University of North Texas
Department of Rehabilitation and Health Services

Course Syllabus
Epidemiological Concepts and Methods for Public Health: PUBH 2010
FALL 2020

Instructor Name: Chisom Odoh, PhD, MPH
Instructor Email: chisom.odoh@unt.edu
Instructor Phone: 859-951-6266
Office Hours: By appointment

Course Description

This course explores fundamental epidemiologic concepts and methods used to examine the distribution and determinants of health and diseases in populations. Students will learn and understand the basic principles of epidemiology and how health and diseases are influenced by biological, behavioral, socioeconomic, cultural, and environmental factors. Course topics covered include the measures of disease burden such as mortality and morbidity, study designs, measures of associations such as odds and risk ratios, as well as statistical concepts as applied to epidemiology and public health.

Learning Objectives

- Understand the importance of epidemiology as it relates to public health
- Understand the patterns of disease and injury in human populations
- Demonstrate a basic understanding of and study design
- Combine appropriate epidemiological concepts and statistical methods
- Calculate epidemiological measures
- Describe epidemiologic study designs
- Identify and describe the impact of bias and confounding in epidemiologic studies
- Apply key ethical issues to conduct epidemiological and other scientific studies
- Identify key sources of data
- Critically evaluate epidemiologic studies

Course Pre-requisites: NONE

Course Materials

Required Text:


The instructor reserves the right to amend this syllabus, and all other course materials as deemed necessary.
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Other available materials for learning
1) WHO epidemiology textbook: Basic Epidemiology, 2nd Ed. (Free; posted on Canvas)
2) OpenEpi (for epidemiologic calculations)
3) Other readings will be assigned as indicated on homework assignments or class slides
4) See canvas for course technology requirements

Technology Competencies/Skills: Students enrolled in the course must be prepared to perform the basic tasks below:
1. Send and receive email
2. Attach files to an email message
3. Use of basic Microsoft Office programs
4. Save files to an external device (e.g. flash drive, CD, or DVD)
5. Post and reply to discussion forums

Student Support Services

Also known at the University of North Texas campus as SSS. Please refer to the website (https://trio.unt.edu/sss) for detailed list of services. The University of North Texas provides student technical support with the use of Canvas and supported resources. The student help desk may be reached at: Email: helpdesk@unt.edu

Teaching Philosophy

My teaching philosophy is centered on facilitating and enhancing student learning. Students are responsible for their own learning. Instructors can only provide opportunities to learn. To enhance student learning, active learning strategies will be used in every class, and formative feedback will also be used to tailor the course material and delivery for the class.

Student Evaluation

1. Homework (5% each for a total of 30%): Six homework sets will be assigned periodically throughout the semester to assess individual assessment of course material. Homework questions may consist but will not be limited to calculations, multiple choice, short answer questions, and journal reviews. These are due on Tuesdays at 11:59pm.

2. Discussions (5% each for a total of 30%): Six discussion questions will be posted throughout the semester (see schedule). You are required to first POST in your comments, read all of the posts of your classmates, and reply to at least two of the posts that you read. Discussions are due every Tuesday at 11:59pm. Replies are due two days (i.e. Thursdays at 11:59pm) after the discussion post.

3. Exams (10% for exam #1, and 15% for exams #2 and #3 for a total of 40%): There will be three exams given during the semester on the dates specified in the schedule. Lock-down browser may be used for all exams. There will be no make-ups without prior consent or proper documentation. The instructor reserves the right to change the specific exam content (i.e., different questions on make-up exams that assess the same knowledge) and format.
Grading scale

Your final grade will be based on the following scale:
A: 90.0 - 100.0
B: 80.0 - 89.9
C: 70.0 - 79.9
D: 60.0 - 69.9
F: <60.0

NOTE: Please contact me if you are unable to attend class or complete an assignment because you are ill, or unable to attend class or complete an assignment due to a related issue regarding COVID-19. It is important that you communicate with me prior to being absent or missing an assignment as to what may be preventing you from coming to class or completing course requirements so I may make a decision about accommodating your request to be excused from class or an assignment.

Time Requirements/Commitment

In order to be a successful remote/online student, you should plan to log in to the course at least twice per week (especially the day a new lecture is scheduled), possess excellent time management and organization skills, and avoid procrastination (risk of technology failure increases as the deadline for an assignment approaches).

Technology/internet issue is not an excuse for missed assignment.

Course Policies – to assist learning

Students are responsible for knowing and adhering to all university and college dates and deadlines. Such dates and deadlines include those for enrollment (registration), adding and dropping of courses, academic holidays, payment and refunds, and applying for graduation. In a case of emergency, it is the student’s responsibility to keep posted on all official University alerts or closures.

Student Responsibilities

• Take care of yourself so that you can be present (physically and mentally) in virtual classes
• Read the required materials prior to each class to prepare for class work and discussions
• Check email and Canvas regularly for homework assignments and other course-related communications, and updates to the syllabus schedule
• Complete assignments by the due dates that are communicated in class and posted on Canvas
• Students are responsible for and may be evaluated on anything in the assigned reading, lectures and discussions

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How I’m going to help: As the instructor in this course, I am responsible for providing course materials that will assist and enhance your achievement of the stated course goals, including:

- Providing timely and helpful feedback within the stated guidelines
- Treating you and your time with respect
- Will try to respond to questions via email within 24 hours (M-F)
- Assignment grades will be posted within 7 days after the item’s submission due date
- Final grades will be posted by the due date listed in the academic calendar

Communication with the Instructor

Personalized communication between instructor and student is important in enhancing the learning experience. The best and primary means to contact me will be via e-mail: chisom.odoh@unt.edu or via the Canvas inbox email.

