University of North Texas
College of Health and Public Service
Department of Rehabilitation and Health Services
PUBH 4070 Public Health Informatics

Welcome to PUBH 4070 Public Health Informatics Spring 2023 course. My name is Andrea Traylor. I will be your instructor for this class.

COURSE INFORMATION

Course Number and Title: PUBH 4070 Public Health Informatics
Meets: T/Th 2:30 PM – 3:50 PM
Location: 316 WH
3 Credit Hours

INSTRUCTOR INFORMATION

NAME: Andrea Traylor, Ph.D., ME.d, CHES
Office Location: Chilton 218J
Phone number: (940)565-4938
Email: andrea.traylor@unt.edu
Email will be the best way to communicate with me this semester. In most cases, I will reply to messages left at the department within 48 hours and emails within 24 hours. Holidays and weekends will be 48 hours.
Office hours: Tuesday/Thursday 10am-11:30am and by appointment on Zoom

COURSE DESCRIPTION

This course introduces students to the fundamentals of health informatics. Students will learn how to use information technology and communication systems to improve population health by fostering better collaboration between healthcare providers and public health professionals. We will look at the information systems that are used to collect and organize various types of health data. Students will learn how to generate knowledge from health information using various techniques and tools. We will talk about the ethical issues that arise when collecting, organizing, analyzing, interpreting, and using health information.

PRE-REQUISITES

Recommended prerequisite(s): None

COURSE OBJECTIVES

By the end of this course, students will be able to:
• Describe how the public health information infrastructure is used to collect, process, maintain,

and disseminate data
- Understand the 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

REQUIRED MATERIALS

Required Textbook:

- Population Health Informatics By Joshi, Ashish / Thorpe, Lorna ISBN: 9781284103960

- Additional Required Readings:
  Readings will be posted in Canvas throughout the semester
- Any additional required readings will be posted in Canvas each week and will be available electronically.

TECHNICAL SKILL REQUIREMENTS

Students will need access to Canvas, have the ability to download and upload files, send and receive emails, and communicate with fellow students in various electronic formats, including video conferencing.

TECHNICAL SUPPORT

Part of working in the online environment involves dealing with the inconveniences and frustration that can arise when technology breaks down or does not perform as expected. Here at UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues.

UIT Help Desk: UIT Student Help Desk site (http://www.unt.edu/helpdesk/index.html)

Email: helpdesk@unt.edu
Phone: 940-565-2324
In Person: Sage Hall, Room 130
Walk-In-Availability: 8am-9pm
Telephone Availability:
- Sunday: noon-midnight
- Monday-Thursday: 8am-midnight
- Friday: 8am-8pm
- Saturday: 9am-5pm

Laptop Checkout: 8am-7pm

For additional support Visit: Canvas Student Guide (Student Guide - Canvas Community (canvaslms.com))

COURSE REQUIREMENTS

Here are the four major ways I will assess a student's performance in this course. Students are required to attend class and complete the reading assigned in the textbook and the supplemental readings. Students are required to complete weekly reflections to assess their understanding of the material. *The reflections center on the material presented the same week.* A final exam will be held at the end of the semester. It will cover all material discussed during the semester and will be taken in Canvas. Finally, students will be given a chance to assess their work in the course.

Assignment	Points Possible	Percentage of Final Grade
Participation	15 weeks @ 10 points each 150 points	15%
Weekly Reviews	15 reflections @ 20 points each 300 points	30%
Student Project	300 points total	30%
Final Exam	250 points	25%
Total Points Possible	**1000 points**	**100%**

GRADING

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 number of correct answers for each quiz, writing skills, research skills, and ability to illustrate comprehension of all course topics.

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

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

Weekly Reflections:

Students are required to complete 15 weekly reflections in Canvas. Some of the reflections are straightforward from material in the text and lecture material. In general, reflections are due Sundays at

11:59 pm. If a student does not complete the reflection for the week, they will not receive any points. The reflections cannot be made up unless a student contacts me before the due date or has a valid reason for not completing the week's requirement (illness, death in the family, etc.).

