

**ALHS 5347 - EPIDEMIOLOGY**  
**Spring Semester 2024**  
**Hybrid (both face-to-face & online sessions)**

**Course Dates:** January 16 to May 4.

**Instructor Name and Title:** William Sorensen, Ph.D., Professor

**Office Location & Times:** PAC UT Tyler Rm #3095, regular office hours but schedule a time beforehand (send instructor an e-mail to set up a time).

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**Required Text:** Webb, P., Bain, C., Page, A. Essential Epidemiology. Cambridge University Press. Cambridge UK, 4<sup>th</sup> edition. ISBN 978-1-108-76680-7

**Format:** Consider this a hybrid course where half of the semester the class meets in a traditional setting (classroom) and the other half is conducted online. Canvas is the platform for this course (mainly for document storage, but also exam delivery. Much communication and posting assignments are done through Canvas or email (please have your Canvas notifications set so that you receive Canvas announcements automatically through your email; Make a constant schedule whereby you log you're your Patriots account and Canvas several times each week).

**Place/Time:** Room 3010 in HPC, Mondays from 5:00pm to 7:45pm (unless substituted, see schedule). For several weeks, the class will rely on online Zoom meetings (these Zoom meetings are mandatory).

**Catalog Description:** Study of the application of epidemiologic findings to the planning of health services, with emphasis on constructing a rational basis for setting priorities and allocating health resources.

**Course Goal:** The purpose of this course is to facilitate self-directed learning of the concepts and techniques of epidemiologic methods including the acquisition, analysis, and interpretation of data about diseases in human populations.

**Course Objectives:** To accomplish the purpose of the course the student will be able to:

1. Describe the types of study designs used in epidemiology, and their advantages and disadvantages.
2. Explain the differences between outbreak or surveillance, descriptive or analytic approaches to epidemiology.
3. Evaluate associations using epidemiologic data.
4. Calculate measures of disease occurrence including: incidence, prevalence, morbidity, mortality, relative risk, odds ratio, and describe their inter-relationships and limitations.
5. Critically interpret epidemiologic literature considering the roles of chance, bias, confounding, reliability, and validity, in order to judge the usefulness of a study.

6. Explore biological explanations or social determinants as causes to disease.
7. Describe how epidemiologic methods and data can be useful in planning, implementing, and evaluating public health policies or public education efforts.

### Letter grade transcription

91-100 A                      81- 90 B                      71- 80 C

### Grading Plan:

<i>Projects</i>	24%	-14% Database; 10% Epi research design paper
<i>Participation</i>	29%	- 2% AIDS history, - 5% Outbreaks vs. Surveillance articles- video, -10% Problems including Ababo/Oswego sets, - 6% MERS, coronavirus, - 6% Epi as a science/What is it? (a. research study, b. essays).
<i>Exams</i>	47%	-first at 25%; second at 22%.

**Learning Philosophy:** Knowledge is constructed, not necessarily “right” or “wrong”. Answers may be “correct” but interpreted differently by different people. Then there is an issue of expressing what you think is important (or “reporting”). These complications seem to be challenges particularly in a subject like Epidemiology. Decisions concerning a design or protocol, and interpretation of data, may depend upon critical judgments, much like weighing pros and cons of a situation. If a topic point or answer seems incorrect or implausible to you, or if you merely disagree, you are encouraged to bring these issues up for discussion.

**No Make-ups:** On the graduate level, the instructor expects no late projects (exceptions create stress and chaos).

### UT Tyler POLICIES-

See University policies and information in the Canvas module “Getting Started”