


| | |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>University of North Texas</p> <p>Department of Rehabilitation and Health Services</p> <p>Course Syllabus</p> <p>Public Health Informatics: PUBH 4070</p> <p>Spring 2025</p> |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Instructor Name: Chisom Iwundu, PhD, MPH

Instructor Email: chisom.iwundu@unt.edu

Instructor Phone: 940-369-5356

Office Hours: By appointment

Course Description: This online course introduces students to the principles and concepts of health informatics. Students will become familiar with the ways information technology and communication systems can be used to improve population health by fostering better collaboration between healthcare providers and public health professionals. We will examine information systems used to gather and organize different types of health data. Students will learn the techniques and tools used to generate knowledge from health information. We will discuss the ethical issues that arise in the collection, organization, analysis, interpretation, and use of health information.

Learning Objectives

- Describe how public health information infrastructure is used to collect, process, maintain, and disseminate data
- Understand data usage, structure, and organization of health systems
- Outline a holistic framework for the implementation of electronic health records
- Analyze the usage of complete lifetime patient data and data accessibility
- Use technology and analytical tools to determine how critical health issues might be addressed in cost-effective, efficient, and sustainable ways
- Identify how technology can be used to improve population health
- Apply legal and ethical principles to the use of information technology and resources in public health settings

Course Pre-requisites: None

Required textbook: Joshi, A., Thorpe, L., & Waldron, L. (2019). Population Health Informatics: Driving Evidence-based solutions into practice. Jones & Bartlett Learning. ISBN: 9781284103960

Any additional required readings will be posted in Canvas each week and will be available electronically.

Student Evaluation: Performance in this course will be assessed in three ways including weekly reviews, a student project, and a final exam. See below for the points breakdown, details about the assignments, and late work policies. Additional information for each assignment will be posted on Canvas.

| Assignment | Points Possible | Percentage of Final Grade |
|------------------------------|---------------------------------------|---------------------------|
| Weekly Reviews | 15@30 points each 450 points total | 45% |
| Student Project | 300 points | 30% |
| Final Exam | 250 points | 25% |
| Total Points Possible | 1000 | 100% |

Weekly Reviews

Students will have weekly reviews/tasks to complete. The reviews will cover information presented the same week. The weekly reviews can be in the form of discussion, quizzes, and essay questions.

Student Project

Students will complete a project due as outlined in the course schedule below. More details will be posted in Canvas.

Final Exam

There will be one exam at the end of the semester. All content from the course will be included in the exam. Many questions will come from questions asked in the weekly reviews.

See Canvas or the Course Calendar on page 9 for due dates

Late Assignments: Any work submitted after the deadline will lose 10 points. All assignments are set to close in Canvas 24 hours after the deadline. Once a quiz, assignment, or exam is closed, you may not submit work. Please contact me if you have any issues meeting a deadline.

Grading Scale: All of the components of a student's grade will have a point value system, based on A being equivalent to a 4.0. Points will be given based on a student's performance, such as the quality of information posted in the weekly discussions, writing skills, research skills, and

ability to illustrate comprehension of all course topics. Each assignment will include a rubric for specific details on grading criteria.

Total Points Possible for Semester/Grading Scale = 1,000

| |
|----------------|
| 1000 – 900 = A |
| 899 – 800 = B |
| 799 – 700 = C |
| 699 – 600 = D |
| 599 – 500 = F |

Course Expectations:

As the instructor in this course, I am responsible for:

1. Providing course materials that will assist and enhance your achievement of the stated course goals.
2. Providing timely and helpful feedback within the stated guidelines.
3. Assisting in maintaining a positive learning environment for everyone.

As a student in this course, you are responsible for:

1. Reading and completing all requirements of the course in a timely manner.
2. Working to remain attentive and engaged in the course and interact with your fellow students.
3. Assisting in maintaining a positive learning environment for everyone.

