ALHS 4320 - PRINCIPLES OF EPIDEMIOLOGY Spring Semester 2025

Instructor Name: William Sorensen, Ph.D.

Office Location & Times: PAC Rm #3095- schedule a time beforehand with the

instructor for a meeting (send the instructor an e-mail to set up a time).

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Teaching Assistant: Narisha Habib

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Required Text: Gordis Epidemiology, by Celentano & Szklo; Elsevier Publishers, 6th

edition; ISBN 0323552293, EAN13 9780323552295

Prerequisites: None

Classroom Location: HPC room 2255

Course Time and Dates: Jan 13 – April 29 (or so)

Traditional class: 12:30am-1:50pm, Tuesday, Thursday

Date to withdraw without penalty: March 31st

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 44% (2 exams @ 22 each)
Group participation 8% (4 assignments @ 2 each)
Class handout discussion 8% (4 discussions @ 2 each)

Participation 10% (attendance, punctuality, being vocal)

Course Format: This is mostly a face-to-face, in-person course (with some online [Canvas] activity). Classes will consist of a mixture of lecture, discussions and problem solving. Some sessions may include guest lecturers. Also, students must be prepared to discuss the assigned readings. That is- READ beforehand! Necessary skills: Writing and speaking skills, organization of information, being on time, being prepared.

Canvas will be used mostly as a document storage for important documents (notes from class lessons like powerpoint slides will not be stored in Canvas).

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 discussion 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 questions. 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 Formats:

<u>Exams</u>: 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. If an exam is missed, the student needs 1. Show a valid excuse on paper, 2. arrange with the instructor to take it during none-class time within 4 days.

<u>Projects</u>: 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 the first week of being late, after one week they will not be accepted at all.

Class and Group Participation: Class notes are up to the student (information from Powerpoint presentations should be written down as notes). If the student misses a day and wishes to go over the material, he/she must find a classmate to get the notes. Students will be called upon during class and asked to provide insights into a particular question or problem. Students' attention and readiness in responding reflects on one's grade- this is "participation". And it is not just about waiting for the instructor to ask, it is

also an invitation for students to be leaders and initiate conversation. Also, attendance and lateness is a form of participation (points will be deducted for excessive absences or latenesses).

Al statement (starting in the fall of 2024, UT Tyler expects every course syllabus to include an Al statement): Al is not permitted in this course at all. The reasons for this decision from Dr. Sorensen emanate from the fact that you should be able to communicate on your own. (Al is a notoriously poor writer for short, punctuated assignments.)

UT Tyler POLICIES

See Canvas module for University policies.