

Social Epidemiology Online

*Soc 3673-90
Spring Semester, 2014*



INSTRUCTOR

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TEACHING ASSISTANT (TA)

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OFFICE HOURS

Office visit with the instructor is by appointment. The TA, Kelin Li, offers weekly office hour from 1:00 to 2:00 pm on Wednesdays, starting from January 13th, in 420 BEH S.

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. You are also welcome to schedule in-person meetings or phone conversations with the instructor or TA to discuss course-related issues.

COURSE 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. We will cover 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 used in epidemiology, as well as how to statistically identify the risk factors or causes of a disease. We will also review epidemiology as a social science by reviewing the social causes and consequences of health.

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 and social interactions in forming social disparity in health outcomes.

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 BOOK

Text: **Leon Gordis's Epidemiology (4th edition). Philadelphia, PA: W.B. Saunders. 2008.**

A copy of the textbook is on reserve in the Marriott library.

ADDITIONAL REQUIRED READINGS

- Berkman LF & Kawachi I. 2000. "A historical framework for social epidemiology." In *Social Epidemiology* by Berkman LF and Kawachi I (eds.). New York: Oxford University Press.
- Berkman LF & Syme SL. 1979. "Social networks, host resistance, and mortality: A nine-year follow-up study of Alameda County residents." *American Journal of Epidemiology* 109(2):186- 204.
- Ross C. 2000. "Walking, exercising, and smoking: does neighborhood matter?" *Social Science & Medicine* 51:265-274.
- Syme SL & Yen IH. 2000. "Social epidemiology and medical sociology: Different approaches to the same problem." In *Handbook of Medical Sociology* by Bird CE, Conrad P & Fremont AM (eds.). New Jersey: Prentice Hall.

LECTURE NOTES

PowerPoint lecture notes will be released by noon on Monday. The instructor will selectively go over some slides and record the instructor's voice into mp3 files and upload them to the corresponding learning module. These mp3 files correspond to the PowerPoint lecture notes and will be named accordingly.

CANVAS

All course materials including lecture notes, quizzes, and additional documents are posted on Canvas. Weekly email messages will be sent to you on Monday via email on Canvas highlighting what to expect during the week. Please check the course site and your email via Canvas on a regular basis. It is highly encouraged 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.

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 required of the student.

COURSE REQUIREMENTS & GRADING

- **Homework assignments (5%)** – There will be three homework assignments in this class. 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. Solutions to the homework assignments will be posted after the due day. Homework assignments will not be graded based on the content; rather, they will be graded based on the amount of completion. You will get full credit for completing all homework assignments and submitting them on time.

- **Quizzes (30%)** – There will be timed quizzes on a weekly basis throughout the semester except during the exam or spring break week. The quizzes are to be posted and completed on Canvas. Quizzes will be open on Monday morning (before noon) and closed on Sunday night (midnight). **Do not open the quiz if you do not plan on taking it!** Once you begin a quiz, the timer starts and you will be unable 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 quizzes will be dropped from your final grade to accommodate any unexpected contingencies. Quizzes cannot be redone or made up.
- **Exams (60%)** – There will be four online exams comprised of true/false and multiple choice questions (not comprehensive). Exams are equally weighted but your lowest exam score will be dropped. The exams will be based on the corresponding course materials including the text book, lecture notes, films, and additional required readings. This is a timed, open-book, open-note exam completed online in Canvas. You may use whatever materials you wish to help you out, but **you must not consult another person.** One week is allocated for each exam to review the materials and take the exam; and note you only have 150 minutes to complete the exam. **Do not open the exam if you do not plan on taking it!** Once you begin the exam, the timer starts and you will be unable to stop it. You only have one chance to take the exam. Make sure you are ready to take the exam and you are in a stable computer environment before starting it. Your lowest exam score will be dropped from your final grade.
- **Online Discussion (5%)** – There will be several online discussion sessions throughout the semester (see the course schedule). Each session will run for four days (Wednesday through Saturday) within the corresponding week. The discussion threads will be posted before 10am on Wednesday and closed at midnight on Saturday. Each student is expected to post at least one comment on the discussion thread to receive full credit. Your online discussion score will be based on both the quantity and quality of your posted comments at the online discussion sessions.
- **Extra credit**– There is a final, cumulative, optional test where you can earn up to **30 extra exam points** in the end of the semester.
- Final grades will be given according to the following scale:

