Proposal Form For Addition And Revision Of Courses

1. Proposing College / School: Agriculture
   Department: Animal Sciences

2. Course Prefix and Number: ANSC 3650
   3. Effective Term: 2015

4. Course Title: Physiology of the Equine Athlete
   Abbreviated Title (30 characters or less):

5. Requested Action:
   - [ ] Renumber a Course
   - [ ] Add a Course
   - [ ] Revise a Course
   - Current Course Number:
   - Proposed Course Number:
   - Type of Revision: credit hours

6. Course Credit:
   Contact/Group Hours
   Scheduled Type
   (e.g.: Lab, Lecture, Practicum, Directed Study)
   Weekly or Per Term?
   Credit Hours
   Anticipated Enrollment
   Maximum Hours (Repeatability):
   3
   lecture
   weekly
   3
   20
   Total Credit Hours: 3

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

8. Prerequisites/Corequisites:
   Use "P:__" to indicate a prerequisite, "C:__" to indicate a corequisite, and "P/C:__" to indicate a prerequisite with concurrency.
   P: ANSC 1000, BCHE 3200, BIOL 2510

9. Restrictions: List specific restriction in space above.
   - [ ] College
   - [ ] Major
   - [ ] Standing
   - [ ] Degree

10. Course Description:
    (20 Words or Less; exactly as it should appear in the Bulletin)
    Selection and development of the horse for athletic performance; exercising, training and fitness conditioning for performance horses.

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

12. Affected Program(s):
    (Respond "N/A" if not included in any program; attach memorandum if more space is required)
    Program Type
    (e.g.: minor, major, etc.)
    Program Title
    (e.g.: MS in Chemistry, Performance Option, Minor in Art)
    Requirement or Elective?
    (required or optional?)
    Major
    Animal Sciences - Equine Science Option
    Elective

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 course, it is the faculty's assessment that two lecture hours are not sufficient to cover this subject in adequate detail for a 3000-level course and be of benefit for a student who will be working in industry upon graduation.

(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:

- Describe aspects of physiologic processes unique to the horse at rest
- Describe changes in physiology during and immediately after an exercise session
- Identify long-term adaptations of the horse to a conditioning program
- Understand implications of stress, fatigue, and overtraining on equine performance

(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 to exercise physiology
2 Energetics
3 Muscle function; HOMEWORK 1
4 Muscular responses & disorders; HOMEWORK 2
5 Connective tissue; EXAM 1
6 Skeletal system & responses
7 Respiratory system
8 Respiratory responses; HOMEWORK 3
9 Cardiovascular system
10 Cardiovascular responses; HOMEWORK 4
11 CV responses; EXAM 2
12 Thermoregulation
13 Stress and fatigue; monitoring fitness; HOMEWORK 5
14 Physical conditioning techniques
15 Training psychology; PRESENTATIONS

FINAL EXAM

(Provide a comprehensive, week-by-week breakdown of course content, including assignment due dates)

18. Assignments / Projects:

Exams: Three exams will be given, covering information from lecture discussions, text reading and handouts. Because course concepts build on previous lecture topics, all exams can be considered cumulative.

Homework: Five homework assignments will be given at various points in the semester. The assigned activity may include time spent at the Auburn University Horse Unit or other horse training or competition facilities to observe equine athletes at work. This may involve some evenings and weekends. Students will be expected to arrange their own travel to these facilities. Observations and data may be collected in small groups (as applicable), but the submitted assignment is to be completed independently.

Team Presentation: Research in exercise physiology and related fields is ongoing, and continues to change the way we think about preparing the equine athlete for peak performance. Pairs of students will present a 10-15 minute summary of a research paper (or group of papers) published within
the last 5 years. The talk should include an introduction to the topic, brief discussion of experimental methodology and results. The focus should be on application(s) of the research in a real-world training and conditioning program. Topic, copy of article and names of partners are due October XX, and is worth 5 of the 50 points for this assignment. The presentations will be given the week after Thanksgiving break. Journal sources and presentation format will be discussed in further detail in class.

(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</td>
<td></td>
</tr>
<tr>
<td>Midterm 1</td>
<td>100</td>
</tr>
<tr>
<td>Midterm 2</td>
<td>100</td>
</tr>
<tr>
<td>Final</td>
<td>100</td>
</tr>
<tr>
<td>Homework (5 x 10 points each)</td>
<td>50</td>
</tr>
<tr>
<td>Team Presentation</td>
<td>50</td>
</tr>
</tbody>
</table>

Grades will be calculated as a percentage of 400 possible points. Letter grades will be assigned according to the standard 90-80-70-60 scale.

(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, subpoenae 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, but 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 XII) 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, 844-2996 (VITT).
Approvals

Department Chair / Head

Date

College / School Curriculum Committee

Date

College / School Dean

Date

Dean of the Graduate School (for Graduate Courses)

Date

Assoc. Provost for Undergraduate Studies (for Undergraduate Courses)

Date

Contact Person: Dale A. Coleman
E-Mail Address: colemda@auburn.edu

Telephone: 844-1512
Fax: 844-1519
ANSC 3650 Physiology of the Equine Athlete  
Fall 2012

Instructor:  
Betsy Wagner, PhD, PAS  
Office hours: most mornings,  
229 Upchurch Hall  
or by appointment  
844-7503  
elw0001@auburn.edu

Required Text:  

Other equine anatomy and/or physiology texts may also be helpful.