Late Submissions

Late assignments are accepted with a penalty of 5% off the points for the assignment for each day or part thereof late, up to a maximum of 4 days late. After 4 days, the assignment will no longer be accepted and the student will receive a score of 0. (This is not applicable to exams and quizzes. Appropriate documentation must be provided for missed exams and quizzes). The documentation must also cover the timeframe for the activity.

Grades Incomplete

In general, students will not be allowed to take an Incomplete in the course. If you find you have a legitimate reason for needing to take an Incomplete (refer to UNT policy on requesting incompletes), please discuss with me as soon as possible.

Academic Integrity

All works submitted for credit must be original works created by the scholar uniquely for the class. It is considered inappropriate and unethical, particularly at the graduate level, to make duplicate submissions of a single work for credit in multiple classes, unless specifically requested by the instructor. You are encouraged to become familiar with the university’s Student Standards of Academic Integrity policy:

https://policy.unt.edu/sites/default/files/06.003.AcadIntegrity.Final_.pdf

NOTE: Students will receive no credit for the assignment or assessment on which the student engaged in academic misconduct

Syllabus Revision

The course instructor reserves the right to modify any portion of this syllabus. Students are expected to be aware of any presented changes. A best effort will be made to provide an opportunity for students to comment on a proposed change before the change takes place.

UNT Policies
**Academic Honesty Policy**

You are encouraged to become familiar with the University Student Code of Conduct maintained by the Dean of Students in the Office of Student Affairs: [Student Conduct Operations | Dean of Students](http://studentconduct.unt.edu/).

**ADA Policy**

As per the Office of Disability Accommodation, a syllabus for a course SHALL include the following statement: *The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Office of Disability Accommodation website at [http://disability.unt.edu/](http://disability.unt.edu/). You may also contact them by phone at 940.565.4323.*

**Add/Drop Policy**

The department adheres to add/drop schedule established and published by the UNT office of the registrar. See the registration calendar for information [https://registrar.unt.edu/registration/fall-registration-guide](https://registrar.unt.edu/registration/fall-registration-guide).

*More policies are available on canvas*

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<table>
<thead>
<tr>
<th>Week</th>
<th>Readings</th>
<th>Virtual Lectures</th>
<th>Activity due dates and corresponding lecture dates</th>
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</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Syllabus; Chapter 1</td>
<td>Syllabus and expectations; History and scope of epidemiology</td>
<td>08/25</td>
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<tr>
<td>Week 2</td>
<td>Chapters 3 and 4</td>
<td>Measures of prevalence and incidence</td>
<td>09/01</td>
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<td>Week 3</td>
<td>Chapter 5</td>
<td>Epidemiologic data sources; Descriptive epidemiology: Person, place, time</td>
<td>09/08</td>
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<td>Discussion 1</td>
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<td>Homework 1</td>
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<td>Week 4</td>
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<td><strong>Exam #1</strong></td>
<td><strong>09/15 – 09/17</strong></td>
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<td>Week 5</td>
<td>Chapter 6</td>
<td>Association and causality</td>
<td>09/22</td>
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<td>Discussion 2</td>
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<td>Homework 2</td>
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<td>Week 6</td>
<td>Chapter 7</td>
<td>Epidemiologic study designs</td>
<td>09/29</td>
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<td>Discussion 3</td>
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<td>Homework 3</td>
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<td>Week 7</td>
<td>Chapter 7; WHO textbook, pp. 67-73</td>
<td>Epidemiologic study designs cont.</td>
<td>10/06</td>
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<td>Week 8</td>
<td>Chapter 2; WHO textbook, pp. 67-73</td>
<td>Bias and error/ Review of statistical concepts</td>
<td>10/13</td>
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<td>Discussion 4</td>
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<td>Homework 4</td>
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<td>Week 9</td>
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<td><strong>Exam #2</strong></td>
<td><strong>10/20 – 10/22</strong></td>
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<td>Week 10</td>
<td>Chapter 9; WHO textbook, pp. 99-114</td>
<td>Epidemiology and screening for diseases</td>
<td>10/27</td>
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<td>Week 11</td>
<td>Chapter 8</td>
<td>Epidemiology and health Policy</td>
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<td>Homework 5</td>
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<tr>
<th>Week 12</th>
<th>Chapter 10; WHO textbook, pp. 119-127</th>
<th>Infectious disease and outbreak investigations</th>
<th>11/10</th>
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<td>Week 13</td>
<td>Chapter 10</td>
<td>Infectious disease and outbreak investigations contd.</td>
<td>11/17</td>
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<td>Week 14</td>
<td>Chapter 11</td>
<td>Social and behavioral epidemiology</td>
<td>11/24</td>
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<td>Thanksgiving break November 26 – 27</td>
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<td>Week 15</td>
<td>Chapter 12</td>
<td>Special epidemiologic applications</td>
<td>12/01</td>
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<td>Week 16</td>
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<td>Exam #3</td>
<td>12-07 – 12-09</td>
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