SUMMER 2014 SOC 3673-090:

SOCIAL EPIDEMIOLOGY

DEPARTMENT OF SOCIOLOGY
ONLINE
3 CREDIT HOURS



CONTACT INFORMATION

Instructor: Martha Munezhi Office location: S BEH 422 Office hours: By appointment

E-mail: through canvas system or martha.munezhi@utah.edu

MEETING TIME

This is an online course, which begins on May 12. The final exam must be taken by August 1.

REQUIRED COURSE MATERIALS

Book: Epidemiology by Leon Gordis (4th edition). Philadelphia, PA: W.B. Saunders. 2008.

- The textbook is available at the campus store or from online booksellers. It's also on 3hour reserve at the library

Articles and videos: See course calendar and list

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 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 used in epidemiology, 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.

COURSE OBJECTIVES

Upon completion of this course, the student should be able to:

- Calculate, interpret, and compare various measures of morbidity, mortality, disease-exposure associations and the validity and reliability of diagnostic tests
- Explain the logic of, and problems with various epidemiological study designs;
- Critically read, analyze and discuss epidemiological literature
- Understand the importance of social factors and social interactions in forming social disparity in health outcomes.

COURSE REQUIREMENTS AND GRADING STANDARDS

Prerequisites: The course fulfills the Quantitative Reasoning (QB) and Quantitative Intensive (QI) general education requirements. Knowledge of basic algebra and elementary statistics is required before taking this course. Students must have already completed a basic statistics course (for example SOC 3112, FCS 3210, ECON 3640, PSY 3000) prior to enrolling.

EVALUATION METHODS AND CRITERIA

Course evaluation of	components
Quizzes	20%
Discussions	20%
Homework	20%
Final exam	40%
Total	100%

Final exam grad	ling scale
A	90% - 100%
В	80% - 89%
С	70% - 79%
D	60% - 69%
F	0% - 59%

For the final grade, within each range, 0 to 2.99 will earn a minus, 7 to 9.99 will earn a plus.

QUIZZES (20%) – There will be four timed quizzes to be completed on canvas. The quizzes will focus more specifically upon the conceptual/factual information presented in the course lectures, text, and readings. You may use whatever materials you wish to help you out, but you must not consult another person. Quizzes will be accessible from Thursday evening to the end of Sunday. Do not open the quiz before you 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 computing environment before you start it. Please note that no make-up quizzes will be given, even for emergency situations; however, I will drop your lowest quiz score from your final grade.

DISCUSSIONS (20%) – There will be twelve required discussion sessions: most discussion sessions are based on the book chapters, additional assigned readings and videos. These discussions are designed to (1) give you experience in critically reading, analyzing and discussing epidemiological studies, and (2) facilitate critical discussion of the central theoretical questions of social epidemiology. For each required discussion, I will post a series of questions. You are required to:

- 1. Provide a well-reasoned answer to at least one of my questions
- 2. Respond to at least two other student answers or responses

Answers should be more than a simple "yes" or "no" or "I agree". Reasonable answers will usually be at least four sentences in length. I want you to express your thoughts—for example, do you agree or disagree with the author's claims; if so, why? Always explain why you think the way you do. Disagreement and critical thinking are part of healthy debate; however, rude and demeaning comments are not acceptable (see the Student & Faculty Responsibilities section of this syllabus). These discussions are usually quite enjoyable, and many students find them to be the most interesting part of the course. Online discussion scores will be based on both the quantity and quality of your comments.

HOMEWORK (20%) – 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 they will be accessible from Thursday evening to the end of Sunday. 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.

FINAL EXAM (40%) – In addition to the exercises (quizzes, discussions and critical thinking), you will have to take a final examination. The exam will be comprehensive, covering the material addressed throughout the semester. The exams will be timed and closed-book. You may bring a 3-inch by 5-inch notecard containing notes to refer to during the exam. You may use a simple, non-graphing calculator. Other than the simple calculator you may not use any electronic devices, including your phone. (Note: you may *not* use the calculator on your phone.). The exam must be taken at a proctored testing center arranged through U-Online at www.uonline.utah.edu There will be several times as well as locations available for the exam.