A: 92 – 100	A-: 89 – 91	B+: 86 – 88
B: 80 – 85	B-: 77 – 79	C+: 74 – 76
C: 70 – 73	C-: 65 – 69	D: 60 – 65
E: <60		

LATE POLICY

- The deadline is enforced electronically by **Canvas** based on its server's clock of **Utah Time**. Each activity/assignment is due at 11:59PM on the corresponding deadline. Be sure to pay close attention to the deadlines. It is your responsibility to finish and submit assignments, discussion comments, quizzes, and exams on time.
- No late submission will be accepted. There is no exception. A late/missed activity/assignment will receive 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 expected contingencies.
- Computer or Internet related problems (i.e. electronic or equipment failure) are **not** a valid excuse 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. Therefore it is advisable to complete the assignments early enough to take into account any problems that may occur.

THINGS TO REMEMBER (Please read them carefully!)

- This is an online course but the instructor and the TA are both nearby! Please feel free to email, telephone, or even come and see us! If you email us, please use the mail function within Canvas. We will regularly check there. Email will be responded within 48 hours (often sooner).
- 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 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 exam that is handed in must be your own work! However, talking with one another 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. We will not distinguish between the person who copied a solution and the person whose solution was copied. Both people will be 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 presented in class, in the book, and general issues relevant to the assignments.
 - When taking 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 University Student Behavior Committee. 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. If you're having trouble understanding the material, please let us know and we will be more than happy to help.
- **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.
 - 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>).

COURSE SCHEDULE*

WEEK	READING ASSIGNMENT
Jan 6	Ch 1 - Introduction
	Ch 2 - The Dynamics of Disease Transmission
Jan 13	Ch 3 - Morbidity Measures
	Film "Rx for Survival: A Global Health Challenge - How Safe are We?"
	Online discussion session 1 (about the film; Jan 16-Jan 19)
Jan 20	Ch 4 - Mortality Measures
	Homework assignment 1 (posted on Jan 21)
Jan 27	Review and exam week
	Homework assignment 1 due by midnight on Jan 27

	Homework assignment 1 answer key posted on Jan 28
	Exam 1 (available to take on Canvas from Jan 28 to midnight of Feb 3)
Feb 3	Ch 7, 8 - Randomized Trials
Feb 10	Ch 9, 10 – Observational study designs
	Film "Rx for Survival: A Global Health Challenge – Back to Basics?"
Feb 17	Film - "The Great Leveler"
	Online discussion session 2 (about the two films; Feb 20-Feb 23)
	Homework assignment 2 (posted on Feb 18)
Feb 24	Review and exam week
	Homework assignment 2 due by midnight on Feb 24
	Homework assignment 2 answer key posted on Feb 25
	Exam 2 (available to take on Canvas from Feb 25 to midnight of March 3)
March 3	Ch 5 - Validity and Reliability & Ch 6 - Survival and Prognosis
March 10	<i>Spring Break - No Class</i>
March 17	Ch 11, 12 - Estimating Risk
March 24	Ch 14, 15 - Association vs. Causation / Bias, Confounding, & Interaction
	Homework assignment 3 (posted on March 25)
March 31	Review week
	Homework assignment 3 due by midnight on March 31
	Homework assignment 3 answer key posted on April 1
	Exam 3 (available to take on Canvas from April 1 to midnight of April 7)
April 7	Additional reading: Social Epidemiology (Syme and Yen 2000)
	Two films “Unnatural Causes: Is Inequality Making Us Sick?: In Sickness and In Wealth” & “Place Matters”
	Online discussion session 3 (about the article and the two films; April 10 - April 13)
April 14	Additional readings: Berkman & Kawachi 2000; Berkman & Syme 1979; Ross 2000
	Online discussion session 4 (about the three articles; April 17 - April 20)
April 21	Review and exam week
	Exam 4 (available to take on Canvas from April 22 to midnight of April 28)

* The schedule is subject to change.

Films available online:

- Rx for Survival: A Global Health Challenge - Back to the Basics
<http://digital.films.com.ezproxy.lib.utah.edu/PortalPlaylists.aspx?aid=6296&xtid=44353>
- Rx for Survival: A Global Health Challenge - How Safe are We?
<http://digital.films.com.ezproxy.lib.utah.edu/PortalPlaylists.aspx?aid=6296&xtid=44354>
- The Great Leveler
<http://vimeo.com/50915371>
- In Sickness and in Wealth
<http://stream.lib.utah.edu/index.php?c=details&id=584>
- Place Matters
<http://stream.lib.utah.edu/index.php?c=details&id=588>