Social Epidemiology Online
SOC 3673-90
Fall Semester, 2018

INSTRUCTOR
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TEACHING ASSISTANT (TA)
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Department of Utah

OFFICE HOURS
Email via Canvas is the best way to communicate with the instructor and the TA. Email will be responded within 48 hours except for weekends or public holidays. You are also welcome to schedule in-person meetings or phone conversations with the instructor to discuss course-related issues.

COURSE DESCRIPTION
Why does a disease develop in some people and not in others? What is the burden of a disease in the community? How does a disease spread quickly from a population to another and even across the world? Can public policies regarding disease prevention and health promotion make a difference in controlling or reducing the spread of disease?

Epidemiology is the study of the distribution and determinants of health-related outcomes in human populations. Epidemiology is also concerned with collecting and analyzing health-related data to help prevent health problems and inform the development of public health interventions and policies. Drawing on lectures and lecture notes, readings, documentaries, audio lectures, discussions, problem sets, and homework assignments, this course will introduce students to the concepts and methods used in epidemiology. We will explore the various types of research methods and designs epidemiologists use. We will also explore epidemiology as a social science by reviewing several articles that highlight how social factors contribute to the development and distribution of disease and health inequality.

CLASS OBJECTIVES AND LEARNING OUTCOMES
Upon completion of this course, the student should be able:

• To calculate, interpret, and compare various measures of morbidity, mortality, survival, and measures of disease-exposure associations; and to assess the validity and reliability of diagnostic tests;
• To explain the logic, pros and cons of various epidemiological study designs;
• To critically read, analyze and discuss epidemiological studies;
• To understand the complexity and importance of social factors in contributing to health disparities across social groups
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 (e.g. passing one of these courses: SOC 3111, SOC 3112, FCS 3210, ECON 3640, PSY 3000) before taking this course.

TEXT BOOK

ADDITIONAL REQUIRED READINGS
(available on Canvas)

LECTURE NOTES
PowerPoint lecture notes will be released on the previous week’s Friday to facilitate weekend studying. The instructor will selectively go over some slides and record the instructor's lectures into mp3 files and upload them to the corresponding learning module. These mp3 files correspond to the PowerPoint lecture notes and are named accordingly.

CANVAS
All course materials including lecture notes, quizzes, and additional documents are posted on Canvas. Weekly messages will be posted on Friday for the next week. It is highly encouraged that you closely follow the course schedule in order to do well on the weekly quizzes, keeping up with the pace of the course material and not getting lagged behind. Please link your canvas account to your personal contact methods via email or phone texting.

SYSTEM REQUIREMENTS
This class can be "attended" from wherever there is a functioning Internet connection. All lecture notes, discussion threads, homework assignments, quizzes, and exams are posted and submitted on Canvas. Competence in using an Internet browser and Canvas is necessary to effectively take this class.

COURSE REQUIREMENTS & GRADING
- Homework assignments (5%) – There will be three homework assignments in this class. They are based on the textbook including both quantitative and qualitative problems. Homework assignments will be posted on Canvas. The due dates of the homework are shown in each assignment and the course schedule below. Late assignments will not be accepted even under emergency situations because solutions to the homework assignments will be posted after the due day. Student collaboration on homework is allowed.
• **Quizzes (30%)** – There will be timed quizzes on a weekly basis throughout the semester except for the exam or holiday or break time. The quizzes are to be posted and completed on Canvas. Quizzes will be open on Monday morning and closed on Sunday at midnight. Only the first quiz is given two weeks to complete. All the other quizzes are given one week to complete. **Do not open the quiz if you do not plan on taking it!** Once you begin a quiz, the timer starts and you will NOT be able to stop it. Make sure you are ready to take the quiz and you are in a stable computer/Internet environment before starting it. Your **three lowest quiz scores** will be dropped from your final grade to accommodate for any unexpected contingencies. No additional accommodations will be given. Quizzes cannot be redone or made up.

• **Exams (60%)** – There will be four non-cumulative online exams comprised of true/false and multiple choice questions. Your **lowest exam score** will be dropped. Exams are equally weighted and based on the corresponding course materials including the text book, lecture notes, films, and additional required readings. These are timed, open-book, open-note exams completed on Canvas. One week is allocated for students to review the materials and take the exam.

