

ALHS 4320 - PRINCIPLES OF EPIDEMIOLOGY

Spring Semester 2026

Instructor Name: Ifeolu David, MD, MPH, Ph.D.

Office Location & Times: By appointment

Phone: (903) 566-7031 **E-mail:** idavid@uttyler.edu

Required Text: Gordis Epidemiology, by Celentano & Szklo; Elsevier Publishers, 7th edition; ISBN: 978-0-323-87775-6

Prerequisites: None

Classroom Location: HPC2255

Course Dates: Starts January 12, ends May 2

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

Course Evaluation and Grading

Student performance in this course will be evaluated using a combination of assessments designed to measure knowledge acquisition, application of epidemiologic principles, critical thinking, communication skills, and active engagement with course material.

Grades will be determined using the following components:

- **Attendance and Participation – 10%**

Students are expected to attend class regularly and actively participate in course activities, discussions, and in-class exercises. Attendance and meaningful participation contribute to the learning environment and are essential for success in this course.

- **Weekly Quizzes (10 total) – 50%**

Quizzes are designed to assess understanding of key epidemiologic concepts, methods, and terminology covered in readings and lectures. Each quiz contributes equally to the overall quiz grade.

- **Discussion Activities (10 total) – 20%**

Structured discussion activities require students to analyze epidemiologic problems, interpret data, and apply concepts to real-world public health scenarios. Active, thoughtful participation is required to earn full credit.

- **Class Presentation (1) – 20%**

Students will complete one class presentation focused on an epidemiologic topic or application. The presentation will assess the ability to synthesize information, apply epidemiologic reasoning, and communicate findings clearly and professionally.

Total: 100%

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.

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.

UT Tyler POLICIES

See Canvas module “Getting started” for University policies.