

## **EXRS 3700 APPLIED EXERCISE PHYSIOLOGY**      Fall 2004

Instructor:            Ed Mahoney, M.A.: 542-4009, 107 Ramsey (lab) or 101F (office)  
[emoney@uga.edu](mailto:emoney@uga.edu)

Prerequisites:        CBIO 2200 and CBIO 2210

Office Hours:        Monday & Wednesday 11:00AM -1:00 PM and by  
appointment

Class:                10:10-11:00 Monday & Wednesday 203 Ramsey Center

Text:                 Physiology of Sport and Exercise, Jack Wilmore, David Costill,  
Human Kinetics, 3rd Edition

**Learning Objectives:** To learn and understand the physiological basis for muscular contraction and movement as well as energy metabolism, physiological responses and adaptations to exercise under varying conditions and with various populations, and the impact of physical activity on health, fitness, and disease prevention, and disease treatment.

Please read the assigned text. The reading is fairly simplistic and provides many graphics to illustrate important concepts.

**Attendance:** Attendance is not mandatory but highly suggested. Learning objectives will be covered during lectures and subsequently on tests.

**Grading:** Grades will be based on 4 exams (3 exams and 1 final). Each exam will account for 25% of the final grade. Exam material will include information presented in class as well as from assigned reading. The final course grade will be awarded based upon the following grade-point range: A = 90-100; B = 80-89.9; C = 70-79.9; D = 60-69.9; F =  $\leq$  **59.9**

All exams must be taken on the assigned day. Please communicate with me if you have special considerations or emergency situations. Students will receive zero credit for exams missed (unless prior approval from instructor).

### University Honor Code and Academic Honesty Policy

Students in this course are expected to conform to the UGA Student Honor Code: " I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others." Academic honesty means performing all academic work without plagiarism, cheating, lying, tampering, stealing receiving unauthorized or illegitimate assistance from any other person, or using any source of information that is not common knowledge. Examples of academic dishonesty are copying answers from another student during an exam, giving a false excuse for failing to show up for an exam, obtaining advance exam copies by unauthorized means, and damaging a computer disk to prevent evaluation of the work on that disk. Students who assist other students in academically dishonest acts are in violation of the policy. Consequences of academic dishonesty may include receiving a lower grade, community service, a

notation on the student's transcript, or suspension or expulsion from the University. Students have the responsibility for knowing the University's policy and procedures on academic dishonesty, which are described in the publication, A Culture of Honesty. Copies of this publication can be obtained from the Office of the Vice President for Instruction or may be viewed at the following web site:

<http://www.uga.edu/ovpi/>.

The instructor reserves the right to amend the course syllabus as needed.

### Course Outline:

- Aug 23: Introduction, Syllabus, History of Exercise Science (pg. 1-27)
- Aug 25: Chapter 1; Muscle control of movement
- Aug 30: Chapter 2; Neurological control of movement
- Sept 1: Chapter 3; Neuromuscular adaptations
- Sept 6: HOLIDAY, NO CLASS
- Sept 8: Chapter 4; Metabolism
- Sept 13: Metabolism (cont)
- Sept 15: Chapter 6; Metabolic adaptations to exercise
- Sept 20: Unfinished material, Review
- Sept 22: EXAM 1
  
- Sept 27: Chapter 5; Hormonal regulation of exercise
- Sept 29: Chapter 7; Cardiovascular control during exercise
- Oct. 4: Cardiovascular Control (cont)
- Oct. 6: Chapter 8; Respiratory regulation during exercise, and Altitude Chapter 11; (pp 338-352)
- Oct. 11: Respiratory & Altitude (cont.)
- Oct. 13: Chapter 9; Cardiorespiratory adaptations to exercise.
- Oct. 18: Unfinished material, Review
- Oct. 20: EXAM 2
  
- Oct. 25: Chapter 10; Thermoregulation and exercise
- Oct. 27: Chapter 13; Hydration and Sports Drinks (pp 424-432 & pp 435-441)
- Nov. 1: Chapter 15; Ergogenic Aids
- Nov. 3: Chapter 12; Training for Sport & Chapter 19: Exercise prescription
- Nov. 8: Chapter 14; Body Composition
- Nov. 10: Unfinished material, Review
- Nov. 15: EXAM 3
  
- Nov. 17: Chapter 16; Growth and Development
- Nov. 22: Chapter 17; Aging and the older athlete
- Nov. 29: Chapter 18; Sex differences and the female athlete
- Dec. 1: Chapter 20; Cardiovascular disease and physical activity
- Dec. 6: Chapter 21; Obesity, diabetes, and physical activity.
- Dec. 8: Review; Instructor Evaluations
- Dec. 17: EXAM 4 (8:00-11:00AM)  
Final will cover ~50% new material and ~50% of material from first 3 exams.