GRADES, EXTRA CREDIT AND LATE EXAM POLICY:

- Deadlines are enforced electronically by Canvas based on its server's clock of Utah time. Each
 activity/assignment 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, homework, exam, discussion will receive zero automatically.
- There will be no extra credit for this course. Please also note that no make up quiz, homework, discussion or exam will be given.
- 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.

STUDENT & FACULTY RESPONSIBILITIES

It is the responsibility of both students and the instructor to maintain an environment that is safe, respectful, and conducive to learning and critically thinking. Individuals in the course will have different backgrounds and viewpoints. Open and critical dialogue is essential to achieve the objectives of the course; but comments or actions that are hurtful, unkind, uncivil, or intimidating will hamper the learning process, and are not acceptable.

All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. Students have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, plagiarism, and/or collusion, as well as fraud, theft, etc. Students should read the Code carefully and know they are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee.

ACADEMIC INTEGRITY

When you have used ideas of others, you must properly indicate that you have done so. Plagiarism, cheating, misrepresenting one's work, inappropriately collaborating, and fabrication or falsifications of information are serious offenses. The perpetrating student will be punished by failure the individual assessment, failure in the course, and/or expulsion from the university. I will also report any incidences of academic misconduct to the chair of the sociology department. All students should be familiar with the formal definitions of academic misconduct, as outlined in the University of Utah Student Code at http://www.admin.utah.edu/ppmanual/8/8-10.html.

AMERICANS WITH DISABILITIES ACT

The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the

Center for Disability Services, 162 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.

ONLINE COMPONENTS OF COURSE

Lecture notes – Power point lecture notes will be available by noon on Thursday of each week

Canvas – All course materials including lecture notes, quizzes, and additional documents are posted on Canvas. Weekly messages will be sent on Thursday via email on Canvas highlighting what to expect during that 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 and to keep up with the pace of the course material.

System requirements - Note that most portions of this course will be completed online. Make sure you have a reliable internet connection. The following notes are important:

- Electronic or equipment failure:
 - It is your responsibility to maintain your computer and related equipment in order to participate in the online portion of the course.
 - Equipment failures will not be an acceptable excuse for late or absent assignments.
- Canvas uses electronic dating, so you cannot submit assessments or quizzes late.
 - Some students are in different time zones. The due dates for the online components of
 this class will follow Utah time. Make sure you keep this in mind when you complete
 your assignments and quizzes. If you need help with this, please contact me early.
- Discussion threads, e-mails, and chat rooms are all considered to be equivalent to classrooms, and student behavior within those environments shall conform to the Student Code. Specifically:
 - Posting photos or comments that would be off-topic in a classroom are still off-topic in an online posting.
 - Using angry or abusive language is called "flaming", is not acceptable, 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 !!!! and question marks
 ??????.
 - Off-color language and photos are never appropriate.