Online Course Technology Requirements & Skills

Technology Requirements: Please familiarize yourself with the technical requirements to complete this online course:

Canvas

Please familiarize yourself with the technical requirements to complete this course:

1. [Hardware and Software requirements for Canvas](#)
2. [Canvas Browser Check](#)

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. All activities and services provided by SSS are intended to help students progress through their degree to an *on-time graduation*. Please refer to the [student support services website](https://trio.unt.edu/sss) (<https://trio.unt.edu/sss>) for detailed list of services. More student support information is also available on Canvas.

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

Grades Incomplete: In general, students will not be allowed to take an Incomplete grade on 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, 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): (https://policy.unt.edu/sites/default/files/06.003.AcadIntegrity.Final_.pdf)

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

AI Statement: Intellectual integrity is essential in both our academic community and this course. All submitted work must be your own and adhere to the University's Guidelines on Academic Integrity. The use of ChatGPT or any other generative AI applications is strictly prohibited in this class. Any assignment found to involve AI reporting more than >30% will receive a score of zero. AI is not a replacement for your own thinking and research.

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. 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](#).

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/spring-registration-guide.html) <https://registrar.unt.edu/registration/spring-registration-guide.html>.

Emergency Notification & Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.

Access to Information - Eagle Connect

Students' access point for business and academic services at UNT is located at my.unt.edu. All official communication from the University will be delivered to a student's Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail [Eagle Connect](https://it.unt.edu/eagleconnect) (<https://it.unt.edu/eagleconnect>).

Acceptable Student Behavior

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classrooms, labs, discussion groups, field trips, etc. Visit UNT's [Code of Student Conduct](https://deanofstudents.unt.edu/conduct) (<https://deanofstudents.unt.edu/conduct>) to learn more.

Sexual Assault Prevention

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal laws (Title IX and the Violence Against Women Act) and UNT policies prohibit discrimination on the basis of sex, and therefore prohibit sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking, and/or sexual assault, there are campus resources available to provide support and assistance. UNT's Survivor Advocates can assist a student who has been impacted by violence by filing protective orders, completing crime victim's compensation applications, contacting professors for absences related to an assault, working with housing to facilitate a room change where appropriate, and connecting students to other resources available both on and off-campus. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-565- 2648. Additionally, alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at oeo@unt.edu or at (940) 565 2759.

Copyright Notice

Some or all of the materials on the course website may be protected by copyright. Federal copyright law prohibits the reproduction, distribution, public performance, or public display of copyrighted materials without the express and written permission of the copyright owner, unless fair use or another exemption under copyright law applies. Additional copyright information may be located on the UNT website.

Important Notice for F-1 Students taking Distance Education Courses

Federal Regulation

To read detailed Immigration and Customs Enforcement regulations for F-1 students taking online courses, please go to the [Electronic Code of Federal Regulations website](http://www.ecfr.gov/) (<http://www.ecfr.gov/>). The specific portion concerning distance education courses is located at Title 8 CFR 214.2 Paragraph (f)(6)(i)(G).

The paragraph reads:

(G) For F-1 students enrolled in classes for credit or classroom hours, no more than the equivalent of one class or three credits per session, term, semester, trimester, or quarter may be counted toward the full course of study requirement if the class is taken online or through distance education and does not require the student's physical attendance for classes, examination or other purposes integral to the completion of the class. An online or distance education course is a course that is offered principally through the use of television, audio, or computer transmission including open broadcast, closed circuit, cable, microwave, or satellite, audio conferencing, or computer conferencing. If the F-1 student's course of study is in a language study program, no online or distance education classes may be considered to count toward a student's full course of study requirement.

University of North Texas Compliance

To comply with immigration regulations, an F-1 visa holder within the United States may need to engage in an on-campus experiential component for this course. This component (which must be approved in advance by the instructor) can include activities such as taking an on-campus exam, participating in an on-campus lecture or lab activity, or other on-campus experience integral to the completion of this course.

