

Semester: Fall 2021
Instructor: Christian R. Alvarado
Office: H246
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Office Hours: Drop-in or by appointment (please email)

Format: Fully online may require more than one face-to-face session

Course Description: This core course in epidemiology is intended to introduce students to the discipline of epidemiology and its application to public health research and practice. It provides a conceptual foundation for further study of epidemiology; especially study design, quantitative concepts and methods, analysis, and interpretation.

Prerequisite: N/A

Co-requisite: N/A

Course Objectives:

By the end of the module students should be able to:

- Demonstrate understanding of the fundamental concepts and methods of the epidemiologic approach to the study of health states, including study design and analytic methods, and their application to research and public health settings.
- Demonstrate knowledge of and ability to apply both descriptive and analytic epidemiologic methods and the statistical procedures commonly used.
- Explain the relative strengths and limitations of epidemiological strategies for studying associations between risk factors or exposures in populations and rates of disease occurrence or death.
- Critically interpret and evaluate findings from various types of studies, noting strengths, weaknesses and making recommendations for improvement.
- Demonstrate a working knowledge of key current issues and problems in epidemiology and biostatistics.
- Demonstrate the fundamental knowledge required for the subsequent study of advanced epidemiologic concepts and competencies taught in intermediate and advanced epidemiology courses.
- Specific skills and methods covered include:
 - Concepts of disease variation in time, person and place.
 - Measures of morbidity in populations including incidence and prevalence; measures of mortality and standardization procedures.
 - Measures of association and impact including relative risk, odds ratio and attributable risk concepts.
 - Study designs (e.g., cohort, case-control, cross-sectional, ecological and intervention studies).
 - Sources of random and non-random error (e.g. bias, confounding, measures of reliability and validity).
 - Methods to evaluate confounding and effect-modification.
 - Basic methods for evaluating effectiveness of public health intervention programs.
 - Criteria for causal inference and evaluation of scientific evidence.

Course Assessments:

Discussion Board: Every student will be interacting using the discussion board. Each week a new discussion board topic will be made available. In the discussion board, you will have opportunities to post response to this week's discussion question. You will also be posting a comment to someone else's response. You need to post a response and comment on someone's post to receive full credit for Participation for that week.

Homework: 6 homework assignments will be given to students in weeks 1, 2, 3, 5, 6, and 7. Each homework assignment will be worth 5% of your grade.

Midterm: The midterm consists of multiple choice, matching, and short answer questions and will test students on material from weeks 1-7.

Final: The final exam consists of multiple choice, matching, and short answer questions and will mainly test students on all material covered in this course (weeks 9-13).

Overall Grading Structure:

- 10% - Participation (Discussion Board)
- 30% - Homework
- 30% - Midterm exam
- 30% - Final exam

Textbook:

Celentano, David D., M Szklo, and Leon Gordis. Gordis Epidemiology. 6th edition. Philadelphia, PA: Elsevier, 2019.

Course Schedule:

Week	Dates	Readings	Assignments and Assessments
Week 1	08/26-09/01	Chapter 1	Discussion Board 1
Week 2	09/02-09/08	Chapter 2	Homework 1 & Discussion Board 2
Week 3	09/09-09/15	Chapters 3 & 4	Discussion Board 3
Week 4	09/16-09/22	Chapters 5 & 6	Homework 2 & Discussion Board 4
Week 5	09/23-09/29	Chapter 7	Discussion Board 5
Week 6	09/30-10/06	Chapter 8	Homework 3 & Discussion Board 6

Week 7	10/07-10/13	Chapter 9	Discussion Board 7
Week 8	10/14-10/20	No Required Readings	Midterm Exam (10/14)
Week 9	10/21-10/27	Chapters 10 & 11	Homework 4 & Discussion Board 8
Week 10	10/28-11/03	Chapters 12 & 13	Discussion Board 9
Week 11	11/04-11/10	Chapters 14 & 15	Homework 5 & Discussion Board 10
Week 12	11/11-11/17	Chapters 17 & 18	Discussion Board 11
Week 13	11/18-11/24	Chapters 19 & 20	Homework 6 & Discussion Board 12
Week 14	11/25-12/01	No Required Readings	Thanksgiving Holiday
Week 15	12/02-12/08	No Required Readings	Final Exam (12/02)

Attendance/ Participation: Regular and punctual attendance is expected. You should arrive on time and participate in all class activities. If a student misses a class or lab, the student is responsible for obtaining any information distributed during those times.

