

ALHS 4320 - PRINCIPLES OF EPIDEMIOLOGY
Fall Semester 2025 – online format

Instructor Name: William Sorensen, Ph.D.

Office Location & Times: PAC Rm #3095- No set hours since this is online. One-on-one communications with the instructor will be through UT Tyler email (please not through Canvas email).

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(note the spelling of the last name)

Required Text: Gordis Epidemiology, by Celentano & Szklo; Elsevier Publishers, 6th edition; ISBN 0323552293, EAN13 9780323552295

(this is an older edition than the latest edition, and therefore it should be relatively cheaper to acquire)

Prerequisites: None

Classroom Location: Online

Course Dates: Starts August 25th, ends December 13th

Deadline to withdraw without penalty: Nov. 3rd

Catalog Description: Study of the distribution and determinants of disease in human populations, morbidity, mortality and life expectancy measures, as well as research design concepts. Along with this subject is a primer in demographics.

Course Goal: The purpose of this course is to provide theoretical and practical information regarding the study of diseases in human populations. Therefore, we will take these ideas and collectively engage each other in learning, communicating, and solving problems regarding the study of diseases in human populations.

Course Objectives: The student will be able to:

1. Apply past contexts of epidemiology to current techniques and envision possible future situations. .
2. Apply and discuss theoretical concepts of epidemiology (disease, risk, causality, data limitations, etc.).
3. Analyze basic issues in demographics (birth, death, migration).
4. Apply graphing and mathematics skills to solve and interpret epidemiologic problems.
5. Apply research knowledge to create research designs in new situations.

Letter grade transcription

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

Grading Plan:

Projects	30% (4 projects in this order: 6, 7, 8, 9 points)
Exams	48% (2 exams @ 24 each)
Zoom discussions	10% (any 2 of 3 @ 5 pts each)
Zoom labs	12% (any 3 of 5 @ 4 pts each)

Format and skills needed:

Since this is an online class, your ability to work independently and retain information from that effort is necessary. Sounds easy, but it is not so easy if you are new to this format.

- Self-discipline and time-management skills become more important in online classes than in traditional classes.
- It is recommended that you set aside 6-8 hours or so, per week, for this class. It would be very wise to look at the calendar document and mark important dates/times into your personal calendar.
- Each student should have his/her own version of the textbook.
- Pay attention to Canvas announcements (you can program to receive announcements to your e-mail account).
- Be consistent in reading the text book; some parts of some chapters seem dull and boring, pace yourself. The instructor uses a cut-and-paste approach to reading the textbook, where we jump around quite a bit; it will require heightened attention just to follow what to read (fortunately it is written out in the schedule).
- The motivation to learn is up to you.

Class Philosophy: This subject demands a comprehensive approach-- reading, writing, discussing, and a little math; you are expected to stretch yourself in each of these branches of learning.

Many questions raised during class may not have a single right or wrong answer. Decisions concerning the study design and interpretation of data may depend upon judgments such as “how big is big?” or “is it worth it?” As will soon be apparent, everyone in the class (including your instructor) is fallible and may not always have a “perfect” answer. But this is not a reflection of their lack of study or expertise, but of the complexity of many epidemiologic issues. IF A TOPIC POINT OR ANSWER SEEMS INCORRECT OR IMPLAUSIBLE TO YOU, YOU ARE ENCOURAGED TO BRING THESE ISSUES UP FOR DISCUSSION; go ahead, be heard.

Particular assignment formats:

Exams: These are given to assess knowledge, skill, memory. The questions are either multiple choice, short essay, true false questions, or problem solving questions (including graph making and interpretation). Students need a calculator for these events. No late exams are allowed.

Projects: Projects are assignments that are more open, elaborate and individualized than exams, and require more time to let critical thinking mature. Students will have several days, if not weeks, to work on projects. Late projects will be penalized 50% if submitted within two days of the due date; after that they will not be accepted at all.

Zoom Participation: This course uses 2 types of Zoom meetings: One is called “Discussion” and is longer than the other (1½ hours) whereby the students drive the discussion based on a supplemental article. The other Zoom is called a “Lab”, which is shorter, and the emphasis is to go over problems; but again the student drives the discussion with questions. Both are invitations for students to be leaders and initiate conversation. In an effort to try to be flexible with times, the days/hours of the Zoom meetings change. Also, students do not have to “attend” all of them; the student is allowed to choose for schedule flexibility. All Zoom sessions will be recorded and posted into Canvas.

Communications: In regards to questions about the “mechanics” of the class, please communicate through the Canvas discussion folder called “Administrative issues”. This allows both questions and responses to questions to be seen by everyone. More generally, please do not send the instructor an e-mail message or a private Canvas-“inbox” message about the mechanics of the course. If you must communicate with the instructor privately, send him an email through regular university email.

AI statement (starting in the fall of 2024, UT Tyler expects every course syllabus to include an AI statement): AI may be used in this course if it is acknowledged as a reference. Caution is needed however: Dr. Sorensen believes that AI is not needed, and in fact may gunk up some of your assignments. He thinks that you should be able to communicate on your own. His experience with AI is that it is a notoriously poor writer; it may write with no spelling errors, but the “thrust” of communication may be missed with AI)

UT Tyler POLICIES

See Canvas module “Getting started” for University policies.