If such an on-campus activity is required, it is the student's responsibility to do the following:

- (1) Submit a written request to the instructor for an on-campus experiential component within one week of the start of the course.
- (2) Ensure that the activity on campus takes place and the instructor documents it in writing with a notice sent to the International Student and Scholar Services Office. ISSS has a form available that you may use for this purpose.

Because the decision may have serious immigration consequences, if an F-1 student is unsure about his or her need to participate in an on-campus experiential component for this course, they should contact the UNT International Student and Scholar Services Office (telephone 940-565-2195 or email internationaladvising@unt.edu) to get clarification before the one-week deadline.

Rules of Engagement

Rules of engagement refer to the way students are expected to interact with each other and with their instructors. Here are some general guidelines:

- While the freedom to express yourself is a fundamental human right, any communication that utilizes cruel and derogatory language on the basis of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law will not be tolerated.
- Treat your instructor and classmates with respect in any communication online or face-to-face, even when their opinion differs from your own.
- Ask for and use the correct name and pronouns for your instructor and classmates.
- Speak from personal experiences. Use “I” statements to share thoughts and feelings. Try not to speak on behalf of groups or other individuals’ experiences.
- Use your critical thinking skills to challenge other people’s ideas, instead of attacking individuals.
- Avoid using all caps while communicating digitally. This may be interpreted as “YELLING!”
- Be cautious when using humor or sarcasm in emails or discussion posts as tone can be difficult to interpret digitally.
- Avoid using “text-talk” unless explicitly permitted by your instructor.
- Proofread and fact-check your sources.
- Keep in mind that online posts can be permanent, so think first before you type. See these [Engagement Guidelines](https://clear.unt.edu/online-communication-tips) (https://clear.unt.edu/online-communication-tips) for more information.

For all other UNT Policies, please go to the Student Handbook.

Student Support Services

[Registrar](https://registrar.unt.edu/registration) (https://registrar.unt.edu/registration)

[Financial Aid](https://financialaid.unt.edu/) (https://financialaid.unt.edu/)

[Student Legal Services](https://studentaffairs.unt.edu/student-legal-services) (https://studentaffairs.unt.edu/student-legal-services)

[Career Center](https://studentaffairs.unt.edu/career-center) (https://studentaffairs.unt.edu/career-center)

[Multicultural Center](https://edo.unt.edu/multicultural-center) (https://edo.unt.edu/multicultural-center)

[UNT Care Team](https://studentaffairs.unt.edu/care) (https://studentaffairs.unt.edu/care)

[Counseling and Testing Services](https://studentaffairs.unt.edu/counseling-and-testing-services) (https://studentaffairs.unt.edu/counseling-and-testing-services)

[Student Affairs Care Team](https://studentaffairs.unt.edu/care) (https://studentaffairs.unt.edu/care)

[Student Health and Wellness Center](https://studentaffairs.unt.edu/student-health-and-wellness-center) (https://studentaffairs.unt.edu/student-health-and-wellness-center)

[Pride Alliance](https://edo.unt.edu/pridealliance) (https://edo.unt.edu/pridealliance)

[UNT Food Pantry](https://deanofstudents.unt.edu/resources/food-pantry) (https://deanofstudents.unt.edu/resources/food-pantry)

[ALL Programs and Services](https://studentaffairs.unt.edu/programs-and-services) (https://studentaffairs.unt.edu/programs-and-services)

Student Organizations

Did you know there are more than 400 student organizations at UNT? Joining an organization is a great way to meet other students with similar interests. There are clubs related to academics, recreation, advocacy, entertainment, and so much more. Many organizations offer students opportunities to gain leadership skills and network with others to expand career opportunities.

