

# Exercise Physiology/Physiology of Exercise (KINE3680) Course Syllabus Fall 2014

**Instructor:** Brooks Mobley, M.Ed., CSCS  
**\*Co-Instructor:** Leslie Neidert, M.Ed.  
**Office:** 236 School of Kinesiology Bldg  
**Lab:** 245 School of Kinesiology Bldg  
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**Office hours:** Monday & Friday: 3-5pm  
Tuesday & Thursday: 1-3pm

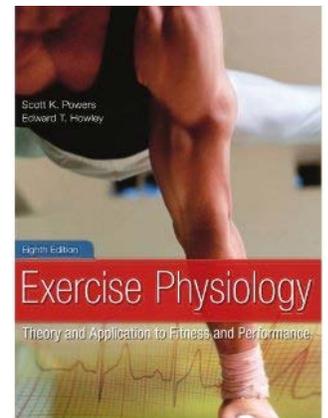
**Prerequisites:** none  
**Corequisites:** none  
**Class schedule:** MWF: 9:00 – 9:50pm  
**Location:** 2043 Beard-Eaves Memorial Coliseum  
**Lab schedule:** M: 12:00-1:40pm  
**Location:** 136 School of Kinesiology Bldg

**Course description:** This course will focus on the physiological, anatomical and biochemical/molecular aspects of exercise physiology.

**Syllabus prepared:** 07-25-2014

**Required text:**

Powers, S.K & Howley, E. T. (2011). *Exercise Physiology: Theory and Application to Fitness and Performance*. (8<sup>th</sup> or 9<sup>th</sup> Ed.) New York, NY: McGraw-Hill Humanities



**Best preparation:** print off class notes from Canvas prior to coming to class and come to class!!!

**Class Objectives:** upon completion of this course students should demonstrate an understanding of:

- The physiological adaptations that occur in response to exercise
- The physiological aspects of muscle, respiratory, cardiovascular responses to exercise
- Basic concepts of bioenergetics, muscle, respiratory & cardiovascular physiology

## Semester Grading Rubric:

Assignments	Description	Points/ % of final grade
Quizzes	(5) quizzes over lecture material	200 / 15%
Exams	(3) M/C, T/F, Matching Exams	300 / 25%
Class Project	Scientific Article Review Abstract/Paper	50 / 10%
Final Exam	(1) M/C, T/F, Matching Cumulative Exam	200 / 20%
LAB	Attendance, Assignments, Lab Reports, Exams	250 / 30%
Total	-	1000 / 100%

\*Lowest quiz will be dropped; however, student must be present and make an effort for this to apply. (Example: Being absent from class without a University excused absence will not count)

## Grading Scale:

Letter Grade	Point Range	Percent Scale
A	900 - 1000	90-100
B	800 - 899	80-89
C	700 - 799	70-79
D	600 - 699	60-69
F	< 600	<60

**Attendance and Late-work Policies:** attendance is highly encouraged given that 50% of his/her grade is obtained through daily quizzes. If he/she were to miss a class due to a foreseen circumstance (e.g., wedding, funeral, etc.), then make-up quizzes or exams can be re-scheduled. For unforeseen circumstances (slept late, flat tire, etc.) it is he's/she's responsibility to obtain class notes from fellow students and/or online.

### Disability and other accommodations

Students who need special accommodations in class, as provided by the Americans with Disabilities Act, should

follow university-approved procedures. If you need assistance, make an appointment with the Program for Students with Disabilities, 1244 Haley Center 844-2096. Accommodations for examinations should be discussed with the instructor at least one week prior to the scheduled examination.

Also, please contact me for accommodations for class projects using MS word, PowerPoint, etc.

## **Academic Honesty and Conduct**

All portions of the Academic Honesty code on <https://fp.auburn.edu/studentaffairs/policies.aspx> apply.

## **Diversity**

Auburn University is committed to providing a working and academic environment free from discrimination and harassment and to fostering a nurturing and vibrant community founded upon the fundamental dignity and worth of all its members.

## **Contingency Plan**

If the normal schedule is disrupted, the syllabus and other course plans may be modified to allow for completion of the course. Your instructor is aware that things may arise and affect the course of work as a class; in that case, your instructor will provide an addendum to your current syllabus with revised course assignments which will then replace this syllabus.

**NO CHEATING!**

**NO NEWSPAPERS!**

**NO SLEEPING!**

**NO TEXTING!**

**\*Students may use computers or tablets to view class materials and/or take notes; however, if students are suspected of browsing the internet or playing games during class time, pop-up quizzes may be given without notice and these quizzes will not be dropped.**

## **Scientific Article Review Abstract/Paper**

Each student will choose a topic in exercise physiology (must be approved by instructor) of their choice and construct a paper on the theory behind the article(s) of interest (what physiological systems are supposed to be affected), data supporting or refuting the theory, safety data, and how future research should be geared and directed given the findings. This paper is to serve more or less like a review article for a chosen topic. The paper will need to follow APA style formatting and will need to be double spaced. No plagiarism will be tolerated and will be treated as cheating. More details on the paper/project will be presented throughout the semester. The paper should include a title page, author block (name, date, class, and semester), abstract, body of work, conclusion, reference page(s).

