

Course Syllabus

**SCHOOL OF
PUBLIC HEALTH**



Special Topics: PUBH394

Public Health Problem Solving: Epidemiology in Action!

Fall 2017 - Tuesdays 3:30pm - 6:15pm

Credits: 3.0sh

Meeting Days: Tuesday

Meeting Time: 3:30 – 6:15 p.m.

Meeting Place: TBD

Instructors: TBD

Teaching Assistant: TBD

Office Address: TBD

Office Phone: TBD

E-mail: TBD

Course Text: Leon Gordis, *Epidemiology*, 5th ed., Saunders Title, ISBN: 978-1-4557-3733-8

I. Course Description

Epidemiology is the basic science of public health and epidemiological methods are used not only to investigate infectious disease outbreaks but also to link exposures to non-infectious and chronic health outcomes, as well as to evaluate the effectiveness of public health interventions. Through student driven discourse, hands-on projects and instructor facilitated case studies, this course is designed to hone previously learned epidemiological principles and apply them to simulated field conditions. The course is designed to bring theory of epidemiology to practice in public health protection and intervention.

II. Course Prerequisites

PUBH 120 or consent of instructor.

III. Course Objectives

Building on previous coursework in epidemiology and critical thinking, students should, at the completion of PUBH 394, be able to:

- 1) Describe the historic and current importance of epidemiology.
- 2) Critically assess the methodology, results and conclusions of science journal articles and become adept at using basic descriptive and analytical epidemiological techniques, and statistical skills, to evaluate public health data from surveillance systems, outbreak investigations and other sources.
- 3) Communicate epidemiological findings, including descriptive data in tabular and graph formats, sample quality and size, quantitative analysis effectively in written and oral forms to a wide range of audiences.
- 4) Critique the limitations and strengths of observational study designs used in public health science research.

School of Public Health Curricular Goals and Learning Outcomes addressed in this course are as follows:

Curricular themes addressed: Life Course Perspective and One Health

Course Learning Outcomes	UG PH Major Curricular Goals	UG PH Major Curriculum Learning Outcomes	Assignments	Assessment
Describe the historic and current importance of epidemiology.	1. Rise to the challenge of understanding the world in a nuanced way expressing a broad world view and an expansive view of health.	b) Analyze historical and contemporary public health events from multiple perspectives.	Gordis readings CDC Principles of Epidemiology modules CDC and CDC-EIS Case Studies	Objective testing, using a combination of MCQs and on-line statistical calculators
Communicate epidemiological findings, including descriptive data in tabular and graph formats, sample quality and size, quantitative analysis effectively in written and oral forms to a wide range of audiences.	2. Be informed, attuned, and energized advocates of health accepting individual responsibility to effect positive change.	c) Articulate how human, animal, and environmental health interact and impact the health of populations.	Gordis readings CDC Principles of Epidemiology modules CDC and CDC-EIS Case Studies	1) In class, interactive case study exercises utilizing those already developed for epidemiology knowledge training and assessment by the CDC 2) Student project presentations
Critically assess the methodology, results and conclusions of science journal articles and become adept at using basic descriptive and analytical epidemiological techniques and statistical skills to evaluate public health data from surveillance systems, outbreak investigations and other sources.	3. Demonstrate skill in critical and analytical thinking.	a) Describe the methods used to measure health status, promote public health, and curtail disease. b) Discriminately apply scientific information and data to public health endeavors. c) Demonstrate the use of selected strategies and tools used for measuring population health.	Gordis readings CDC Principles of Epidemiology modules CDC and CDC-EIS Case Studies	1) In class, interactive hands-on case study exercises utilizing those already developed for epidemiology knowledge training and assessment by CDC 2) Student project presentations

Course Learning Outcomes	UG PH Major Curricular Goals	UG PH Major Curriculum Learning Outcomes	Assignments	Assessment
Critique the limitations and strengths of observational study designs used in science research.				
Communicate epidemiological findings, including descriptive data in tabular and graph formats, sample quality and size, quantitative analysis effectively in written and oral forms to a wide range of audiences.	4. Communicate effectively both orally and in writing with a variety of audiences.	a) Apply critical reasoning to select or develop public health related messages. b) Develop reasoned arguments in support of public health premises.	Gordis readings CDC Principles of Epidemiology modules CDC and CDC-EIS Case Studies	1) In class, interactive case study exercises utilizing those already developed for epidemiology knowledge training and assessment by the CDC 2) Student project presentations

IV. Methods of Instruction

In this class, instructors and the teaching assistant integrate lectures, discussion, interactive sessions, hands-on exercises and case studies. Course communication outside of the classroom and in-community projects will primarily occur through UIC's Blackboard Learning System. Email is the preferred method of contact for instructors and the TA. If you send an email, include "PUBH 394" in the subject line so instructors can give your message a high priority. Students will be enrolled into the Blackboard course site each semester after registering. The instructors will post lecture notes, articles, updates, grades, and announcements in Blackboard throughout the course. The instructors will prepare notes versions of lectures for students to download and print out prior to class should they wish to write notes. Students are expected to log in to the Blackboard course site regularly and frequently to learn about any developments related to the course, to upload assignments, to participate in discussions, and to communicate with classmate and instructors. To learn more about Blackboard, go to: <http://blackboard.uic.edu>.

