

Social Epidemiology Online

Soc 3673-90

Fall Semester, 2017

INSTRUCTOR

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OFFICE HOURS

Email via Canvas is the best way to communicate with the instructor and the TA. Emails will be responded to within 48 hours except for weekends or public holidays. You are also welcome to schedule in-person meetings or phone conversations with the instructor or the TA 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 populations. Epidemiology is also concerned with the application of health-related data to the control of health problems and the formation of public health interventions and policies. Using lectures, assigned readings, documentaries, video lectures, discussion sessions, group exercises, and homework assignments, this course will introduce students to the concepts and methods used in epidemiology. We will use real-life data to explore how epidemiologists measure morbidity, mortality, and life expectancy across a population. We will explore the various types of research methods and designs epidemiologists use, as well as how to statistically identify the risk factors or causes of a disease. Also in this course, we will explore epidemiology as a social science by reviewing the social causes and consequences of health, especially on 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 and pros & 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 (e.g. passing one of these courses: SOC 3112, FCS 3210, ECON 3640, PSY 3000) before taking this course.

TEXT BOOK

Text: *Leon Gordis's Epidemiology (5th edition)*. Philadelphia, PA: W.B. Saunders. 2014. ISBN-13: 978-1455737338; ISBN-10: 145573733X (hardcopy on reserve in the Marriott library).

ADDITIONAL REQUIRED READINGS

(available on Canvas)

- 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 lectures 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 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.

- **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 midnight. Only the first quiz is given more time 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 no later than Monday morning 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 **30 extra exam points** towards the end of the semester.
- Final grades will be curved according to the overall class performance.

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 assignments, discussion comments, quizzes, 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 do homework assignment and take the quiz. 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!)

- 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 to understand the material better is strongly encouraged (except during exams!). 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 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.
 - 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

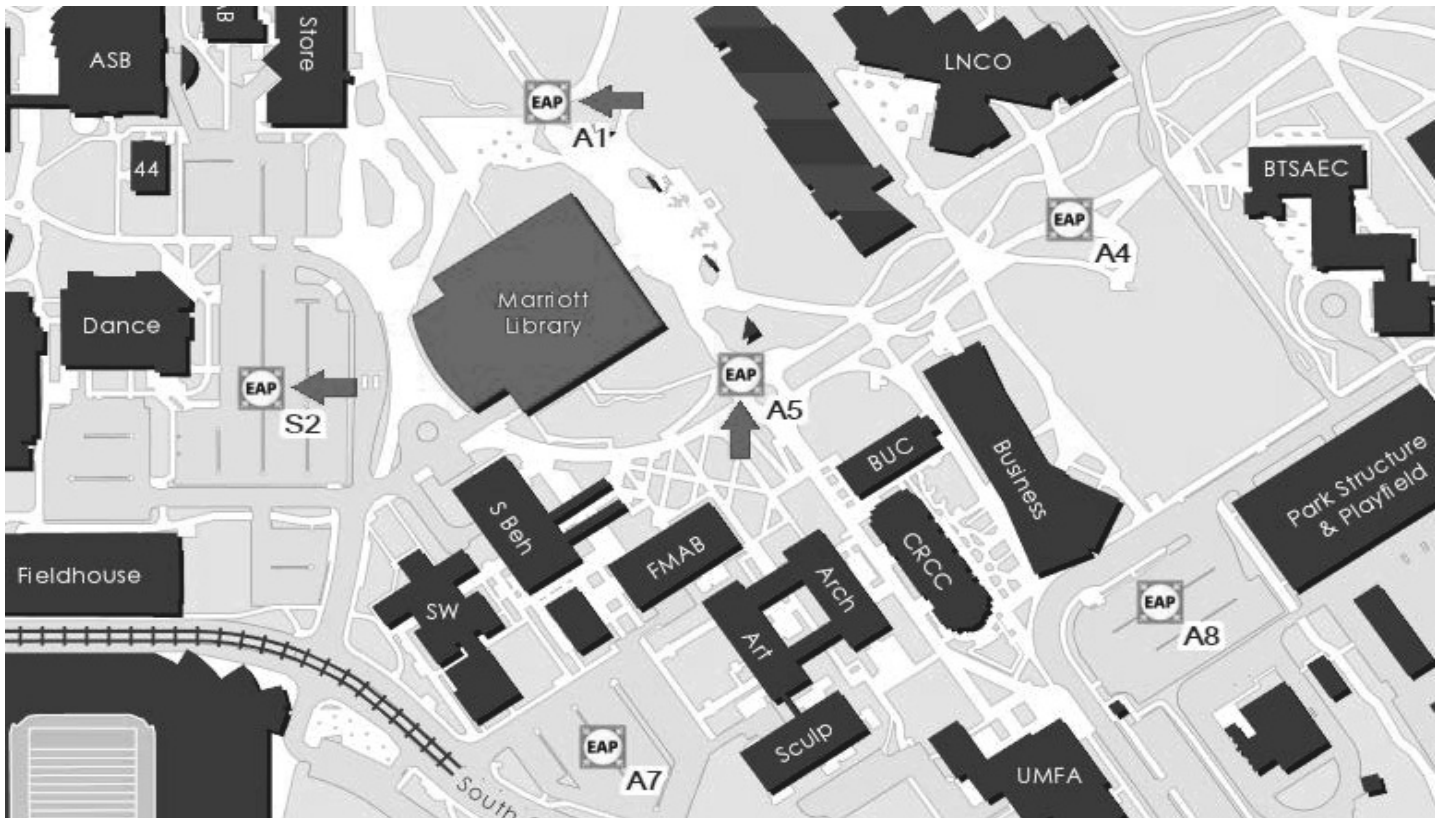
Per University of Utah regulations (Policy # 6-400). "A student who engages in academic misconduct," as defined in Part I.B. and including, but not limited to, cheating, falsification, or plagiarism, "may be subject to academic sanctions including but not limited to a grade reduction, failing grade, 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.