SYLLABUS CHANGE POLICY

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice

ARTICLES AND VIDEOS

ARTICLES

- 1. Armstrong, David. 2000. "Social theorizing about health and illness." in *Handbook of Social Studies in Health & Medicine*, edited by Gary L. Albrecht et. al. Thousand Oaks, CA: Sage Publications.
- 2. Berkman, Lisa F., and Ichiro Kawachi. 2000. "A historical framework for social epidemiology." In *Social Epidemiology* by Berkman, Lisa F. and Ichiro Kawachi (eds.). New York: Oxford University Press.
- 3. Cutler, D. & G. Miller, 2005. "The role of public health improvements in health advances: the twentieth-century US." *Demography* 42 (1, Feb):1-22.
- 4. Ferraro, Kenneth and Melissa Farmer. 1999. "Utility of Health Data from Social Surveys: Is There a Gold Standard for Measuring Morbidity?" *American Sociological Review* 64: 303-315.
- 5. Kiene, Susan M. and William D. Barta. 2006. "A Brief Individualized Computer-Delivered Sexual Risk Reduction Intervention Increases HIV/AIDS Preventive Behavior." *Journal of Adolescent Health* 39:404-410.
- 6. Link, Bruce G. and Jo Phelan. 1995. "Social Conditions as Fundamental Causes of Disease." *Journal of Health and Social Behavior* 35:80-94.
- 7. Mechanic, D. and D. D McAlpine. 2010. "Sociology of Health Care Reform: Building on Research and Analysis to Improve Health Care." *Journal of Health and Social Behavior* 51:S147-S159.
- 8. Reilly, John J, Julie Armstrong, Ahmad R Dorosty, Pauline M Emmett, A Ness, I Rogers, Colin Steer, & Andrea Sherriff. 2005. "Early Life Risk Factors for Obesity in Childhood: Cohort Study." *BMJ* 330:1357.
- 9. Ryder, Norman. 1965. "The Cohort as a Concept in the Study of Social Change." *American Sociological Review* 30: 843-861.
- 10. Smeeth, Liam, Claire Cook, Eric Fombonne, Lisa Heavey, Laura C. Rodrigues, Peter G. Smith, and Andrew J. Hall. 2004. "MMR Vaccination and Pervasive Developmental Disorders: A Case-control Study." *The Lancet* 364:963-969.
- 11. Syme S. Leonard and Irene H. Yen. 2000. "Social Epidemiology and Medical Sociology: Different Approaches to the Same Problem. Pp. 365-376 in *Handbook of Medical Sociology*, edited by C. E. Bird, P. Conrad, and A. M. Fremont. New Jersey: Prentice Hall.
- 12. Weitz R. 2000. "The U.S. Health Care System and the Need for Reform." In *The Sociology of Health, Illness, and Health Care*, edited by R. Weitz. Belmont, CA: Wadsworth/Thomson Learning, c2004.

FILMS

- 1. 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
- 2. 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
- 3. The Great Leveler http://vimeo.com/50915371
- 4. Unnatural Causes: Is Inequality Making Us Sick? In Sickness and In Wealth & Place Matters. http://stream.lib.utah.edu/index.php?c=details&id=584

- 5. Sick around the World: PBS Video http://video.pbs.org/video/1050712790/
- 6. Place matters http://stream.lib.utah.edu/index.php?c=details&id=588

COURSE CALENDAR

Week	Text material	Readings	Films	Dates and Deadlines
Week 1				Discussion 1
May 12	Chapter 1 - Introduction	Armstrong		Available: May 15, Due May 18
Week 2				Discussion 2
May 19	Chapter 2 – Disease transmission	Berkman	How safe are we?	Available May 22, Due May 25
Week 3				Discussion 3, Quiz 1
May 26	Chapter 3 – Morbidity	Ferraro		Available May 29, Due June 1
Week 4				Discussion 4, Homework 1
June 2	Chapter 4 – Mortality	Cutler		Available June 5, Due June 8
Week 5				Discussion 5, Quiz 2
June 9	Chapter 6 – The natural history of diseases	Syme	Back to basics	Available June 12, Due June 15
Week 6		Kiene		Discussion 6
June 16	Chapter 7, 8 – Randomized trials			Available June 19, Due June 22
Week 7				Discussion 7, Quiz 3
June 23	Chapter 9, 10, 13 – Observational study designs	Ryder	The great Leveler	Available June 26, Due June 29
Week 8				Discussion 8
June 30	Chapter 11, 12 – Estimating risk	Reilly		Available July 3, Due July 6
Week 9				Discussion 9, Homework 2
July 7	Chapter 14, 15 – Association vs. Causation	Smeeth		Available July 10, Due July 13
Week 10			Unnatural causes	Discussion 10, Quiz 4
July 14	Chapter 5 – Validity and Reliability	Link	& Place matters	Available July 17, Due July 20
Week 11				Discussion 11, Homework 3
July 21	Chapter 17, 19 - Evaluating health services	Weitz and Mechanic	Sick around the world	Available July 24, Due July 27
Week 12				Discussion 12, Final exam review
July 28	Course Wrap up	No additional readings		Available July 27, Due July 30

Final Exam Thursday July 31, Friday August 1 (40%)

NOTES: Dates, topics, assignments and due dates are subject to change. Reading will be posted on canvas.