**Physiology of Exercise**

**(KINE3680-003) Course Syllabus**

**Fall 2012**

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**Instructor:** Dr. Heidi Kluess

**Office:** 2100 Memorial Coliseum

**Phone:** 844-1844

**E-mail:** hak0006@auburn.edu

**Office Hours:** TTH 8:30-9:30AM, or by appointment

**Credit:** 4 credit hours

**Prerequisites:**

**Corequisites:**

**Syllabus prepared:** 5/1/2012

**Class Schedule:** TTH 11AM-12:15AM; room 2034 COLSM

**Course Description:** This course will focus on basic energy, musculoskeletal, nervous, cardiovascular and respiratory systems as they relate to aerobic and anaerobic exercise. Emphasis will be placed on the adaptations of these systems to training.

**Objectives:** Undergraduate exercise physiology students are expected to demonstrate competency in the following areas:

1. A general knowledge of the bioenergetics systems and their functions during specific exercises
2. A general knowledge of the adaptations of the bioenergetics systems to specific training programs
3. A general knowledge of various organ systems and their functions during exercise and adaptations to specific training programs
4. An ability to perform basic physiology of exercise laboratory test

**Required Text:** Powers and Howley. Exercise Physiology: Theory and Application to Fitness and Performance, 2012, 8thed.

**Student Evaluation:**

A. Examinations: 79% of class grade (5/6 exams will count toward final grade)

B. Laboratory: 20% of class grade (see lab syllabus for details).

C. Course syllabus acceptance: 1% of class grade

This syllabus serves as a contract to identify what is required for a given course grade. Each student is required to either 1) formally accept the terms outlined in this syllabus, or 2) engage in open discussion with the instructor about matters of clarification/alteration, followed by formal acceptance of the revised syllabus. Formal acceptance of the syllabus is performed within the Blackboard quiz content module and counts toward 1% of the class grade. All students must complete the syllabus acceptance on or before **Aug 30, 2012**.

**Grading Scale:**

A: 90% - 100% D: 69.99% - 60.0%

B: 89.99% - 80.0% F: < 60.00%

C: 79.99% - 70.0%

**Attendance Policy:**

***Lecture attendance*** Attendance is mandatory as a pre-requisite for participation. However, attendance will not be regularly taken or recorded. As such, class attendance will not directly impact your course grade. Students will be expected, should they choose to be absence for any excused or unexcused reasons, to obtain all information necessary for successful completion of this course.

***Lab attendance*** No Lab absences will be allowed. Lab write-ups will not be accepted if one was not present for data collection. The only exception to this is data will be provided to students that miss lab for an excused absence.

***Exam attendance***: Exam dates are on the tentative schedule in this document. Missed exams will result in 0 points for that portion of the course grade, no exceptions. Excused absences on exam dates must be arranged in advance of the start of the exam for makeup consideration. It is the student’s responsibility to be aware of scheduled exams – even in the event that they miss a class where an

exam is announced (for excused or unexcused reasons).

**Late policy:** Assigned lab work will not be accepted late. All assigned work is due on the stated date during the class period. The only exception is if you talk to me before the assignment is late (end of the class period when it is due) and negotiate a new due date with me.

Failure to do so will result in a **ZERO** on the assignment. The only appropriate excuses for failing to inform me ahead of time are: you were unconscious, you were unable to speak or type as a result of a medical condition, or you were in jail and didn’t want to use your one phone call on me.

**Academic Integrity Policy:** The Auburn University student academic honesty code Title XII found on the University Policies webpage (<https://sites.auburn.edu/admin/universitypolicies/default.aspx>) applies to this class. 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 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 PSD office, but need accommodations, make an appointment with The Program for Students with Disabilities, 1228 Haley Center, 844-2096 (V/TT).

**Professionalism:** As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College’s conceptual framework. These professional commitments or dispositions are listed below: Engage in responsible and ethical professional practices

o Contribute to collaborative learning communities

o Demonstrate a commitment to diversity

o Model and nurture intellectual vitality

Tentative schedule of topics and exams for the lecture.

|  |  |  |
| --- | --- | --- |
|  | Topic/activity | Reading |
| Th 8/16 | Syllabus and history | Ch 0 |
| T 8/21 | History | Ch 0, Harvard Fatigue Laboratory: Contributions to WWII |
| Th 8/23 | Measurement of work, power, energy | Ch 1 |
| T 8/28 | Measurement of work, power, energy |  |
| Th 8/30 | **Exam 1** |  |
| T 9/4 | Control of internal environment | Ch 2 |
| Th 9/6 | Control of internal environment |  |
| T 9/11 | Bioenergetics | Ch 3 |
| TH 9/13 | Bioenergetics |  |
| T 9/18 | **Exam 2** |  |
| TH 9/20 | Exercise Metabolism | Ch 4 |
| T 9/25 | Exercise Metabolism |  |
| TH 9/27 | Hormonal responses to exercise | Ch 5 |
| T 10/2 | Hormonal responses to exercise |  |
| TH 10/4 | **Exam 3** |  |
| T 10/9 | The nervous system | Ch 7 |
| TH 10/11 | The nervous system |  |
| T 10/16 | Skeletal muscle | Ch 8 |
| TH 10/18 | Skeletal muscle |  |
| T 10/23 | **Exam 4** |  |
| TH 10/25 | Circulatory adaptations | Ch 9 |
| T 10/30 | Circulatory adaptations |  |
| TH 11/1 | Temperature regulation | Ch 12 |
| T 11/6 | Temperature regulation |  |
| TH 11/8 | **Exam 5** |  |
| T 11/13 | Physiology of training | Ch 13 |
| TH 11/15 | Physiology of training |  |
| T 11/20 | Thanksgiving Break |  |
| TH 11/22 | Thanksgiving break |  |
| T 11/27 | Factors affecting performance | Ch 19 |
| TH 11/29 | Factors affecting performance |  |
| Final exam | **Exam 6** |  |