

ALHS 4320 - PRINCIPLES OF EPIDEMIOLOGY
Spring Semester 2024

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).

Phone: (903) 566-7032

E-mail: wsorensen@uttyler.edu

Fax: 903-566-7065

Teaching Assistant:
(TA)

Narisha Habib

E-mail: nhabib@patriots.uttyler.edu

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

Prerequisites: None

Classroom Location: HPC room 3055

Course Time and Dates: Jan 16 – May 4 (or so)

Traditional class: 11:15am-12:10pm, Monday, Wednesday, Friday

Date to withdraw without penalty: March 25th

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	34% (4 projects in this order: 7, 8, 9, 10 points)
Exam	35% (2 parts)
Extra Handout discussion	16% (4 discussions @ 4 pts each)
Regular In-class participation	15% (attendance, punctuality, being vocal)

Course Format: This is a face-to-face, in-person course (with some online days (see schedule)). Classes will consist of a mixture of lecture, class discussions and problem solving. Some sessions may include guest lecturers. Also, students must be prepared to discuss the assigned readings (including handouts). That is- READ beforehand! Many of the Friday sessions are labeled “online”- these may be real-time meetings through Zoom, or simply assignments. A gauge of your ability: Writing and speaking skills, organization of information, attending and 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); it will also serve to instruct students during online “classes”; also part of the exam may be delivered through 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:

Exam: This is 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 the exam. An unexcused, missed exam has no chance for make-up (plan ahead).

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 the first week of being late, after one week they will not be accepted at all.

Class 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).

Pandemic: This is our 5th spring since the pandemic began, with considerable infection and death still occurring. We must continue to consider prevention behaviors when there is a scheduled meeting, that is:

- Consider getting vaccinated;
- If you feel sick, consider staying home;
- Wear a mask;
- Socially distance from each other.

As a society, we have asserted that individuals can come to the right decisions by themselves. Still, none of the above steps may convince you of "sure prevention". At the very least, we have interesting issues to discuss.

UT Tyler POLICIES

See Canvas module for University policies.