V. Course Text and Other Readings

The primary textbook is *Epidemiology, 5th ed.*, by Leon Gordis (ISBN: 978-1-4557-3733-8). Other readings and course materials for the course will be also available on Blackboard. Reading materials and assignments will be posted either in the lectures and/or in Blackboard.

VI. Course Outline/Weekly Schedule/Assessments

CLASS SCHEDULE AND ASSIGNMENTS

Summary Overview:

NOTE: In the first week of the semester, a summary table listing assignment due dates will be shared with the students to aid in and facilitate organization of students' schedules based on the expectations of the course.

Course schedule:

For details, please see the “Course by Week” section on the course Bb site.

WEEK	DATE	TOPIC	ASSIGNMENT
1		Introduction, syllabus, review of the history of epidemiology, research ethics, epi basics (part I) Instructor facilitated discussion.	IRB training module, Belmont, Tuskegee
2		Epi basics (part II) (including basic stats) Student driven discussion.	Gordis CDC Principles of Epidemiology
3		Epi basics (part III), descriptive epidemiology, surveys, displaying and communicating findings Student driven discussion.	Gordis CDC Principles of Epidemiology
4		Cross-sectional (Prevalence) studies Instructor facilitated discussion.	Gordis CDC Principles of Epidemiology
5		Cross-sectional (Prevalence) studies Student driven discussion.	Case study exercise
6		Case Control studies Instructor facilitated discussion.	Gordis CDC Principles of Epidemiology
7		Case Control studies Student driven discussion.	Case study exercise
8		Midterm exam	
9		Cohort studies (retrospective – prospective) Instructor facilitated discussion.	Gordis CDC Principles of Epidemiology
10		Cohort studies (retrospective – prospective) Student driven discussion.	Case study exercise
11		Cohort studies (prospective) Instructor facilitated discussion.	Gordis CDC Principles of Epidemiology
12		Cohort studies (prospective) Student driven discussion.	Case study exercise
13		Student project presentations	

WEEK	DATE	TOPIC	ASSIGNMENT
14		Student project presentations	
15		Final exam	

VII. Office Hours

The instructors will be available before or after the class or by appointment. You may contact any of us by email (please put PUBH 394 in the subject line). Other resources you may find useful are your academic advisors and the UIC Writing Center and UIC ACCC SAS and other statistical software training courses.

VIII. Mutual Tolerance and Respect

Public health deals with controversial issues from multiple perspectives and consideration of these issues may cause disagreements among us or may evoke strong personal feelings, depending on our individual experience, histories, identities and worldviews. Therefore, in all of our interactions and communications, it is important that we strive to have mutual respect and tolerance for one another and for any course guests and members of the community with whom we come into contact. We hope that we, both students and instructors, can address these issues in the context of the class if and when they arise. If you anticipate that you may have difficulty with a topic, please discuss this with an instructor so that we can accommodate your needs and help you find resources for support. If you have been offended by any content or interactions, you are encouraged to bring this up in class or to discuss this with one of the instructors.

IX. Grading

Grading in this course is based on class participation, case studies preparation and discussion, mid-term exam, group project and final examination. Please note that it can be challenging to work in groups. To be fair to all group members, each individual member must account for their own work (e.g., put your name on your contribution and specify your contribution for tasks).

Grading rubrics will be available for each of the assignments and published under the “Assignments” section of the course website. **The allocation of scores for the different components of course assessments to the total grade (out of 100) is as follows:**

Class Participation:	10 points
Epidemiology review:	10 points
Case studies preparation and discussion:	20 points
Mid-term examination:	20 points
Group project:	20 points
Final Examination:	20 points
TOTAL:	100 points

PLEASE NOTE: There will be **NO “Extra Credit” opportunities to improve your grade** in PUBH 394

Letter Grading Scale is as follows:

A = 90-100 B = 80-89 C = 70-79 D = 60-69 F = <60

Grades for assignments will be posted in the Blackboard throughout the term, and within the terms of UIC are non-negotiable and final. The TA has primary responsibility for grading each assignment. The instructors will provide grading rubrics and supervision for all assignments. We put a lot of time and effort into grading and our feedback is intended to provide additional perspective on the material as well as suggestions as to how you might improve your work throughout the semester.

