

# Course Syllabus EXRS 4300/6300

## Exercise Epidemiology

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**Office Hours:** 8:00 to 9:00 a.m. MTW (others by appointment only; e-mail is best)  
**Credit:** Three (3) hours  
**Time:** TR - 2:00 to 3:15 p.m.  
**Place:** Room 205 Ramsey Student Center  
**Text:** Dishman, Washburn, & Heath (2004). Physical Activity Epidemiology. Champaign, IL: Human Kinetics (Available at Campus Bookstore). Lecture Notes (Available at Campus Bookstore).  
Lecture slides and notes available online at WebCT.

### Course Description:

The course surveys the health-related aspects of exercise, physical activity and physical fitness from the perspective of epidemiology. Biological mechanisms for healthy adaptations to physical activity are addressed. The behavioral determinants of physical activity and regular participation in exercise are reviewed.

		<u>%</u>	<u>Points</u>
Grading:	Exam 1 (~9/14)	25	~100
	Exam 2 (~10/10)	25	~100
	Exam 3 (~11/9)	25	~100
	Exam 4 (12/12) 3:30 to 6:30	25	~100

Graduate and honors students will be graded also on a term paper (due 11/21) that will constitute 15% of the course grade; the 4 exams will subsequently constitute 25%, 20%, 20% & 20% of the course grade. Students with a course average below 70% after the first 3 exams will have the option of taking a comprehensive final exam that will be doubled and averaged with the first 3 exams. Exams may be rescheduled before official university travel or in the event of an emergency. Hospitalization or family death define an emergency. I must be notified before the exam. Your lack of planning does not constitute an emergency. Exams will be previewed before and reviewed after each exam. Requests for re-grading any questions for each exam must be made within one week of that exam's review. Students who drop the course with a test average below 59% will be assigned a grade of WF. The course syllabus is a general plan for the course; deviations announced to the class schedule by the instructor may be necessary.

A	90% to 100%	C+	73% to 76.9%
A-	87% to 89.9%	C	70% to 72.9%
B+	83% to 86.9%	C-	67% to 69.9%
B	80% to 82.9%	D	<67%
B-	77% to 79.9%	F	<59

All academic work must meet the standards contained in "A Culture of Honesty." Each student is responsible to inform themselves about those standards before performing any academic work. Academic honesty means performing all academic work without plagiarism, cheating, lying, tampering, stealing, receiving unauthorized or illegitimate assistance from any other person, or using any source of information that is not common knowledge. Example of academic dishonesty are copying answers from another student during an exam, giving a false excuse for failing to show up for an exam, obtaining advance exam copies by unauthorized means, and damaging a computer disk to prevent evaluation of the work on that disk. Students who assist other students in academically dishonest acts are in violation of the policy. Consequences of academic dishonesty may include receiving a lower grade, community service, a notation on the student's transcript, or suspension or expulsion from the University. Students have the responsibility for knowing the University's policy and procedures on academic dishonesty, which are described in the publication, *A Culture of Honesty*. Copies of this publication can be obtained from the Office of the Vice President for Instruction or may be viewed at the following Web site: <http://www.uga.edu/honesty/>

I understand and accept the policies and procedures for EXRS 4300/6300: \_\_\_\_\_ Date: \_\_\_\_\_

EXRS 4300/6300  
**Exercise Epidemiology**  
 Weekly Schedule: FALL 2006

<u>Days</u>	<u>Topic</u>	<u>Readings</u>
8/17	What is Epidemiology? Disease, Illness, Health	Introduction
8/22	History and Current Scope	Chapter 1
8/24 to 8/29	Concepts and Methods	Chapter 2
8/31	Behavioral Epidemiology	Chapter 3
9/5 to 9/12	All-Cause and CVD Mortality	Chapter 4
<b>9/14 EXAM 1</b>		
9/19 to 9/21 (2 lectures)	Stroke and Hypertension	Chapter 5,6
9/26 to 9/28 (2 lectures)	Lipids	Chapter 7
10/3 to 10/5 (2 lectures)	Obesity	Chapter 8
<b>10/10 EXAM 2</b>		
10/12 to 10/17	Diabetes	Chapter 9
10/19 to 10/24	Osteoporosis	Chapter 10
<b>10/26 No Class Fall Break</b>		
10/31-11/7 (3 lectures)	Cancer and Immunity	Chapter 11,12
<b>11/9 EXAM 3</b>		
11/14 to 11/16 (2 lectures)	Mental Health	Chapter 13
11/21	Hazards of Exercise	Chapter 15
<b>11/23 No Class Thanksgiving</b>		
11/28 to 12/5 (3 lectures)	Determinants of Physical Activity/Interventions to Increase Physical Activity	Chapter 16

Last day of Class 12/5  
**EXAM 4 12/12 3:30-6:30**

## **Other important dates:**

Study questions #1 distributed ~9/5  
Study questions #2 distributed ~9/28  
Study questions #3 distributed ~10/31  
Study questions #4 distributed ~11/30

## **Graduate and Honors Students' papers due 11/21**

### BRIEF TOPICAL OUTLINE:

- I. Principles and applications of exercise epidemiology
  - a. Morbidity and mortality rates from major causes
  - b. Behavioral risk factors and exercise
  - c. Methods and principles
  - d. Applications and interventions
  
- II. Disease-specific benefits, risks and mechanisms for exercise and physical activity.
  - a. All-cause mortality and longevity
  - b. Coronary artery disease
  - c. Hypertension
  - d. Hyperlipidemia
  - e. Obesity
  - f. Diabetes
  - g. Osteoporosis
  - h. Cancer and immunity
  - i. Depression and Anxiety
  - j. Disability
  - k. Hazards of Physical Activity
  
- III. Behavioral aspects of health-related exercise, physical activity and physical fitness.
  - a. Determinants of exercise and physical activity
  - b. Interventions for increasing exercise and physical activity
  - c. Alternatives to fitness programming

### COURSE OBJECTIVES:

Students will be able to:

1. Describe contemporary trends in the prevalence rates of leading risk factors of illness and death in the United States, including physical inactivity according to age, sex, race, region, education level, and disability.
2. Identify behavioral correlates of the major causes of morbidity and mortality in developed nations and explain how exercise, physical activity and physical fitness may influence, or interact with, other known health risk factors to promote health and prevent disease.
3. Describe the methods of exercise epidemiology and the cardinal criteria for establishing causality for health risk factors.
4. Identify and describe major epidemiological evidence that shows an association between habitual physical activity and/or physical fitness with morbidity and mortality.
5. Identify and discuss the disease-specific benefits and risks of physical activity and exercise for cardiovascular disease (i.e., coronary heart disease and stroke), hypertension, hyperlipidemia, obesity, diabetes, osteoporosis, cancer and immunity, anxiety and depression, according to age, sex, race, and disability.
6. Identify and discuss biologically plausible mechanisms whereby physiological adaptations to exercise and physical activity might reduce risks for disease or improve health or longevity.
7. Discuss known personal, environmental, and physical activity characteristics associated with participation in leisure time physical activity.
8. Discuss the key elements of theories used to understand physical activity and guide interventions to increase it.
9. Describe typical interventions designed to increase physical activity and their effectiveness.