



SOC 3673-090 Social Epidemiology

Spring Semester 2022 (Online)

Instructor: Ming Wen, Ph.D. in Sociology

Email: Canvas mail

Office Hours via Zoom: by appointment

Teaching Assistant (TA): Jared Poff, M.S., Ph.D. student in Sociology

Email: Canvas mail

Office hours via Zoom: 2-3 PM on Thursdays or by appointment

The instructor and TA will make efforts to respond to email messages within 48 hours except on weekends or public holidays.

Required Readings

Gordis Epidemiology, 6th edition. 2019, authors Celentano and Szklo. Elsevier. The inclusive access to this textbook is available via Canvas. The price for the electronic access is \$35.30 to students (eBook 9780323552295). Please carefully read the following note from the University Book Store regarding this inclusive access program:

“The inclusive access program provides students a digital copy of the book at a discounted price they pay for with their tuition. Students are provided the book on the first day of the semester, **if for any reason a student does not want the inclusive access textbook, they can opt out of the program anytime within the first two weeks of the semester**. Students do receive about three emails telling them about inclusive access and how to access the textbook or opt out of the program. For more information, please see the information I included from our website.”

Additional articles to read are posted on the course website via Canvas under the weekly module.

Course Description

Epidemiology is the study of how diseases are distributed in populations and the factors that influence or determine this distribution. Epidemiology is the basic science of public health, a quantitative field that draws on statistical methods. Epidemiologists design studies to learn about disease causes and distributions. Using a variety of teaching and assessment methods, we will cover topics such as how exposure to a factor affects health, how disease spreads across a population, and how public health interventions 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 disease. We will also watch films and read published articles to further understand social epidemiology as social science, addressing the ways in which social, political, cultural, and economic circumstances influence our chances for a healthy life. This course fulfills the Quantitative Reasoning (QB) or Quantitative Intensive (QI) requirement of the University of Utah. You need to have a basic knowledge and understanding of algebra and elementary statistics before taking this course.

Course Learning Outcomes

By the end of this course, you are expected to:

- understand what epidemiology is and know its contributions to public health and medicine
- calculate, interpret, and compare various measures of morbidity, mortality, survival, and measures of disease-exposure associations
- identify questions that can be answered with epidemiological studies
- understand the defining features of different epidemiologic study designs and their strengths and limitations
- understand the complexity and importance of social factors in forming social disparity in health outcomes

Assignments and Grading

- **Exams (60%)**
 - 4 midterm exams and a cumulative final; your lowest exam score among the five exams will be dropped
 - All exams will be open on Canvas for 3.5 days (see the course schedule for exact days & times)
 - The final exam will take place during finals week
 - 150-minute time limits once opened
 - Open-book and open-note, but no collaboration with others is allowed
- **Homework assignments (20%)**
 - 4 homework assignments closely corresponding to the exams
 - Due at 11:59 PM on scheduled Fridays; answer key posted at noon the next day
 - Can be submitted as an individual or a group assignment
- **Short write-ups (10%)**
 - 4 reflection essays relating to assigned films, etc.
 - Due at 11:59 PM on scheduled Fridays
 - 350-500 words (grading is partly based on this word limit)
- **Team presentation (10%)**
 - You will work in a team to develop a 5-8-minute presentation on a health outcome/disease
 - Teams select their own presentation topics
 - The presentation should include:
 - Background information on the disease/health outcome; relevant data and statistics to shed light on the scope of the problem
 - How social factors affect the risks of the disease/outcome (feel free to either focus on the main effects of the selected social factors or include both main effects and interaction effects)
 - The social constructions or conditions that would need to change to alleviate the disease/outcome and its impact, including specific public policy recommendations
 - Presentation slides with at least 3 valid and reliable scholarly references listed at the end
 - You will receive two grades for this assignment: a team grade (50 points)—see this assignment in Canvas for additional details and the grading rubric—and an individual grade (20 points) based on your team members' evaluations of your overall contributions to the project
- **Extra credit exam points**
 - You may participate in extra credit discussion boards on Canvas to earn up to 20 points of extra credit towards your exam scores (10 points possible per discussion board)
 - There will be one board posted for the first half of the semester and one for the second
 - There is also an optional quiz toward the end of the semester based on three articles to earn up to 10 points of extra credit towards your exam scores.

Final grade distribution will be as follows:

93-100% = A; 90-92% = A-; 87-89% = B+; 82-86% = B; 78-81% = B-; 73-77% = C+; 68-72% = C; 60-67% = C-; 55-59% = D; <55% = E

Depending on the final class performance, grade curving up is possible if needed.

Online Format

This class can be "attended" from wherever there is a functioning Internet connection. Readings, lecture slides, assignments, and other course materials are posted under each week's module on Canvas. Instructions are provided in Canvas for each assignment. The modules include a weekly message outlining the topics covered and assignments required in the upcoming week. Competence in using an Internet browser and Canvas is necessary to effectively take this class. You will also need a basic calculator for homework and exams. From experience, actual calculators are preferable to ones on your phone or computer.

