

GEORGE MASON UNIVERSITY  
School of Recreation, Health, and Tourism

KINE310 — Physiology of Exercise (3)  
Fall 2011

DAY/TIME:	TH 9:00 – 10:15 a.m.	LOCATION:	PW – BW BRH 246
PROFESSOR:	Dr. Jan Redmond	EMAIL ADDRESS:	<a href="mailto:jredmon2@gmu.edu">jredmon2@gmu.edu</a>
OFFICE LOCATION:	Bull Run Hall	PHONE NUMBER:	703-993-7118
OFFICE HOURS:	TTh 10:30–11:30 a.m. by appointment	FAX NUMBER:	703-993-2025

#### PREREQUISITES

BIO 124 and 125

#### COURSE DESCRIPTION

Covers human physiological responses to exercise.

#### COURSE OBJECTIVES:

Upon successful completion of this course, students will:

1. Have a theoretical knowledge regarding the physiological responses and capacity for exercise by the human body.
2. Apply the principles of exercise physiology to help themselves and others to achieve optimum work performance.
3. Provide intelligent and factual answers related to the effects of work on the human body.
4. Attain knowledge toward understanding current topics in the practice of exercise physiology.

#### REQUIRED READINGS:

McArdle, WD, Katch, FI & VL Katch (2011) Essentials of Exercise Physiology. 4th Edition. McGraw-Hill Publishing (required)

#### COURSE OVERVIEW

The course will be conducted in lecture format and is designed to be an introduction to the physiological responses by the human body to exercise in relation to nutrition and energy, energy transfer, the physiologic support systems work, training and training adaptations, and the benefits of exercise in relation to body composition and aging.

#### CLASS POLICIES:

✓ Attendance is required for success in this class. The student is responsible for any information presented, discussed and assigned in class regardless of whether or not the student is present. Make-up tests, quizzes, assignments, or other grades will be granted for excused absences only:

- serious illness (doctor's note required)
- official university excused absences (with proper documentation **and** prior notification)
- extenuating circumstances (PRIOR approval should be obtained or direct contact made with the instructor **at least 24 hours** of the event)

• Please be aware that any student who does not attend the lecture during the initial drop/add phase and has not communicated with me is subject to being administratively dropped from the roster. Roll will be taken up until the last day to add a class only and will not be used in grade calculation.

✓ When contacting the instructor(s) in reference to class issues via e-mail or other method (for example a note in my mail box or on my office door), if you do not receive confirmation that I have received your message, project, etc., within a reasonable time period (**2 work days**), then I did not get it! **In other words, if you do not hear back from me, please follow up to make sure we are communicating effectively!**

✓ Please check Blackboard e-mail account prior to coming to class. If I am ill or there is a change in the class location, materials required, or meeting time, I will send an e-mail out via blackboard to all of your Mason student accounts.

✓ Students are always encouraged to come to office hours in order to ask additional questions on the material or to just check-in about anything.

✓ All students are expected to conduct their work for this class as spelled out in the George Mason University Honor Code. All class projects are subject to evaluation under plagiarism detection software such as “Turn It In” or “SafeAssign”.

✓ Student employment does not take priority over academic obligations. I recognize that many students need to work in order to meet living expenses, however, there are distinct guidelines for students in terms of the number of credit hours which should be attempted based on how many hours per week a student has outside employment. For additional information on this subject, please see the GMU student handbook.

✓ As per GMU policy, all sound emitting technology is required to be turned off during the class meeting time. No sound emitting technology (e.g., cell phones, smart phones, iPads, Tablets, pagers, etc.) is allowed at any time during the lecture or lab sections. If the professor/instructor identifies any student using a sound emitting technology in any fashion (e.g., text message, phone calls, instant messaging services, or others) the student will be requested to leave the classroom, and it will count as an absence.

✓ Additionally, no laptop computers (e.g., netbooks, notebooks, etc.) will be permitted for use during class time; the only exception is for use during presentations and projects and only with instructor permission.

## EVALUATION

Exams	
1	100
2	100
Final(cumulative)	100
Unannounced Quizzes (6 @ 10 points)	60
<b>TOTAL</b>	<b>360</b>

<b>Grading Scale</b>			
A = 94 – 100	B+ = 88 – 89	C+ = 78 – 79	D = 60 – 69
A- = 90 – 93	B = 84 – 87	C = 74 – 77	F = 0 – 59
	B- = 80 – 83	C- = 70 – 73	

## TENTATIVE COURSE SCHEDULE

DATE			TOPIC	READINGS/ASSIGNMENT DUE
T	August	30	Introduction to Exercise Physiology	
Tr	September	1	Macronutrients & Micronutrients	Chapter 2
T		6	Macronutrients & Micronutrients	Chapter 2 & 3
Tr		8	Food Energy & Optimum Nutrition for Exercise	Chapter 3
T		13	Fundamentals of Human Energy Transfer	Chapter 5
Tr		15	Fundamentals of Human Energy Transfer	Chapter 5 & 6
T		20	Human Energy Transfer During Exercise	Chapter 6
Tr		22	Human Energy Transfer During Exercise	Chapter 6
T		27	Assessing Human Energy Generating-Capacities During Exercise	Chapter 7
Tr		29	Energy Expenditure During Rest and Recovery	Chapter 8
T	October	4	Cardiovascular System/Review	Chapter 10
Tr		6	Exam	
T		11	Cardiovascular System	Chapter 10
Tr		13	Pulmonary System	Chapter 9
T		18	Pulmonary System	Chapter 9
Tr		20	Neuromuscular System	Chapter 11
T		25	Neuromuscular System	Chapter 11
Tr		27	Hormones, Exercise, and Training	Chapter 12
T	November	1	Hormones, Exercise, and Training	Chapter 12
Tr		3	Review	
T		8	Exam	
Tr		10	Exercise Training and Adaptations	Chapter 13, 14, & 15
T		15	Exercise Training and Adaptations	Chapter 13, 14 & 15
Tr		17	Aids to Performance	Chapter 4
T		22	Body Comp, Obesity, &Wgt. Control	Chapter 16
Tr		24	Happy Thanksgiving!	
T		28	Physical Activity, Aging and Disease Prevention	Chapter 16 & 17

DATE			TOPIC	READINGS/ASSIGNMENT DUE
Tr	December	1	Physical Activity, Aging and Disease Prevention	Chapter 17
T		6	Clinical Aspects of Exercise Physiology	Chapter 18
Tr		8	Review for Final	

**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.
- Students are expected to exhibit professional behaviors and dispositions at all times.

### *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>].

