

GEORGE MASON UNIVERSITY
School of Recreation, Health, and Tourism

KINE 410-C01: Exercise Physiology II (3)
Summer 2013

DAY/TIME:	M-Th 12:00 – 2:15 pm	LOCATION:	PW 246 Bull Run Hall
PROFESSOR:	Dr. Charles Robison	EMAIL ADDRESS:	crobiso4@gmu.edu
OFFICE LOCATION:	PW 205 Bull Run Hall	PHONE NUMBER:	703-993-7115
OFFICE HOURS:	M-Th 2:15 – 3:00pm, or by appointment	FAX NUMBER:	703-993-2025

PREREQUISITES:
BIOL 124, BIOL 125, KINE 310

COURSE DESCRIPTION:

This course provides study in advanced theory of exercise physiology. Knowledge related to the physiologic, neuroendocrine, and biochemical changes of the human body associated with both a single bout of exercise and chronic exercise training will be addressed.

COURSE OBJECTIVES:

Upon completion of KINE 410 students should be able to:

1. Obtain theoretical knowledge relative to the human's physiologic responses to and capacity for performing work
2. Apply the principles of mammalian physiology to help themselves and others achieve optimum work performance
3. Provide intelligent and factual answers related to the effects of work on the human body and effectively communicate the implications of those effects.

COURSE OVERVIEW:

Material for the course will be drawn from the required textbook and assigned readings of published research. Class lectures will be presented in PowerPoint with handouts posted on Blackboard in advance of class meetings.

NATURE OF COURSE DELIVERY:

This course will be delivered in a face-to-face type of environment. This class will consist of both lecture and laboratory instruction.

SPECIAL REQUIREMENTS:

This course requires a laboratory fee of \$25.00 payable to George Mason University. This fee is due at the beginning of the second-class meeting (July 2, 2013) and you need to pay with a check. You should make your check payable to George Mason University and in the Memo section write in "KINE 410 Lab Fee." A receipt will be issued to you upon payment.

REQUIRED READINGS:

McArdle, W.D., Katch, F.I, and Katch, V.L. (2010) *Exercise Physiology: Nutrition, Energy, and Human Performance*, 7th edition. Lippincott, Williams & Wilkins. ISBN: 978-0-7817-9781-8

EVALUATION:

A. Written Examinations (4)	45%
B. Lab Reports	25%
C. Performance Enhancing Substance Paper	20%
D. Performance Enhancing Substance Presentation	10%

Grading Scale

A = 93.5 – 100	B+ = 87.5 – 89.4	C+ = 77.5 – 79.4	D = 59.5 – 69.4
A- = 89.5 – 93.4	B = 82.5 – 87.4	C = 72.5 – 77.4	F = 0 – 59.4
	B- = 79.5 – 82.4	C- = 69.5 – 72.4	

Tentative Course Schedule

Week	Topic	Readings/Assignments Due
1	Bioenergetics/Lactate Lab	Chapter 5 Introduction to Energy Transfer Chapter 6 Energy Transfer in the Body Chapter 7 Energy Transfer during Exercise
2	Bioenergetics/ Exam 1 / Cardiovascular	Lactate Lab Due Chapter 6 Energy Transfer in the Body Chapter 7 Energy Transfer during Exercise Chapter 15 The Cardiovascular System
3	Cardiovascular/ HR & BP Lab/ Exam 2 / Neuromuscular	HR & BP Lab Due Chapter 16 Cardiovascular Regulation and Integration Chapter 17 Functional Capacity of the Cardiovascular System Chapter 18 Skeletal Muscle: Structure and Function
4	Neuromuscular/ Exam 3 / Fatigue	Chapter 19 Neural Control of Human Movement Chapter 22 Muscular Strength: Training Muscles to Become Stronger
5	Muscle Fatigue Lab/ Recovery/ Hormones/ Exam 4	Muscle Fatigue Lab Due Chapter 25 Exercise and Thermal Stress Chapter 20 The Endocrine System: Organization and Acute and Chronic Responses to Exercise
	Thursday, 8/1, 1:30 – 4:15pm, Performance Enhancing Substance Presentations	Performance Enhancing Substance Papers Due

Note: Faculty reserves the right to alter the schedule as necessary.

Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].
- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <http://ods.gmu.edu/>].
- Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
- Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

Campus Resources

- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <http://caps.gmu.edu/>].
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <http://writingcenter.gmu.edu/>].
- For additional information on the College of Education and Human Development, School of Recreation, Health, and Tourism, please visit our website [See <http://rht.gmu.edu>].

PROFESSIONAL DISPOSITIONS: Students are expected to exhibit professional behaviors and dispositions at all times.

CORE VALUES COMMITMENT: The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. [See <http://cehd.gmu.edu/values/>].