• **Online Discussion (5%)** – There will be several online discussion sessions throughout the semester (see the course schedule). Each session will run for a week. The discussion threads will be posted before 10am on Monday and closed at midnight on Sunday. Each student is expected to post at least one meaningful comment on the discussion thread to receive full credit.

• **Extra credit** – There is a final, cumulative, optional test where you can earn up to **15 extra exam points** towards the end of the semester.

• **Late Policy**

  • The deadline is enforced electronically and strictly by Canvas based on its server's clock of Utah Time. Each activity/assignment/test is due at 11:59PM on the corresponding due day. Be sure to pay close attention to the deadlines. It is your responsibility to finish and submit quizzes, discussion comments, homework assignments, and exams on time.

  • **No late submission will be accepted.** There is no exception. A late or missed activity, assignment or test will receive a score of zero automatically. Please remember that being late by one second is late. Do not ask the instructor to accept your submission because it is "only one second late." Do not send your assignment by email because it is late. Please also note that no make-up quiz/exam/homework/discussion will be given, even for emergency situations. Your three lowest quiz scores and one lowest exam scores will be dropped from your final grade to accommodate unexpected contingencies. And you can take the extra credit optional test to improve your grade.

  • Computer or Internet or power related problems (i.e. electronic or equipment failure) are not valid excuses for not completing or submitting an assignment on time. It is your responsibility to keep your computer, Internet, and related equipment functioning in order to effectively participate in this online class. And you have a whole week to work on these assessment items. **It is advisable to complete the assignments early enough to take into account any problems that may occur.**

**Things to Remember**

• An ‘incomplete’ will only be granted if you can justify to the instructor that you cannot finish the course because of circumstances beyond your control and if the majority of course work is already completed.

• If you are a member of a university athletic team and need accommodations, you must provide
the instructor with a schedule of games and team commitments within the first two weeks of the semester.

- Cheating of any kind will not be tolerated. Any assignment or quiz or exam that is handed in must be your own work! However, talking with one another not during the exam time to understand the material better is strongly encouraged. Recognizing the distinction between cheating and cooperation is very important.
  
  - If you copy someone else's solution, you are cheating. If you let someone else copy your solution, you are cheating. Both the person who copied a solution and the person who let other students copy his or her solution was copied are treated as cheaters.
  - If someone dictates a solution to you, you are cheating. Everything you hand in must be in your own words, and based on your own understanding of the solution.
  - If someone helps you understand the problem during a high-level discussion, you are not cheating. We strongly encourage students to help one another understand the material.
  - When taking a quiz or an exam, you must work independently. Any collaboration during an exam will be considered cheating.
  - Any student who is caught cheating will be given an E in the course and referred to the Dean of Students. Many students think they can get away with cheating and will not be caught. But it is much easier to spot cheaters than you might think! Please don't take that chance.

- Classroom equivalency: Discussion threads, e-mails, and chat rooms are all considered to be equivalent of a classroom setting, and the student behavior within those environments shall conform to the Student Code.
  
  - Using angry or abusive language online will not be tolerated, and will be dealt with according to the Student Code.
  - All the course communications are part of the classroom and as such, are University property and therefore will be subject to GRAMA regulations and the Student Code.
  - Posting photos or comments that would be considered off-topic in a classroom are still off-topic in an online posting.
  - Off-color language and photos are never appropriate.
  - Using angry or abusive language online will not be tolerated, and will be dealt with according to the Student Code.
  - Do not use ALL CAPS, except for titles, since it is the equivalent of shouting online, as is overuse of certain punctuation marks such as exclamation points e.g. !!!! and question marks e.g. ????.
  - Course e-mails, discussion postings and other online course communications are part of the classroom and as such, are University property and therefore will be subject to GRAMA regulations and the Student Code. Privacy regarding these communications between correspondents must not be assumed and should be mutually agreed upon in advance, in writing.