Final Exam:

The exam will be available from May 5th 8:00 AM to May 8th at 5:00pm.

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.

The instructor and students will share responsibility for each other's learning. Much of the class time will focus on application and discussion of information in the assigned readings. **Therefore, students are expected to critically read and think about the assigned reading material, and be ready to raise questions and discuss issues relevant to the readings in class.** Required reading should be completed before class on the assigned day (*please bring your text and/or pertinent readings to class with you).*

ATTENDANCE POLICY AND CLASS PARTICIPATION

Students are required to attend classes. Attendance will be taken throughout the semester. If a student does not attend class, they will potentially lose the ability to get credit for the course. They will also miss important information related to the course material, assignments, quizzes and the final exam. Students are encouraged to participate in class discussions and group work. If group participation cannot be shown, the student could lose points on the group work project.

UNT POLICIES

Academic Integrity Policy

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of

academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University. *Work submitted may be analyzed by software for academic integrity.*

ADA Policy

UNT 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 a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students 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 reasonable 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/. You may also contact them by phone at 940.565.4323.

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 Blackboard for contingency plans for covering course materials.

Important Notice for F-1 Students

To read detailed Immigration and Customs Enforcement regulations for F-1 students, please go to the Electronic Code of Federal Regulations website at http://www.ecfr.gov/. Please contact me if you have further questions.

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

CALENDAR

Tentative calendar for the course, including information for each class date, each week's topics, required reading for each class, and the due dates for quizzes, assignments, projects and the final exam. **These dates and topics are subject to change.**

Module	Readings	Assignments

Week 1 1/16 1/18	Introduction to the Course	No reading required	Reflection #1 Due 1/21 at 11:59pm
Week 2 1/23 1/25	Emerging Need for Population Health Informatics	Chapter 1	Reflection #2 Due 1/28 at 11:59pm
Week 3 1/30 2/1	Population Health Informatics Workforce Programs	Chapter 2	Reflection #3 Due 2/4 at 11:59pm
Week 4 2/6 2/8	Role of Informatics in Understanding Data	Chapter 3	Reflection #4 Due 2/11 at 11:59pm
Week 5 2/13 2/15	Six Levels of Data Exchange and Interoperability	Chapter 4	Reflection #5 Due 2/18 at 11:59pm
Week 6 2/20 2/22	Informatics in Population Health Surveillance	Chapter 5	Reflection #6 Due 2/25 at 11:59pm
Week 7 2/27 2/29	Statistical issues in Population Health Informatics	Chapter 6	Reflection #7 Due 3/3 at 11:59pm
Week 8 3/5 3/7	Big Data, Cloud Computing, and Visual Analytics	Chapter 7	Reflection #8 Due 3/10 at 11:59pm
Week 9 3/12 3/14	SPRING BREAK, NO CLASS!	SPRING BREAK!	SPRING BREAK!
Week 10 3/19 3/21	Design, Development, and System Evaluation of Population Health	Chapter 8	Reflection #9 Due 3/24 at 11:59pm
Week 11 3/26 3/28	Electronic Health Records and telehealth Applications	Chapter 9	Reflection #10 and Group Project Due 3/31 at 11:59pm
Week 12 4/2 4/4	Personal Health Records	Chapter 10	Reflection #11 Due 4/7 at 11:59pm
Week 13 4/9 4/11	Mobile Health Interventions	Chapter 11	Reflection #12 Due 4/14 at 11:59pm

Week 14 4/16 4/18	The Economic Value of Informatics Applications in Population Health	Chapter 12	Reflection #13 Due 4/21 at 11:59pm
Week 15 4/23 4/25	Privacy, Confidentiality, Security, and Ethics	Chapter 13	Reflection #14 & Project Due 4/28 at 11:59pm
Week 16 5/1-5/8	Final Exam	Chapters 1-13	Reflection 15 Due 5/5 at 11:59pm Final Exam Due 5/8 11:59pm