	<i>Support is always available if you believe you are a victim of interpersonal violence.</i>
University Resources	Emergency 911
Campus Police: Department of Public Safety 1735 East South Campus Drive 801-585-COPS (2677) dps.utah.edu	Center for Student Wellness, ★ Campus Victim Advocate Student Services Building, Room 328 801-581-7776, wellness.utah.edu
Office of Dean of Students Union Building, Room 270 801-581-7066 deanofstudents.utah.edu	Office of Equal Opportunity and Affirmative Action Park Building, Room 135 801-581-8365, oeo.utah.edu
Women's Resource Center ★ Union Building, Room 411 ★ 801-581-8030 womenscenter.utah.edu	University Counseling Center ★ Student Services Building, Room 426 801-581-6826 counselingcenter.utah.edu

CSBS EMERGENCY ACTION PLAN



BUILDING EVACUATION

EAP (Emergency Assembly Point) – When you receive a notification to evacuate a building either by campus text alert system or by building fire alarm, please proceed in an orderly fashion to the EAP designated for that building. Once everyone is at the EAP, you will receive further instructions from Emergency Management personnel. You can look up the EAP for any building you may be in on campus at <http://emergencymanagement.utah.edu/eap>.



CAMPUS RESOURCES

U Heads Up App: There's an app for that. Download the app on your smartphone at alert.utah.edu/headsup to access the following resources:

- **Emergency Response Guide:** Provides instructions on how to handle any type of emergency, such as earthquake, utility failure, fire, active shooter, etc. Flip charts with this information are also available around campus.
- **See Something, Say Something:** Report unsafe or hazardous conditions on campus. If you see a life threatening or emergency situation, please call 911!

Safety Escorts: For students who are on campus at night or past business hours and would like an escort to your car, please call 801-585-2677. You can call 24/7 and a security officer will be sent to walk with you or give you a ride to your desired on-campus location.

COURSE SCHEDULE*

WEEK	READING ASSIGNMENT
1. Aug 21	Ch 1 - Introduction
	Ch 2 - The Dynamics of Disease Transmission
2. Aug 28	Ch 3 - Morbidity Measures
	Film "Rx for Survival: A Global Health Challenge - How Safe are We?"
	Online discussion session 1 (about the film; Aug 28 – Sep 3)
3. Sep 4	Ch 4 - Mortality Measures
	Homework assignment 1 (due at midnight on Sep 10)
4. Sep 11	Review for Exam 1
	Homework assignment 1 answer key posted on Sep 11
	Exam 1 (Sep 11 – Oct 23)
5. Sep 18	Ch 7, 8 - Randomized Trials
6. Sep 25	Ch 9, 10 – Observational study designs
	Film "Rx for Survival: A Global Health Challenge – Back to Basics?"
7. Oct 2	Film - "The Great Leveler"
	Online discussion session 2 (about the two films; Oct 2 – Oct 8)
	Homework assignment 2 (due at midnight of Oct 15)
8. Oct 9	<i>Fall Break - No Class</i>
9. Oct 16	Review and exam week
	Homework assignment 2 answer key posted on Oct 16
	Exam 2 (Oct 16 – Oct 22)
10. Oct 23	Ch 5 - Validity and Reliability & Ch 6 - Survival and Prognosis
11. Oct 30	Ch 11, 12 - Estimating Risk
12. Nov 6	Ch 14, 15 - Association vs. Causation / Bias, Confounding, & Interaction
	Homework assignment 3 (due at midnight of Nov 12)
13. Nov 13	Review week
	Homework assignment 3 answer key posted on Monday
	Exam 3 (Nov 13 – Nov 19)
14. Nov 20	Additional reading: Social Epidemiology (Syme & 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; Nov 20 – Nov 26)

15. Nov 27	Additional readings: Berkman & Kawachi 2000; Berkman & Syme 1979; Ross 2000 Online discussion session 4 (about the three articles; Nov 27 – Dec 3)
16. Dec 4	Review and exam week <i>Exam 4</i> (Dec 4 – Dec 10)
17. Dec 11	Extra Credit Quiz — Cumulative and Optional (Dec 11 – Dec 17)

* The schedule is subject to change. The due time on all the assessment item is midnight.

Films available online:

- **Rx for Survival: A Global Health Challenge - How Safe are We?**
https://www.youtube.com/watch?v=K_4dgGTmF4
- **Rx for Survival: A Global Health Challenge - Back to the Basics**
<https://www.youtube.com/watch?v= oedxD7ot24>
- **The Great Leveler**
<http://vimeo.com/50915371>
- **Unnatural Causes: Is Inequality Making Us Sick? -- In Sickness and in Wealth**
<http://stream.lib.utah.edu/index.php?c=details&id=584>
- **Unnatural Causes: Is Inequality Making Us Sick? -- Place Matters**
<http://stream.lib.utah.edu/index.php?c=details&id=588>