

GEORGE MASON UNIVERSITY
School of Recreation, Health, and Tourism

EFHP 610: Advanced Exercise Physiology
Fall 2010

DAY/TIME: M 4:30 – 7:10 p.m. LOCATION: PW 246 Bull Run Hall
PROFESSOR: Dr. Margaret T. Jones EMAIL ADDRESS: mjones15@gmu.edu
OFFICE LOCATION: PW 208A Bull Run Hall PHONE NUMBER: 703-993-3247
OFFICE HOURS: T TH 10:30–12:00,
or by appointment

PREREQUISITES:

Graduate standing or permission of the instructor

COURSE DESCRIPTION:

Lecture, demonstration, and seminar experiences in applying research findings to understanding physiological function and effects of exercise on people.

COURSE OBJECTIVES:

Upon completion of EFHP 610 students should be able to:

1. Describe the responses that occur during exercise in the body's various physiological systems
2. Describe the physiological changes that occur as a result of aging and explain how these changes affect performance.
3. Explain how gender differences affect performance
4. Prepare and present research findings on a topic related to a specific area of exercise physiology
5. Demonstrate the ability to critically review current research and connect findings to topics discussed in class.

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.

- Attendance - Students are expected to attend all classes. A grade of zero will be assigned to any missed presentation without prior permission from the instructor.
- Classroom Demeanor - Students are expected to attend all class sections, actively participate in class discussions, complete in-class exercises, and fulfill all assignments. Anyone exhibiting inappropriate behavior may be asked to leave (e.g. sleeping in class, texting). University policy

states that all sound emitting devices shall be turned off during class unless otherwise authorized by the professor.

- Academic Honesty - All students are held to the standards of the George Mason University Honor Code. Students are expected to honestly represent their work. The possible situations when a student could violate these expectations range from incorrectly citing or failing to cite references/footnotes within papers and projects to cheating on an examination or assignment. Academic integrity is the responsibility a student assumes for honestly representing all academic work. This includes but is not limited to quizzes, examinations, projects, and all other forms of oral and written endeavors.
- Accommodation Planning - Students with disabilities who seek accommodations in a course must be registered with the Office of Disability Services (ODS) and inform the instructor, in writing, at the beginning of the semester [See ods.gmu.edu]

REQUIRED READINGS:

McArdle, W.D., F.I. Katch, and V.L. Katch. *Exercise Physiology: Nutrition, Energy, and Human Performance (7th edition)*. Lippincott, Williams & Wilkins, Philadelphia, 2010.

ISBN-13: 978-0-7817-9781-8

Specific journal articles will be assigned.

EVALUATION:

A. Written Examinations

Midterm Exam	30%	(Objectives 1,2,3)
Final Exam	30%	(Objectives 1,2,3)

B. Final Project 25% (Objectives 4,5)

C. Article Presentation 10% (Objectives 4,5)

D. Class Participation 5% (Objectives 1-5)

FINAL EXAM:

4:30 pm, Monday, December 20, 2010

Grading Scale

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/Assignments Due
8/30	Course Introduction, Assignment Explanation	
9/6	No Class: Labor Day Holiday	
9/13	Nutrition Overview, Nutrition for Exercise	MK&K: CH1, CH3
9/20	Nutrition for Exercise, Energy Transfer	MK&K: CH3, CH6 JSCR 24(8): 2192-2202, 2010 Article Presentation #1
9/27	Nutrition for Exercise, Ergogenic Aids	MK&K: CH6, CH23 JSCR 23(S5): S1-S59, 2009 Project topic presentation
10/4	Cardiovascular System, CV Regulation & Integration	MK&K: CH15, CH16 MSSE 33(1): 99-106, 2001 Article Presentation #2
Tues 10/12	CV Regulation & Integration, Functional Capacity of the CV System	MK&K: CH16, CH17 MSSE 32(1): 89-93, 1999 Article Presentation #3
10/18	Skeletal Muscle: Structure and Function	MK&K: CH18 JSCR 22(3): 845-850, 2008 Article Presentation #4
10/25	Mid-term Examination	Project progress report
11/1	Neural Control of Human Movement, Endocrine System	MK&K: CH19, CH20 JSCR 23(9): 2588-2591, 2009 Article Presentation #5
11/8	Training for Power, Muscular Strength	MK&K: CH21, CH22 JSCR 17(3): 493-497, 2003 Article Presentation #6
11/15	Body Composition Assessment; Physique, Performance and Physical Activity	MK&K: CH28, CH29 JSCR 22(1): 243-249, 2008 Article Presentation #7
11/22	Overweight, Obesity, and Weight Control	MK&K: CH30 JSCR 23(5): 1548-1552, 2009 Article Presentation #8
11/29	Physical Activity, Health, and Aging	MK&K: CH31 JSCR 23(S5): S60-S79, 2009 MSSE Special Communication: 1510-1530, 2009 Article Presentation #9
12/6	Final Project Presentations	

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



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- ❖ For additional School of Recreation, Health, and Tourism information, please visit the website at <http://rht.gmu.edu>