Email Correspondence: All email correspondence will be through the UTHSCT email system. Personal email accounts will not be used for any class-related matters (ex. assignments, absence notifications, grades, etc.). All students are responsible for checking their UTHSCT email account regularly. Any questions regarding UTHSCT individual student email accounts should be addressed to the Help Desk at 903.877.7700.

Late Assignments/ Assessments: Students need to contact the Professor if they anticipate submitting an assignment late. Any late assignments will be subject to a 5% deduction each day for the first week (35% if submitted a week late) and an additional 10% if two weeks late. Assignments turned in over 2 weeks late (14 days) will receive a grade of **0** for the assignment. Reasonable accommodations will be made under special circumstances. If you need special accommodations, you must contact the Professor **BEFORE** the due date for the assignment.

Academic Honesty: Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

Cheating

Dishonesty of any kind involving examinations, assignments, alteration of records, wrongful possession of examinations, and unpermitted submission of duplicate papers for multiple classes or unauthorized use of keys to examinations is considered cheating. Cheating includes but is not limited to:

- Using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class.
- Falsifying or inventing any information, including citations, on an assigned exercise.
- Helping or attempting to help another in an act of cheating or plagiarism.

Plagiarism

Plagiarism is presenting the words or ideas of another person as if they were your own. Materials, even ideas, borrowed from others necessitate full and complete acknowledgment of the original authors. Offering the work of another as one's own is plagiarism and is unacceptable in the academic community. A lack of adequate recognition constitutes plagiarism, whether it utilizes a few sentences, whole paragraphs, articles, books, audio-visual materials, or even the writing of a fellow student. In addition, the presentation of material gathered, assembled, or formatted by others as one's own is also plagiarism. Because the university takes such misconduct very seriously, the student is urged to carefully read university policies on Misconduct in Research and Other Scholarly Activity 05.00. Examples of plagiarism are:

- Submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another.
- Submitting a work that has been purchased or otherwise obtained from an Internet source or another source.
- Incorporating the words or ideas of an author into one's paper without giving the author due credit.

Adding/Dropping:

The official deadline for adding and dropping courses is as published in the academic calendar and Graduate Bulletin (typically the day before Census Day). However, students are strongly encouraged to meet with their graduate advisor or the Program Coordinator prior to adding/dropping courses. Movement into and out of classes after the 4th class day requires approval of the Program Director. Students can drop until mid-semester without a WP or WF. Drops after midsemester require approval of the Dean. Each student is responsible for their own enrollment status with the university. The link to the academic calendar 2020-2021 can be found using the following link: <https://www.uthct.edu/wp-content/uploads/20-uthsc-0179a-academic-catalog-pdfs-calendar-2021-2022.pdf>

Disability Accommodations:

UTHSCT abides by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act, which mandate reasonable accommodations be provided for students with documented disabilities. If you have a disability and may require some type of instructional and/or examination accommodations,



please contact me early in the semester so that I can provide or facilitate provision of accommodations you may need. If you have not already done so, you will need to register with the Student Services Office (located on the UT Tyler Campus). You may call 903-566-7079 for more information.

Student Absence Due to Religious Observance:

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second-class meeting of the semester.

Emergency Exits and Evacuation:

Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit or action. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by the Health Center Police or Fire Department.

Technical Support:

If you experience technical problems or have a technical question about this course, you can obtain assistance by emailing me at Christian.Alvarado@uthct.edu or calling the Help Desk at [903.877.7700](tel:903.877.7700).