Rules

You may and are encouraged to work in groups of no more than three students for the homework problem sets. Please turn in a single assignment with all group members' names on both the assignment itself and in a comment along with your submission. You may also work alone, although epidemiologists usually do form collaborative groups to plan studies. A discussion board will be set up on Canvas to help students find assignment partners if they would like to, which we appreciate is sometimes challenging. The assignments' due dates are listed in the schedule below and in the corresponding modules on Canvas as well. ***There will be no credit for late work.*** The deadlines are in Utah times. The only exception to this is for short write-ups when a reason for the late assignment has been sent to the instructor before the day that the assignment is due (before midnight), and the instructor has approved the reason. No late homework assignments are accepted regardless of the reasons because the answer key is posted the following day.

Expectations for Behavior

Please check your Canvas email and course site each week on a regular basis. Students may find it helpful to turn on notifications (Account -> Notifications -> Select Notification Method). Please review all posted materials, complete all assigned readings, and submit assignments via Canvas on time. Please do not ask questions that are clearly addressed in the syllabus or course announcements. Please treat your classmates with the professionalism and courtesy you would expect in the workplace. All course communications (in the classroom and online) should be polite and respectful. All course communications should use standard grammar, punctuation, and capitalization (e.g., never use all caps).

University Policies

1. *Americans with Disabilities Act Statement.* The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability & Access (CDA), 162 Olpin Union Building, (801) 581-5020. CDA will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the CDA.
2. *University Safety Statement.* The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801- 585-COPS (801-585-2677). You will receive important emergency alerts and safety

messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu.

3. *Academic Misconduct Statement.* 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>).
4. *Sexual Misconduct Statement.* Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran’s status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801- 581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).
5. *Emergency Preparedness Information.* Please refer to the Emergency Action Plan document on the last page of this syllabus for the evacuation plan for our class in the event of an emergency.

Social Epidemiology (SOC 3673-090) Spring 2022 Course Schedule

WEEK	LEARNING MATERIAL	ASSIGNMENTS
1/10	Course introduction and syllabus/schedule review Ch 1 – Introduction Film: “Journey to Planet Earth: Hot Zones”	
1/17	Ch 2 – The Dynamics of Disease Transmission Syme & Yen (2000) “Social Epidemiology and Medical Sociology” Berkman & Kawachi (2014) “A Historical Framework for Social Epidemiology”	
1/24	Ch 3 – Morbidity Measures Film – “The Great Leveller”	Write-up 1 due Fri, 1/28 at 11:59 p.m.
1/31	Ch 4 – Mortality Measures	Homework 1 due Fri, 2/4 at 11:59 p.m. Exam 1 open Sat, 2/5 at noon to Tues, 2/8 at midnight
2/7	Ch 5 – Validity & Reliability of Screening Tests	
2/14	Film – “We Heard the Bells: The Influenza of 1918” Film – “Coronavirus: Race Against the Pandemic” Seminar Recording – “Structural Racism and the Covid-19 Pandemic”	Write-up 2 due Fri, 2/18 at 11:59 p.m.
2/21	Ch 6 – The Natural History of Disease	Homework 2 due Fri, 2/25 at 11:59 p.m. Exam 2 open Sat, 2/26 at noon to Tues, 3/1 at midnight
2/28	Ch 7 – Observational Studies Film – “Epidemiology: Linking Smoking and Lung Cancer”	
3/7	SPRING BREAK – NO CLASS	
3/14	Ch 8 – Cohort Studies Ch 9 – Comparing Cohort and Case Control Studies	Write-up 3 due Fri, 3/18 at 11:59 p.m.
3/21	Ch 10 – Randomized Trials Ch 11 – Randomized Trials: Some Further Issues	Homework 3 due Fri, 3/25 at 11:59 p.m. Exam 3 open Sat, 3/26 at noon to Tues, 3/29 at midnight
3/28	Ch 12 – Estimating Risk Film – “Living Old”	
4/4	Ch 13 – More on Risk Film – “Preventing Dementia”	Write-up 4 due Fri, 4/8 at 11:59 p.m.
4/11	Ch 14 – From Association to Causation Ch 15 – More on Causal Inference	
4/18	Ch 16 – Genetic & Environmental Factors in Disease Causation	Homework 4 due Fri, 4/22 at 11:59 p.m. Exam 4 open Sat, 4/23 at noon to Tues, 4/26 at midnight
4/25	Team presentations Optional readings: Jackson et al. (2020); Grundy & Glaser (2000); Lee et al. (2020)	Team presentations due Fri, 4/29 at midnight Bonus quiz open Mon, 4/25 at noon to Tues, 5/3 at midnight
4/28-5/4	FINAL WEEK	Final exam open Sat, 4/30 at noon to Tues, 5/3 at midnight

Please note that the syllabus may be modified with reasonable notice to you.