

EASTERN ILLINOIS UNIVERSITY  
Kinesiology and Sports Studies Department  
PED 4340 Principles of Exercise Physiology  
Course Outline  
Fall 2009

**INSTRUCTOR:** Jeffrey M. Willardson, PhD, CSCS (call me Dr. Willardson)  
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**OFFICE LOCATION:** Lantz 2230  
**OFFICE HOURS:** M, W, F 9-10 AM; Th 2-3 PM (or by appointment)  
**CLASS DAYS:** M, W, F  
**CLASS LOCATION:** LTNZ 1025  
**CLASS TIME:** 1-1:50

**COURSE DESCRIPTION**

This course will give students a basic understanding of how the systems of the body function during exercise. The interaction among systems will be discussed along with the adaptations that take place to allow for enhanced athletic performance. The major emphasis will be on practical examples that can be applied in coaching or sports conditioning settings.

**REQUIRED TEXTBOOK**

POWERS, S.K., AND E.T. HOWLEY. *Exercise Physiology: Theory and Application to Fitness and Performance* (6<sup>th</sup> edition). New York, NY: McGraw-Hill, 2007.

**COURSE OBJECTIVES**

- Understand the physiology of training in terms of effects on VO2 max, performance, homeostasis, and strength
- Understand factors affecting performance and fatigue
- Understand prescriptive principles that allow for safe and effective training
- Understand differences in prescriptive principles for females, children, and other special populations
- Understand basic nutrition principles and use of ergogenic aids proven to enhance performance

**DATES TO REMEMBER**

August 24	First day of classes
September 7	Labor Day—No classes
October 9	Fall break—No Classes
November 23-27	Thanksgiving break—No Classes
December 11	Last day of classes
December 15	Final Exam 12:30-2:30

**GRADING**

- 90-100% = A
- 80-89% = B
- 70-79% = C
- 60-69% = D
- <59% = F

Your grade will be calculated based on points accumulated through quizzes, labs, and the final exam. Specific dates for quizzes and labs to be announced; it is your responsibility to attend class and stay informed of these dates!!! No opportunities will be given for extra credit

**LECTURE SCHEDULE—please access WebCT for lecture material**

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TOPIC	*READING	QUIZ
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Internal Environment	Chapter 2	
Bioenergetics	Chapter 3	1
Exercise Metabolism	Chapter 4	
Hormonal Responses	Chapter 5	2
Nervous System	Chapter 7	
Skeletal Muscle	Chapter 8	3
Circulatory Responses	Chapter 9	
Respiration	Chapter 10	4
Acid-Base Balance	Chapter 11	
Temperature Regulation	Chapter 12	5
Physiology of Training	Chapter 13	
Exercise Prescription	Chapter 16	6
Special Populations	Chapter 17	
Performance Factors	Chapter 19	
Training for Performance	Chapter 21	
None		Final

\*Reading may also consist of articles posted on class website

### **ACADEMIC MISCONDUCT**

Examples of academic misconduct are cheating, plagiarism, and excessive absences. Please consult the Student Handbook for the official academic misconduct policy. Any academic misconduct will be dealt with according to the student handbook and the discretion of the instructor.

### **RESPECT FOR DIVERSITY**

Diversity encompasses age, life experiences, profession, race, religion, sexual orientation, and lifestyle, social class, learning style, philosophy of life, personality, mental and physical challenges, customs, values, and gender. Diversity is to be respected in this class.

### **PROFESSIONALISM**

This is an exercise physiology class and therefore we will be studying the human body and human movement. This class may utilize students as human examples during the course of the class. Professional conduct is expected at all times. Failure to uphold this expectation will result in removal or failure in this class.