

**University of the Sciences**  
**HE730: Fundamentals of Epidemiology**  
**Fall Semester 2008**

**Instructor:**

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**Class hours:** Thursdays 5:10 PM- 8:00 PM **Location:** FOW 110  
**Office hours:** Thursdays 3:45- 4:45 and by appt.  
please call or e-mail to arrange for an appointment.

**Course objectives:** This course is designed to prepare students to:

- Identify basic epidemiologic study designs and the advantages and disadvantages of each.
- Understand risks and benefits of screening programs and surveillance programs.
- Design a basic epidemiologic investigation considering scientific, ethical, financial, and political concerns.
- Utilize epidemiologic tools to Interpret and critique research relevant to public health and health policy.

**Required Readings:**

- Epidemiology: Concepts and Methods, William A. Oleckno Waveland Press 2008.
- Principals of Epidemiology, 3rd edition. Self Study Course SS1000, U.S. Dept of Health and Human Services, Public Health Service, CDC, Public Health Practice Program Office, Atlanta, GA 30333. AVAILABLE AS FREE DOWNLOAD at <http://www.cdc.gov/training/products/ss1000/ss1000-ol.pdf> OR HARD COPY purchase on-line (students must register with CDC training institute to access document)- <http://www2a.cdc.gov/TCEOnline/> once registered and logged in, search for document SS1000 in keyword search.
- Class handouts and Angel postings

**Recommended resources:**

- National Center for Health Statistics web site: <http://www.cdc.gov/nchs/>
- How to Report Statistics in Medicine, T. Lang and M. Secic, American College of Physicians, 1997

**Suggested popular reading:**

- A Civil Action by Johnathan Harr, Vintage Books, 1995
- The Plague by Albert Camus, (many publication, mine is The Modern Library, 1948)
- And The Band Played On, Randy Shilts, St. Martins Press, 1987
- The Coming Plague, Laurie Garrett, Penguin Books, 1995

**Course Preparation and Grading:**

- Required readings are to be completed before class meetings.
- Homework assignments are due by the beginning of class on due date indicated.
- Quizzes will be administered at the beginning of class. No make up quizzes.

### Grade calculation

	<u>Date</u>	<u>% of Final Grade</u>
<u>Midterm exam</u>	<u>10/9/08</u>	<u>30</u>
<u>Final exam</u>	<u>12/11/07</u>	<u>35</u>
<u>Quizzes</u>	<u>See schedule</u>	<u>10</u>
<u>Homework</u>	<u>See schedule</u>	<u>20</u>
<u>Class participation</u>	<u>weekly</u>	<u>5</u>

### Grading criteria:

- ONE quiz grade may be dropped. **No make up quizzes will be offered.** Quiz content is on readings due for class.
- Homework will be accepted out of class if it is mailed, e-mailed, or faxed **BEFORE** class. Late homework will not be accepted.
- Class participation score will be based on participation in class activities and discussion (as observed by instructor)

**Classroom conduct rules:** See student handbook and university policies for details.

- NO CELL PHONES (if you have an emergency please see me before class)
- Questions and discussion are encouraged, but the instructor may limit discussion.
- Grades of incomplete will be given ONLY if most of the course work is completed and serious events BEYOND student's control occur.
- Inclement weather- If the University is closed due to inclement weather- class will be cancelled. Please refer to the University policy about weather closing.

**Academic Conduct: Cheating and plagiarism will not be tolerated. ALL cases will be referred to University Administration.**

**Modifications for students with disabilities:** Any student who needs an accommodation based on a disability should contact me privately to discuss the situation as soon as possible. Students should also contact the University's Disability Support program by calling the Assistant Dean of Students at (215) 596-8950.

### Schedule

<b>Week</b>	<b>Date</b>	<b>Topic</b>	<b>Readings (due before class)</b>	<b>Class exercise</b>	<b>Quiz</b>	<b>Homework</b>
1	8/28	Course Overview, Introduction to Epidemiology History of Epidemiology	Oleckno chapters 1-3 CDC 1-1 to 1-29, CDC 1-59 to 1-73	Ex. #1		
2	9/4	Disease transmission	Oleckno Chapter 5			Homework

		Time, Person, and Place, Status Measures of Health intro	1-30 to 1-45, 2-1 to 2-71 handouts			#1 due
3	9/11	Measures of health cont's Types, sources, and quality of epidemiologic data	Oleckno Chapter 6 CDC sections 3 & 4 & 5 handouts	Ex #2	Q #1	
4	9/18	Overview of study designs, Association, causation, Accuracy	Oleckno Chapter 4 & 7 & 8 Handouts			Homework #2 due
5	9/25	Surveillance, catch up, review	Oleckno pgs 535-552, CDC section 5		Q2	
6	10/2	Cross sectional, ecological studies	Oleckno chapter 9, handout		Q3	
7	10/9	<b>Mid-Term Exam</b>				
8	10/16	Case control studies	Oleckno chapter 10, handout			Homework #3 due
9	10/23	cohort studies	Oleckno Chapter 11, handout		Q #4	
10	10/30	Clinical trials/screening	Oleckno Chapter 12 & 13 handouts	Ex. #3		Homework #4 due
11	11/6	Ethics, Outbreak investigations	Oleckno pages 507-534, CDC section 6, Handouts	Film or next week		
12	11/13	Occupational Epidemiology/ Infectious disease Epi Evaluating epidemiologic studies	Oleckno Chapter 13	Maybe film	Q #5	
13	11/20	Review of epidemiologic studies	Handouts	Ex. #4		Homework# 5 due
	11/27	<b>THANKSGIVING No class</b>	handouts			
14	12/4	Epidemiology to policy and evaluation/ review	handouts			Homework #6 due
	12/11	<b>Final exam MAYBE TAKE HOME TBD</b>				