Other books on the subject you may enjoy:  
The Horse in Motion. 2002. Sarah Pilliner, Samantha Elmhurst and Zoe Davies.  


978-0-7320-2857-1 (recommended if you are considering graduate school)

Handouts:  
Additional course materials will be made available through Blackboard or distributed in class. Consider these to be as valuable as your notes and text book in understanding the material and preparing for exams.

Course Description:  
Bones cannot move without muscles. Muscles require oxygen and nutrients to function. Cardiovascular and respiratory systems rapidly respond to changes in activity and stress. No one system can function independently from the others. Through proper training (conditioning) we have the opportunity to enable the equine athlete to complete its job to the best of its ability while minimizing the risk of exercise-related injury.

This course will focus on physiologic and metabolic adaptations of the equine athlete. Our discussion will begin with energetics and anatomy, and advance to various systems’ responses to exercise and conditioning programs. Sport-specific conditioning objectives and special problems in exercise-related metabolism will also be covered. You will also have the opportunity to explore concepts and review recent research in exercise physiology and related topics through classroom assignments.
Grading:
Exams

Midterm 1: Tuesday, Sept. 13 100 points
Midterm 2: Tuesday, Oct. 25 100 points
Final: Tuesday, Dec. 4, 8-10:30 a.m. 100 points
Homework (5 x 10 points each) 50 points
Team Presentation 50 points

Grades will be calculated as a percentage of 400 possible points. Letter grades will be assigned according to the standard 90-80-70-60 scale.

Exams: Three exams will be given, covering information from lecture discussions, text reading and handouts. Because course concepts build on previous lecture topics (one system can’t function without the others), all exams can be considered cumulative.

Homework: Five homework assignments will be given at various points in the semester. The assigned activity may include time spent at the Auburn University Horse Unit or other horse training or competition facilities to observe equine athletes at work. This may involve some evenings and weekends. Students will be expected to arrange their own travel to these facilities. Observations and data may be collected in small groups (as applicable), but the submitted assignment is to be completed independently.

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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.
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 work or exams will be granted only for authorized absences arranged in advance of the absence or in case of sickness, injury or death in the family. In the case of absence due to sickness, you must present verification of the illness from the University Health Center or family doctor. You will have one week from the day you return to class to present verification of your absence and arrange to make up 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.

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>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
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<tbody>
<tr>
<td>1</td>
<td>Aug 16</td>
<td>Introduction</td>
<td>Ch. 1</td>
</tr>
<tr>
<td>2</td>
<td>21, 23</td>
<td>Energetics</td>
<td>Ch. 2</td>
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<tr>
<td>3</td>
<td>28, 30</td>
<td>Muscle</td>
<td>Ch. 3</td>
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<tr>
<td>4</td>
<td>Sept 4, 6</td>
<td>Muscular responses; <strong>EXAM 1 Thursday</strong></td>
<td>Ch. 7</td>
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<tr>
<td>5</td>
<td>11, 13</td>
<td>Connective tissue</td>
<td>Ch. 4</td>
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<tr>
<td>6</td>
<td>18, 20</td>
<td>Skeletal system &amp; responses</td>
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<td>7</td>
<td>25, 27</td>
<td>Respiratory system</td>
<td>Ch. 8</td>
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<tr>
<td>8</td>
<td>Oct 2, 4</td>
<td>Respiratory responses</td>
<td>Ch. 5</td>
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<tr>
<td>9</td>
<td>9, 11</td>
<td>Cardiovascular system</td>
<td>Ch. 9</td>
</tr>
<tr>
<td>10</td>
<td>16, 18</td>
<td>Cardiovascular responses</td>
<td>Ch. 6</td>
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<tr>
<td>11</td>
<td>23, 25</td>
<td>CV responses; <strong>EXAM 2 Thursday</strong></td>
<td>Ch. 10</td>
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<tr>
<td>12</td>
<td>Nov 30, 1</td>
<td>Thermoregulation</td>
<td>Ch. 12</td>
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<tr>
<td>13</td>
<td>6, 8</td>
<td>Stress and fatigue; monitoring fitness</td>
<td>Ch. 11 &amp; 19</td>
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<tr>
<td>14</td>
<td>13, 15</td>
<td>Physical conditioning techniques</td>
<td>Ch. 15 &amp; 17</td>
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<tr>
<td>15</td>
<td>20, 22</td>
<td><strong>THANKSGIVING BREAK</strong></td>
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<tr>
<td>16</td>
<td>27, 29</td>
<td>Presentations; sports psychology</td>
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<td>Dec 4</td>
<td><strong>FINAL EXAM 8-10:30 a.m.</strong></td>
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Other special dates:
Monday, September 17; KWPN Keuring at Blalock Lakes, Newnan GA
Saturday, September 22; vet box at CIC3* at Poplar Place Farm, Hamilton GA
Saturday & Sunday, September 22 & 23; P&R crew at competitive trail ride, Troy AL
Saturday & Sunday, October 20 & 21; P&R crew at competitive trail ride, Rockford AL
Saturday, October 27; vet box at CCI2* at Chattahoochee Hills, Newnan GA