[Student Organization Homepage](https://studentaffairs.unt.edu/student-org) (<https://studentaffairs.unt.edu/student-org>)

UNT Student Organizations Related to Public Health

[Public Health Student Association](https://unt.campuslabs.com/engage/organization/phsa) (<https://unt.campuslabs.com/engage/organization/phsa>)

[Future Without Poverty](https://unt.campuslabs.com/engage/organization/future-without-poverty) (<https://unt.campuslabs.com/engage/organization/future-without-poverty>)

[UNT Rotaract Club](https://unt.campuslabs.com/engage/organization/global-medical-brigades) (<https://unt.campuslabs.com/engage/organization/global-medical-brigades>)

[Global Medical Brigades](https://unt.campuslabs.com/engage/organization/global-medical-brigades) (<https://unt.campuslabs.com/engage/organization/global-medical-brigades>)

[Student Health Advisory Committee](https://unt.campuslabs.com/engage/organization/student-health-advisory-committee)

(<https://unt.campuslabs.com/engage/organization/student-health-advisory-committee>)

[Alternative Breaks](https://unt.campuslabs.com/engage/organization/alternative-service-breaks) (<https://unt.campuslabs.com/engage/organization/alternative-service-breaks>)

[Health Occupation Students of America](https://unt.campuslabs.com/engage/organization/hosa-unt)

(<https://unt.campuslabs.com/engage/organization/hosa-unt>)

[Pre-Physician Assistant Club](https://unt.campuslabs.com/engage/organization/pre-physician-assistant-club)

(<https://unt.campuslabs.com/engage/organization/pre-physician-assistant-club>)

[Alpha Epsilon Delta Health Pre-Professional Honor Society](https://unt.campuslabs.com/engage/organization/alphaepsilondelta)

(<https://unt.campuslabs.com/engage/organization/alphaepsilondelta>)

Full List of Organizations Related to Public Health, go to the student organization search page and search '[public health](https://unt.campuslabs.com/engage/organizations)' (<https://unt.campuslabs.com/engage/organizations>).

Schedule

| Week and Due Dates | Module Topic | Materials to Review | Participation and Assignments |
|------------------------------|---------------------------------------------------------------------|----------------------------|-------------------------------------------|
| Week 1 January 19 | Introduction to the Course | See Canvas | Weekly Review 1 |
| Week 2 January 26 | Emerging Need for Population Health Informatics | Chapter 1 See Canvas | Weekly Review 2 |
| Week 3 February 2 | Population Health Informatics Workforce Programs | Chapter 2 See Canvas | Weekly Review 3 |
| Week 4 February 9 | Role of Informatics in Understanding Data | Chapter 3 See Canvas | Weekly Review 4 |
| Week 5 February 16 | Data Exchange and Interoperability | Chapter 4 See Canvas | Weekly Review 5 |
| Week 6 February 23 | Informatics in Population Health Surveillance | Chapter 5 See Canvas | Weekly Review 6 |
| Week 7 March 2 | Statistical issues in Population Health Informatics | Chapter 6 See Canvas | Weekly Review 7 |
| Week 8 March 9 | Big Data, Cloud Computing, and Visual Analytics | Chapter 7 See Canvas | Weekly Review 8 |
| Spring break | (March 10 – 16) | (break) | (break) |
| Week 9 March 23 | Design, Development, and System Evaluation of Population Health | Chapter 8 See Canvas | Weekly Review 9 Student Project |
| Week 10 March 30 | Electronic Health Records and Telehealth Applications | Chapter 9 See Canvas | Weekly Review 10 |
| Week 11 April 6 | Personal Health Records | Chapter 10 See Canvas | Weekly Review 11 |
| Week 12 April 13 | Mobile Health Interventions | Chapter 11 See Canvas | Weekly Review 12 |
| Week 13 April 20 | The Economic Value of Informatics Applications in Population Health | Chapter 12 See Canvas | Weekly Review 13 |
| Week 14 April 27 | Privacy, Confidentiality, Security, and Ethics | Chapter 13 See Canvas | Weekly Review 14 |
| Week 15 May 4 | Innovations and Sustainability in Population Health Technologies | Chapter 14 See Canvas | Weekly Review 15 |
| Week 16 May 4 | Final Exam due May 4 by 11:59 pm | (Review for Final) | (Final Exam) |