Exercise Physiology 3700 Fall 2006

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Description	This class will cover the acute physiological responses and chronic adaptations to exercise. This includes neuromuscular, metabolic, cardiovascular, hormonal, and respiratory systems as they pertain to acute and chronic exercise. The major goal of the class is to develop a basic understanding of exercise physiology.	
Prerequisites	cbio2200-2200L and cbio2210-2210L	
Instructor	Chris Black, MA	
Office hours	Tuesday and Thursday: 1:30 – 2:30pm, or by appointment	
Meetings	Class	Monday, Wednesday 10:10 – 11:00am
	Room	203 Ramsey Center
Textbook	Physiology of Sport and Exercise, by Wilmore and Costill, Human Kinetics, 2004. 3rd Edition.	
Evaluation	5 exams (once every 3 weeks)	95%
	Class Assignments	5%
Grading policy	90-100 A 80-89 B 70-79 C 60-69 D	

Grade cut-off's are only approximations. Actual cut-off's will be determined by the instructor after all grades have been calculated. The UGA plus/minus grading policy will be in effect for the Fall semester of 2006. Assignment of plus/minus grades will also be determined after all grades have been calculated.

If a student wishes to have an exam re-graded, she/he must submit in writing the nature of the problem, and the exam, no later than one week after the exam has been returned. The entire exam will be rechecked.

Attendance Attendance of lectures is optional, but strongly encouraged. Most exam questions will come from material covered in the textbook and during lectures. However, some information may only be presented in class. Attendance at all scheduled exams is required. No make up exams will be

given unless official UGA excuse is given (i.e., medical leave, etc.). Students are required to notify the instructor prior to an exam in order to obtain permission to reschedule an exam.

WebCT This course will make use of WebCT. Class information will be posted, as well as the slides used in lecture.

Honors and Masters Credit

Honors credit and Masters degree credit will not be given in this class

Course Objectives or Expected Learning Outcomes

The goals of the class are to develop a basic understanding of exercise physiology so that the student will be able to:

a) understand the basic anatomy of the neuromuscular system
b) understand how the neuromuscular system initiates and controls movement
c) understand how muscle metabolism provides energy to muscles
d) understand the key aspects of muscle fatigue and why it occurs
e) understand how the role hormones play in regulating exercise
f) understand the key aspects of the heart and peripheral circulation system and how it functions during exercise
g) understand the key aspects of the respiratory system and how it functions during exercise
h) understand the acute and chronic responses of the neuromuscular system to resistance training
i) understand how muscle injury occurs and its impact of performance
j) understand the acute and chronic responses of the neuromuscular, metabolic, cardiovascular, and respiratory systems to aerobic exercise training
k) understand the key aspects of thermoregulation including the impact of acute and chronic exercise in hot environments
l) understand the key aspects of acute and chronic exercise at altitude
m) understand the impact of body composition and body weight on exercise performance
n) understand the how exercise and diet can alter body composition
o) understand key aspects of training for specific sports
p) understand the impact of nutrition and ergogenic aids on exercise performance
q) understand the impact of body composition and body weight on exercise performance
r) understand how fluid balance impacts exercise performance
s) understand the impact of aging on exercise and performance
t) understand the impact of exercise, or a lack of exercise, on health

Topical Outline (Book Chapter in parentheses)

WEEK 1
W: Course intro, History of ex.-phys. (Intro)

WEEK 2
M: Structure of the neuromuscular system—part I (Ch.1&2)
W: Structure of the neuromuscular system—part II (Ch.1&2)

WEEK 3
M: Muscle contractions (Ch.1&2)
W: Metabolism (Ch. 4)

WEEK 4
M: Labor Day, no class
W: **Exam 1**

WEEK 5
M: VO2 Max, Resting Metabolic Rate (Ch. 4)
W: Fatigue (Ch. 4)

WEEK 6
M: Hormonal regulation of exercise (Ch. 5)
W: Cardiovascular system (Ch. 7)

WEEK 7
M: Respiratory system (Ch. 8)
W: **Exam 2**

WEEK 8
M: Resistance Training—Part I (Ch. 3)
W: Resistance Training—Part II (Ch. 3)

WEEK 9
M: Muscle Injury
W: Aerobic Training—Part I (Ch. 9)

WEEK 10
M: Aerobic Training—Part II (Ch. 9)
W: **Exam 3**

WEEK 11
M: Thermoregulation and exercise in the heat (Ch. 10)
W: Exercise and altitude (Ch. 11)

WEEK 12
M: Body Composition—Part I (Ch. 14)
W: Body Composition—Part II (Ch. 14)

WEEK 13
M: Sport specific training (Ch. 12)
W: **Exam 4**

WEEK 14
M: Ergogenic Aids (Ch. 15)
W: Fluid Balance (Ch. 13)

WEEK 15
M: Aging and exercise (Ch. 17)
W: no class

WEEK 16
M: Exercise and Health—Part I (Ch. 19-21)
W: Exercise and Health—Part II (Ch. 19-21)

FINALS WEEK
Review??
Exam 5

University Honor Code and Academic Honesty Policy.

All academic work must meet the standards contained in "A Culture of Honesty." Each student is responsible to inform themselves about those standards before performing any academic work.

Copies of the honor code 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/