Social Epidemiology  
Sociology 3673-001  
Spring 2009  
University of Utah  
TH 10:45-12:05 am, BEH S 112

Instructor: Jayme Day MS  
Office Hours: TH 10 am and by appointment (BEH S 329 or 420,435)  
Email: jayme.day@soc.utah.edu; WebCT

Class Description

Epidemiology is the study of the distribution and determinants of health and disease in human populations. This course introduces the basic principles of epidemiologic study design, analysis and interpretation using lectures, readings, assignments, and discussion. We will discuss topics such as how a disease spreads across a population and how public health interventions or medical technology can help control or reduce the spread of disease. We will explore the various types of research methods epidemiologists use, as well as how to statistically identify the risk factors or causes of a disease. Finally, we will review epidemiology as a social science by reviewing the social causes and consequences of health.

Class Objectives

- To be able to critically read and understand epidemiologic studies  
- To be able to calculate and interpret simple measures of disease occurrence and measures of disease-exposure associations  
- To understand the contributions of the science of epidemiology to clinical research, medicine and public health  
- To understand the central questions of social epidemiology

Prerequisites

The course fulfills the Quantitative Reasoning (QB) or Quantitative Intensive (QI) requirement of the University of Utah. Knowledge of basic algebra and elementary statistics is required before taking this course.

Text/Readings


Reading assignments will be available through the Marriott e-reserve which can be accessed through WebCT.
Course Requirements and Grading

Note: All information for this course is provided on WebCT. Please check it often for announcements etc. Be sure to contact me immediately if you feel like you are struggling, waiting till the end of the course to ask for help or the day before an exam might be too late.

- **Homework (10%)** – There will be several homework assignments throughout the semester. Homework will not be graded for correctness, only completion and the answers will be reviewed in class. Assignments will be posted on WebCT and I will announce the due dates in class.

- **Participation (5%)** – Class attendance and participation are essential in order to pass this course.

- **Quizzes (20%)** – There will be several unannounced quizzes throughout the semester. The quizzes will resemble the style of the exams.

- **Exams (65%)** – There will be four exams (not comprehensive). The last exam will be short essays/multiple choice based on the social epidemiology readings assigned. This last exam may be substituted for a short paper (5-7 pages) on a health topic of your choice based on social epidemiology. All papers will be submitted to Social Dialogue for potential publication.

NOTE: Due to the size of the class, I will not allow students to make up quizzes or exams under ANY circumstances (emergencies included); however I will drop your lowest quiz and exam score from your final grade.

**Americans with Disabilities Act (ADA)**

The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you need accommodations in the class, reasonable prior notice is needed to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations.

All written information in the course can be made available in alternative format with prior notification to the Center for Disability Services.

**Academic Misconduct**

Don’t cheat. I will report any incidences of academic misconduct to the chair of the sociology department and the student will at least fail the assignment if not the course.
<table>
<thead>
<tr>
<th>WEEK</th>
<th>CHAPTERS</th>
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| Jan 13,15 | Ch 1 – Introduction  
            Ch 2 – The Dynamics of Disease Transmission |
| 20,22 | Ch 3 – Morbidity Measures |
| 27,29 | Ch 4 – Mortality Measures |
| Feb 3,5 | Exam Review in Class (2/3)  
          **Exam I (2/5)** |
| 10,12 | Ch 7, 8 – Randomized Trials |
| 17,19 | Ch 9 – Cohort Studies |
| 24,26 | Ch 10 – Case-Control, Cross-Sectional Studies, Ecological Studies |
| Mar 3,5 | Exam Review (3/3)  
          **Exam II (3/5)** |
| 10,12 | Ch 5/6 – Validity and Reliability / Survival and Prognosis  
          Ch 14/Ch 15 – Association vs. Causation / Bias, Confounding, & Interaction |
| 17,19 | **Spring Break – no class** |
| 24,26 | Film – “Ghost in Your Genes”  
          Ch 11,12 – Estimating Risk |
| 31, Apr 2 | Ch 11,12 – Estimating Risk |
| 7,9 | Exam Review (4/7)  
      **Exam III (4/9)** |
| 14,16 | Film – “The Great Leveler”  
       Discussion – Social Epidemiology (Syme and Yen 2000) |
| 21,23 | Discussion – Social Epidemiology (Berkman & Kawachi 2000; Macintyre 2002; Lamptey 2006) |
| 28 | **Exam IV in class (4/28) OR Paper due 4/28 by 5pm in BEHS 301** |

* Anything in this syllabus is subject to change. Changes will be announced in class and will be posted in announcements on WebCT.
Select a health topic to explore using a social epidemiologic approach discussed throughout the course.

The objectives of this paper are either (1) to describe the distribution of a health disorder in the population OR (2) to explore the etiology of a health disorder (you may focus on one exposure/cause and one illness and potential confounders) AND to suggest further research and possible interventions. This paper should be 7-10 pages double spaced not including between 5 and 10 academic or news related references.

Model for organization of paper on a health topic:

(PLEASE USE THE FOLLOWING SECTION HEADINGS)

1. INTRODUCTION (10pts): (1) Define the problem (nature, extent, significance, etc.); (2) Clearly and concisely what your objectives are for this paper.
2. BACKGROUND (20 pts): (1) Briefly describe the agent or condition (2) Examine sources on morbidity and mortality in the selected health issue.
3. DISTRIBUTION or ETIOLOGY (30 pts): Examine the distribution of the disease as it relates to the following OR describe how the following potentially influence the relationship between selected exposure and disease.
   • Person
   • Place
   • Time (if applicable)
   • Any additional characteristic that contributes to an epidemiologic description of the health topic (e.g. social policy, technology)
4. DISCUSSION (30 pts): Discuss how your health issue is understood publicly and what directions you would suggest for the future.
   • Summarize any current hypotheses/explanations of the observed distribution/etiology.
   • Are there any gaps/debates in the current understanding of the problem?
   • Suggest future research or interventions.
5. REFERENCES (10 pts): Use APA style for your references.

NOTE: These are guidelines to help you frame your paper. You do not need to include all of this information or only this information, just whatever is applicable to your chosen health topic. PLEASE PROVIDE YOUR EMAIL WITH PAPER!

Please consult me if you are having problems finding sources or want to discuss your topic further.

(Adapted from an exercise distributed at the Columbia University School of Public Health)