

## HPER 2980 Physiology of Exercise

Summer 2009  
Western Michigan University  
Department of HPER

Instructor: Timothy J. Michael, Ph.D.  
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Room: SRC 1035  
Hours: Lecture MW 12:00-1:40, Lab F 12:00-1:40  
Credit hours: 3  
Prerequisites: BIOS 211, 240

Lab assistant: Tim Houston  
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**Required Texts:** Powers, S. K. and Howley, E. T. (2009) Exercise Physiology: Theory and Application to Fitness and Performance. 7<sup>th</sup> Edition. McGraw Hill Publishing.

Adams, G. M. (2008). Exercise Physiology 5<sup>th</sup> Edition Laboratory Manual McGraw Hill Publishing.

**Course Description:** The purpose of this course is to educate the undergraduate student in the scientific basis of exercise and/or athletic performance. Specifically, the student will study how the body's physiology is transformed and manipulated due to external stresses such as work, exercise or environmental conditions. This information will then be used to help understand the scientific basis of conditioning for athletes, non-athletes and special populations, as well as, the understanding of the limits of athletic or exercise performance (fatigue).

**Course Objectives:** Upon completion of this course students will be able to:

- understand the physiological changes that occur during exercise and physical activity
- understand specific physiological changes that occur within each system during exercise and physical activity
- conduct various assessments to study the changes that occur during exercise
- understand why exercise is a challenge to homeostatic control
- understand what changes occur in response to exercise (adaptation to exercise)

- understand how the environment and ergogenic aids effect performance
- understand what limits performance of varying intensity and duration

**Course requirements:**

1. Exams
2. Lab Assignments
3. Attendance
4. Readings

**Grading:**

Exam 1	25%
Exam 2	25%
Exam 3	25%
Lab	25%

**Grading Scale:**

100-92	A
91-87	BA
86-83	B
82-78	CB
77-70	C
69-65	DC
64-60	D
59-0	E

**Lecture content**

**Chapters covered**

**Tentative Exam Dates**

Chapters	2, 3, 4, 5, 7	Monday May 18th
Chapters	8, 9, 10, 12	Monday June 8th
Chapters	13, 16, 21, 18, 23	Final Wednesday June 24th

**Lab Schedule**

Prior to the first lab read chapters 1, 2, and 3 of the lab manual. It is expected that you will have read each lab before coming to lab class. (Textbook chapters 6, 15, 20 for reference)

**Date (Friday)**

**Lab Manual**

May 8 <sup>th</sup>	Chapters 4 and 5
May 15 <sup>th</sup>	Chapters 8, 9 and 10
May 22 <sup>rd</sup>	Chapter 13, 14 and 15
May 29 <sup>th</sup>	Chapter 16, 17 and 18
June 5 <sup>th</sup>	Chapter 20 and 22
June 12 <sup>th</sup>	Chapter 23, 24, 25 and 26
June 19 <sup>th</sup>	Make –Up Day

**\*Special Dates\***

May 25<sup>th</sup> and May 27th

Things to Remember:

**HPER 2980 Exercise Physiology lab  
POLICIES**

- 1. Make-ups are only permitted with a valid, verifiable excuse (i.e. university business, illness or family emergency) For university business, no make-ups will be allowed without prior arrangement. (Arrange with Lab Assistant).**
- 2. Make-up is at the convenience of the lab assistant.**
- 3. No switching lab sections. You must report to the lab section that you are registered for.**
- 4. Lab reports are due in class on Monday. If you do not bring your lab report to class you can place them in the lab assistant's mailbox on the fourth floor; however they will be assessed a 25% penalty for being late. If you place the report in Dr. Michael's box they will be considered late and be assessed an additional 25% penalty. A 25% penalty per day thereafter will be assessed.**
- 5. Labs that are allowed to be made-up must be completed and turned into the lab assistant by Thursday at 3pm.**
- 6. Foul language will not be tolerated at all. You will be asked to leave immediately and you will be assigned a grade of "0" for the lab that day.**
- 7. It has become clear that students are not reading the labs before coming to class. If this becomes evident then we will begin to use lab quizzes as part of the lab grading criteria.**
- 8. All written work must be typed.**
- 9. If you missed lab, do not turn one in on Monday, this would be a violation of the student code of conduct.**

**-This outline/Syllabus is subject to change.**

-Grades are "earned" not "given"

-No Extra Credit! So don't ask for it.

-Attendance is not factored into your grade; however, failure to attend class will almost certainly guarantee poor performance on exams and assignments.

-If you do not understand something, then find-out! Come and see me, ask questions, do not wait until it is too late.

- No make-up exams will be given, unless arrangements are made prior to the exam or verifiable medical excuse is provided.

-You are responsible for making yourself aware of and understanding the policies and procedures in the Undergraduate and Graduate Catalogs that pertain to Academic Honesty. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity and computer misuse. [The policies can be found at [www.wmich.edu/catalog](http://www.wmich.edu/catalog) under Academic Policies, Student Rights and Responsibilities.] If there is reason to believe you have been involved in academic dishonesty, you will be referred to the Office of Student Conduct. You will be given the opportunity to review the charge(s). If you believe you are not responsible, you will have the opportunity for a hearing. You should consult with me if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test.

(The Code of Honor passed by the Faculty Senate in November 2004 and administration in December 2004, can also be found at [www.wmich.edu/catalog](http://www.wmich.edu/catalog).)