

HSOC 230 FUNDAMENTALS OF EPIDEMIOLOGY SPRING 2008

Faculty:

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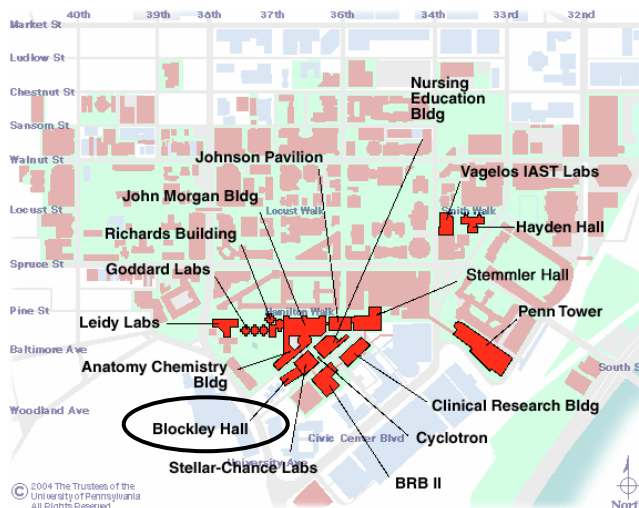
Course times:

Class hours:

Monday 3:30 – 5:00
Wednesday 3:30 – 5:00

Office hours:

Wednesday 9:30 – 10:30
or by appointment



Course Location:

David Rittenhouse Laboratory, Room 3C4

Course Objectives:

- Understand uses of epidemiology in health research
- Understand sources of data describing the health of a community
- Recognize inherent problems associated with data sources
- Be able to locate and use data describing the health of populations
- Understand the major principles of infectious disease epidemiology
- Understand the basics of descriptive and analytic study designs
- Understand the concept of causation
- Be familiar with health problems in Philadelphia

Required Text:

Available at Penn Book Store.

Friis and Sellers. Epidemiology for Public Health Practice, Third Edition. Jones and Bartlett Publishers, 2004.

Course Materials:

All course materials can be found on Blackboard. Lecture slides will be available for printing starting the evening before class. An evaluation for each guest lecturer will be available following his/her lecture, and one will be available at mid-term. You will have two weeks to complete each evaluation.

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Grading:

Homework Assignments	25%
Midterm Examination	25%
Group Presentation	20%
Final Examination	30%

Homework assignments

Due dates for homework assignments are given in the syllabus. Assignments will be due at the beginning of class. Any homework handed in after the first 15 minutes of class will not be accepted for a grade.

Examinations

The midterm and final examinations are closed book and will reflect cumulative materials. You will be responsible for all information covered in class, including lectures, required readings, and special lectures.

Group Presentation

Group presentations will occur on April 23 and 28. Presentations should last about 20 minutes and allow for 5-10 minutes of questions. A PowerPoint format is recommended. The goals of group presentation are:

- obtain knowledge on the epidemiology of a chosen health outcome
- demonstrate ability to research epidemiological topics
- demonstrate ability to work collaboratively toward a common goal
- gain skills in public speaking and presentation

Workshops

Five workshops are offered throughout the semester. During these classes, homework and in-class exercises will be covered. During these classes, we will also discuss Epidemiology in the News.

Epidemiology in the News

Students are expected to bring in and discuss news items related to epidemiology that highlight, reinforce, and further information learned in didactic lessons. Examples of discussion points include, but are limited to:

- What is the exposure under study?
- How is it defined?
- What is the disease under study?
- What is the measure of disease frequency?
- What is the measure of association?
- What did the investigators do to ensure that the comparisons were “fair?”

Class participation Although class participation is not explicitly listed in the grading formula, *positive and constructive participation is expected*. Participation will be assessed for all students and can have the power to alter final grades as computed by the above percentages.

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January 16	Lecture topic	Course Introduction
	Required Readings	F&S Chapters 1 and 2
January 21	No class—Martin Luther King, Jr. day (do something good for your community)	
January 23	Lecture topic	Measures of disease frequency
	Required Readings	F&S Chapter 3 pp. 87-109
January 28	Lecture topic	Comparing disease frequency
	Required Readings	F&S Chapter 9 pp. 327-336 Census articles
	Homework Due	HW1
January 30	Lecture topic	Sources of Data
	Required Readings	F&S: Chapter 5
February 4	Workshop	
	Homework Due	HW2
February 6	Special Lecture	
	Oral Health Disparities: Dental Decay in Children, Adolescents and Adults	
	Joan Gluch, RDH, PhD Director, Community Health & Adjunct Associate Professor University of Pennsylvania School of Dental Medicine	
February 11	Lecture topic	Descriptive Epidemiology
	Required Readings	F&S Chapters 3 pp. 109-122 and 4

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February 13	Lecture topic	Infectious Disease Epidemiology
	Required Reading	F&S: Chapter 12
	Fun Reading	Excerpts from Robert Preston's <u>The Hot Zone</u> 'The West Branch Study' from Berton Roueche's <u>The Medical Detectives</u>
February 18	Workshop	
	Homework Due	Snow on Cholera exercise
February 20	Special Lecture	Infectious Disease Surveillance in Philadelphia Vic Spain, DVM, PhD Director, Epidemiology Unit City of Philadelphia Department of Health
February 25	Lecture topic	Introduction to Study Design Ecologic and Cross-Sectional Studies
	Required Readings	F&S Chapter 6 pp. 213-234 MMWR HIV/AIDS Articles
	Homework Due	Outbreak exercise
February 27	Workshop	
	Homework Due	HW3
March 3	Special Class	Library Resources—Accessing Epidemiologic Data Meet in Van Pelt Library, Goldstein Classroom Carlos I. Rodriguez Medical School Liaison Biomedical Library
March 5	Midterm examination	

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March 10	No Class—Spring break	
March 12	No Class—Spring break	
March 17	No Class—freebie	
March 19	Lecture topic	Experimental Designs
	Required Reading	F&S Chapter 8
March 24	Lecture topic	Cohort Studies
	Required Reading	F&S Chapter 7
	Homework Due	HW4
March 26	Lecture topic	Case-Control Design
	Required Readings	F&S Chapter 6 pp. 234-248
March 31	Special Lecture	Epidemiology and Policy
		Charles Branas, PhD Associate Professor of Epidemiology University of Pennsylvania School of Medicine
	Homework Due	HW5
April 2	Workshop	
April 7	Special Lecture	The Weight Training for Breast Cancer Survivors Study
		Kathryn H. Schmitz, PhD, MPH Assistant Professor of Epidemiology University of Pennsylvania School of Medicine
April 9	Lecture topic	Bias and confounding
	Required Readings	F&S Chapter 10

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April 14	Lecture topic	Random error and causation
	Required Readings	F&S Chapter 9 pp. 336-342
April 16	Lecture topic	Screening
	Required Reading	F&S Chapter 11
	Fun Reading	‘Cystic Fibrosis: Should Everyone Be Tested?’ from Philip Reilly’s <u>Abraham Lincoln’s DNA</u>
	Homework Due	HW6
April 21	Workshop	
	Homework Due	HW7
April 23	Lecture topic	Group Presentations I
April 28	Lecture topic	Group Presentations II
May 8 (Thursday)	Final Examination 12:00-2:00	