Class Participation: Your consistent and meaningful participation is important to the overall learning environment of this course. Participation is defined as verbalizing thoughtful, informed comments based on

assigned course resources and in-class discussions. Your attendance and participation throughout the semester will be tracked. **One half point** will be awarded for attendance and/or excused absences and an additional **one half point** will be awarded for participation during each class (for a maximum of 10 points for the course). Unexcused class absence will result in **no participation points** for that week. **Students who are more than 30 minutes late for class will lose all participation points for that class.**

Class Electronics Use Policy: There is a **no cell phone use policy** in this course (if you have an emergency, you may take a call by stepping out of the class). Repeated use of your cell phone or laptop/tablet use (for activities that do not involve PUBH 394) during class time (using your phone/laptop/tablet after a warning to put it away during a class period) may result in up to 1 percentage off your final grade for each offense.

Late Assignment Policy: Points will be taken off for late submissions (please see below for details). If you have a compelling reason for submitting a late assignment, you should notify the instructors, and TA via email prior to the due date as soon as possible. The course late assignment policy is as follows: i) all assignments submitted before the due date will be graded out of maximum total score for that assignment (i.e., no penalty); ii) late assignments submitted within the 48-hour window following due date will be graded out of 50% of the maximum total grade for that assignment (i.e., 50% penalty); iii) any late assignment beyond the 48-hour time window following the assignment due date can be reviewed by the instructors for no credit (i.e., 100% penalty) if it is submitted within one week of the assignment due date so that the student still get input into his/her assignment and get the opportunity to improve the quality of his/her work as the semester progresses. Any assignment submitted beyond one week of the assignment due date will not be accepted. This late policy is to assure a standard of fairness to all students, to facilitate the class moving forward to new material beyond the assignment, and to allow for a reasonable time to grade assignments and post grades while being responsive to students' needs. Only in rare emergency cases (reviewed by the Dean's office or approved by the University accommodation procedures) will any late assignments not be penalized.

Incomplete Grades: Incomplete may be given only if, for reasons beyond the students' control, required work has not been completed by the end of the term. An "IN" must be converted to a letter grade (A-F) by the end of the students' first term in residence subsequent to that in which it was received or, if the student is not in residence, by the end of the twelve consecutive months subsequent to that in which the "IN" was received. Refer to the Student Handbook for additional information about incomplete grades.

X. Evaluation

Student feedback on course content and faculty teaching skills are an important means for improving our work. Please take the time to complete the Course Evaluation Questionnaire at the end of the semester. CEQs are anonymous and instructors will not receive their CEQ results until after final grades have been submitted.

XI. Honor Code and Academic Integrity

SPH students are expected uphold the SPH Honor Code and act with truth and integrity in their academic work. To better promote an understanding of those obligations, all students entering an SPH degree program are required to complete the School's Academic Integrity Tutorial found at: <http://publichealth.uic.edu/current-students/sph-academic-integrity-tutorial>. Information regarding the Honor Code and SPH policy can be found in the Academic Policies and Procedures handbooks.

Academic dishonesty is an offense against the University and course instructors are obligated to report an incident to the Associate Dean for Academic Affairs. Academic dishonesty includes, but is not limited to, cheating or assisting someone else in academic dishonesty, plagiarism, unauthorized possession of class materials (e.g., tests), and unauthorized changing of one's grade. Students found guilty of engaging in an act of academic dishonesty may receive a failing grade for the assignment or course. Such students may also be prohibited from holding an assistantship or leadership position within the School, and/or be barred from competing for School scholarships and other awards. The range of possible disciplinary actions flowing from an act of academic misconduct are found in the UIC Student Disciplinary Policy at: <http://dos.uic.edu/conductforstudents.shtml>

Additional resources: Two excellent sources which define plagiarism and how to avoid it are located at: <http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml> and

<http://owl.english.purdue.edu/owl/resource/589/01/>. Students are also encouraged to consult their instructor on rules for proper citation.

XII. Disability Statement

It is University policy to facilitate a barrier free environment so that students can fully access classes and other University activities. The Disability Resource Center provides assistance and support for students and assists with the provision of reasonable accommodations to students who have a documented disability. In order to receive accommodations, students must register with the UIC Disability Resource Center (<https://drc.uic.edu/>) and provide the course instructor with the Letter of Accommodation developed by the Disability Resource Center at the beginning of the term or as soon as feasible. Instructors will collaborate with you and the Resource Center to implement a plan that will facilitate learning.

XIII. UIC Counseling Center

As a student you may experience a range of issues that can cause barriers to learning or otherwise be problematic or distressing. The UIC Counseling Center provides services to help students deal with a range of issues including coping with the transition to graduate school, anxiety and depression and identity and relationship issues. Counselors can help students increase resilience and develop effective coping and problem-solving skills. More information can be found at: <http://counseling.uic.edu/>.