- The syllabus is not a binding legal contract. It may be modified by the instructor when students are given reasonable notice of the modification.
AMERICAN WITH DISABILITY 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 needs 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 this course can be made available in alternative format with prior notification to the Center for Disability Services.

ACADEMIC STANDARDS

Per University of Utah regulations (Policy # 6-400). “A student who engages in academic misconduct,” as defined in Part I.B. and including, but not limited to, cheating, falsification, or plagiarism, “may be subject to academic sanctions including but not limited to a grade reduction, failing grade, probation, suspension or dismissal from the program or the University, or revocation of the student's degree or certificate. Sanctions may also include community service, a written reprimand, and/or a written statement of misconduct that can be put into an appropriate record maintained for purposes of the profession or discipline for which the student is preparing.” Please refer to the Student Code for full elaboration of student academic and behavioral misconduct policies (http://regulations.utah.edu/academics/6-400.php).

UNIVERSITY OF UTAH

As the only institution in the state classified in the highest research category (R1), at the University of Utah you will have access to state-of-the-art research facilities and be able to be part of the knowledge creation process. You will have the opportunity to do research of your own with faculty who are leading experts in their field, engaging in programs that match your research interests. Further, you will interact with and often take classes with graduate students that provide an advanced understanding of the knowledge in your field.
## COURSE SCHEDULE*

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<th>WEEK</th>
<th>READING ASSIGNMENT</th>
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| 1. Aug 20 | Ch 1 - Introduction  
Ch 2 - The Dynamics of Disease Transmission  |
| 2. Aug 27 | Ch 3 - Morbidity Measures  
Film "Rx for Survival: A Global Health Challenge - How Safe are We?"  
Online discussion session 1 (about the film; Aug 27 – Sep 2)  |
| 3. Sep 3  | Ch 4 - Mortality Measures  
Homework assignment 1 (due at midnight on Sep 9)  |
| 4. Sep 10 | Review and Exam 2  
Homework assignment 1 answer key posted on Sep 10  
**Exam 1** (Sep 10 – Sep 16)  |
| 5. Sep 17 | Ch 7, 8 - Randomized Trials  |
| 6. Sep 24 | Ch 9, 10 – Observational study designs  
Film "Rx for Survival: A Global Health Challenge – Back to Basics?"  
| 7. Oct 1  | Film - "The Great Leveler"  
(http://vimeo.com/50915371)  
Online discussion session 2 (about the two films; Oct 1 – Oct 7)  
Homework assignment 2 (due at midnight of Oct 7)  |
| 8. Oct 8  | Fall Break - No Class  |
Homework assignment 2 answer key posted  
**Exam 2** (Oct 15 – Oct 21)  |
| 10. Oct 22 | Ch 5 - Validity and Reliability & Ch 6 - Survival and Prognosis  |
| 11. Oct 29 | Ch 11, 12 - Estimating Risk  |
| 12. Nov 5 | Ch 14, 15 - Association vs. Causation / Bias, Confounding, & Interaction  
Homework assignment 3 (due at midnight of Nov 12)  |
| 13. Nov 12 | Review and Exam 3  
Homework assignment 3 answer key posted  
**Exam 3** (Nov 12 – Nov 18)  |
Two films

- Unnatural Causes: In Sickness and in Wealth
- Unnatural Causes: Place Matters

Online discussion session 3 (about the article and the two films; Nov 29 – Nov 25)

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<th>Event Description</th>
<th>Due Date</th>
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<tr>
<td>16. Dec 3</td>
<td>Review and Exam 4</td>
<td>Dec 3 – Dec 9</td>
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**Exam 4 (Dec 3 – Dec 9)**

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<tr>
<td>17. Dec 10</td>
<td>Extra Credit Quiz — Cumulative and Optional</td>
<td>Dec 10 – Dec 16</td>
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* The schedule is subject to change. The due time on all the assessment item is midnight.

**Films available online:**

- The Great Leveler
  [http://vimeo.com/50915371](http://vimeo.com/50915371)
- RX for Survival: Back to the Basics
- RX for Survival: How Safe Are We?
- Unnatural Causes: In Sickness and in Wealth
- Unnatural Causes: Place Matters