diagnosis; management of pregnant mare</td>
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<tr>
<td>June 1</td>
<td>Abnormal pregnancies, pregnancy loss</td>
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<td>4</td>
<td>Special problems with mares, embryo transfer, assisted technologies</td>
<td>Semen processing</td>
<td>Blanchard text, chapters 12-14</td>
</tr>
<tr>
<td>5</td>
<td><strong>Lecture:</strong> Stallion anatomy and physiology, fertility</td>
<td>skills</td>
<td></td>
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<tr>
<td>6</td>
<td>semen handling and processing</td>
<td></td>
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<tr>
<td>8</td>
<td>Natural and artificial insemination</td>
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<tr>
<td>11</td>
<td>Foal handling &amp; management</td>
<td>Foals</td>
<td>Blanchard text, chapter 10-11</td>
</tr>
<tr>
<td>12</td>
<td><strong>Lecture:</strong> Prenatal and neonatal development; special problems of the neonate</td>
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<tr>
<td>13</td>
<td>Open topic</td>
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<tr>
<td>15</td>
<td>Open topic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Record keeping; facility design</td>
<td>Integrated management</td>
<td>Blanchard text, chapter 18</td>
</tr>
<tr>
<td>19</td>
<td><strong>Lecture:</strong> Breeding farm management, nutrition and health management programs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Final Exam – In Class</td>
<td></td>
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</tbody>
</table>

* Two non-class time meeting days:
  Monday, May 28 (Memorial Day) for teasing mares
  Thursday, June 7 for stallion collection