<b>Date</b>	<b>Syllabus</b>	<b>Reading</b>
8/18 Monday	Introduction, Syllabus, Extra Credit OPP	---
8/20 Wednesday	Chapter 1 – Measurement of Work, Power, and Energy	Chapter 1
8/22 Friday	Chapter 1 – Measurement of Work, Power, and Energy	Chapter 1
8/25 Monday	Chapter 2 – Control of the Internal Environment	Chapter 2
8/27 Wednesday	Chapter 2 – Control of the Internal Environment	Chapter 2
8/29 Friday	Chapter 3 - Bioenergetics	Chapter 3
<b>9/1 Monday</b>	<b>NO CLASS – LABOR DAY HOLIDAY</b>	---
9/3 Wednesday	Chapter 3 - Bioenergetics	Chapter 3
9/5 Friday	Chapter 4 – Exercise Metabolism	Chapter 4
<b>9/8 Monday</b>	Chapter 4 – Exercise Metabolism *Last day to drop with tuition refund and no grade	Chapter 4
<b>9/10 Wednesday</b>	Chapter 5 – Cell Signaling and the Hormonal Responses to Exercise <b>QUIZ 1 (Chapters 1-3)</b>	Chapter 5
9/12 Friday	Chapter 5 - Cell Signaling and the Hormonal Responses to Exercise	Chapter 5
9/15 Monday	Chapter 5 - Cell Signaling and the Hormonal Responses to Exercise	Chapter 5
<b>9/17 Wednesday</b>	<b>NO CLASS – ACSM (IPE) Conference</b>	---
<b>9/19 Friday</b>	<b>NO CLASS – ACSM (IPE) Conference</b> <b>QUIZ 2 Online</b> <b>(Self-read Chapter 0)</b>	Chapter 0
<b>9/22 Monday</b>	<b>Review for Exam 1</b>	---
<b>9/24 Wednesday</b>	<b>EXAM 1 (Chapters 0-5)</b>	---
9/26 Friday	Chapter 7 – The Nervous System: Structure and Control of Movement	Chapter 7
9/29 Monday	Chapter 7 – The Nervous System: Structure and Control of Movement	Chapter 7
10/1 Wednesday	Chapter 8 – Skeletal Muscle: Structure and Function	Chapter 8
10/3 Friday	Chapter 8 – Skeletal Muscle: Structure and Function	Chapter 8
<b>10/6 Monday</b>	Chapter 9 – Circulatory Responses to Exercise *Last day to drop with “W” as grade is 10/7 <b>QUIZ 3 (Chapters 7 &amp; 8)</b>	Chapter 9
10/8 Wednesday	Chapter 9 – Circulatory Responses to Exercise	Chapter 9
10/10 Friday	Chapter 10 – Respiration During Exercise	Chapter 10
10/13 Monday	Chapter 10 – Respiration During Exercise	Chapter 10
10/15 Wednesday	Chapter 11 – Acid-Base Balance During Exercise	Chapter 11
<b>10/17 Friday</b>	<b>NO CLASS – FALL BREAK</b>	

10/20 Monday	Chapter 11 – Acid-Base Balance During Exercise	Chapter 11
<b>10/22 Wednesday</b>	<b>EXAM 2 (Chapters 7 – 10)</b>	---
10/24 Friday	Chapter 12 – Temperature Regulation	Chapter 12
10/27 Monday	Chapter 12 – Temperature Regulation	Chapter 12
10/29 Wednesday	Chapter 13 – The Physiology of Training	Chapter 13
10/31 Friday	Chapter 13 – The Physiology of Training	Chapter 13
11/3 Monday	Chapter 18 – Body Composition and Nutrition for Health	Chapter 18
<b>11/5 Wednesday</b>	Chapter 18 – Body Composition and Nutrition for Health <b>QUIZ 4 (Chapters 11-13)</b>	Chapter 18
11/7 Friday	Chapter 19 – Factors Affecting Performance	Chapter 19
11/10 Monday	Chapter 19 – Factors Affecting Performance	Chapter 19
11/12 Wednesday	Chapter 21 – Training for Performance	Chapter 21
11/14 Friday	Chapter 21 – Training for Performance	Chapter 21
11/17 Monday	Chapter 22 – Training for Different Populations	Chapter 22
11/19 Wednesday	<b>EXAM 3 (Chapters 11-13, 18, 19, 21)</b>	---
11/21 Friday	Chapter 23 – Nutrition, Body Composition, and Performance	Chapter 23
11/24 -11/28	<b>NO CLASS THANKING HOLIDAY BREAK</b>	---
12/1 Monday	Chapter 23 – Nutrition, Body Composition, and Performance	Chapter 23
<b>12/3 Wednesday</b>	<b>Class Wrap-Up QUIZ 5 (Chapters 22 &amp; 23)</b>	---
12/5 Friday	<b>Last Day of Class and Final Exam Review</b>	---
<b>12/12 Friday</b>	<b>FINAL EXAM 8:00 a.m. – 10:30 a.m. (Chapters 0-23)</b>	---

