



HPEM 5340: Health Informatics Syllabus Fall 2023

Prerequisites: none

Course Description

This course presents the knowledge, infrastructure, functions, and tools of health informatics. It explores technology, planning and management and applications in public health and healthcare. The emphasis is on conceptual frameworks as well as a deeper level of engagement on system applications. It focuses on the application of health technology. It is designed to familiarize students with core concepts and issues confronting managers in the health sector associated with planning, implementation and evaluation of information systems. The course provides an overview of the theory, processes and applications of information systems and how they relate to health policy and management. It also provides a basic understanding of data standards and requirements, and the critical concepts and practice in mapping and interpreting health information.

Course Objectives

Upon completion of this course, students will have:

- Identified how technology can be used to improve health care delivery in healthcare organizations and population health. [MHA Program Learning Outcomes (PLOs): A8, A9, A10]
- Acquired an understanding of how health technology serves as a data mine for the use of clinical decision making and population health management. [MHA PLOs: A1, A3, A9, A10]
- Increased knowledge in patient and provider interaction with HIT and the role HIT plays in patient safety. [MHA PLOs: A8, A10]
- Acquired an understanding of core concepts and issues confronting managers in the health sector associated with planning, implementation, and evaluation of information systems. [MHA PLOs: A1, A3]
- Acquired an understanding of the theory, processes and applications of information systems and how they relate to health policy and management. [MHA PLOs: A3, A6, A8]

Course Instructors

Instructors	Contact	Office Hours	Office/Phone
Leanne Metcalfe, PhD	lmecalf@uttyler.edu	Text or email to schedule	972-559-0532
Frank Webster, MD	fwebster@uttyler.edu	Text or email to schedule	214-769-0454

Course Location:

Online in Canvas

Course Materials

Lynda R. Hardy. "Health Informatics: An Interprofessional Approach." 3rd Edition.

Assessment & Grading Scale

1. Class Participation: 30% (14 class participation)
2. Mid-Term: 25% (1 midterm)
3. Quizzes: 20% (12 quizzes)
4. Final: 25%

Course Grade Scale (points): A: 90 – 100%, B: 80 – 89%, C: 70 – 79%, F: < 70%

DISCUSSION BOARD POSTINGS GRADING CRITERIA (Adapted from Dr. Pat Royal): The purpose of the discussion board in an online course is to take the place of the class exchange of ideas that would occur in a face-to-face class. It is your opportunity to demonstrate your mastery of the assigned readings and your ability to supplement those readings with expanded exposure to related (and sometimes contrary) information that you will seek in your self-directed quest to understand and be informed. The following information will give you some guidelines and allow used to assign a grade to the discussion board exercises. *Extra credit may be available for those that respond to more than one discussion point.*

CRITERIA/ POINTS	5	4	3	2	1
Format and logical progression of posting	<ul style="list-style-type: none"> -Form is superior; obvious attention to proofreading and grammar. - Main idea is stated early and clearly. - Argument or ideas are built using a logical progression of thoughts which are stated clearly and succinctly. 		mid		<ul style="list-style-type: none"> - Spelling and grammar errors detract from the substance of the posting; random thoughts with no sense of a plan to reach a logical conclusion. - No clear main idea or direction for flow of information.
Depth and relevance of post to the topic at hand	<ul style="list-style-type: none"> -Posting clearly shows evidence of critical thinking and analysis to a substantial depth expected of a doctoral student. - Ideas offered are relevant to the topic and show the ability to extrapolate complex ideas from various sources into a coherent argument or statement(s). - At least one external relevant reference cited; cited reference(s) are appropriate and indicative of the best knowledge on the topic. 		mid		<ul style="list-style-type: none"> - Posting shows superficial thinking based on personal experiences or opinions only, there is little consideration of contributions to the topic in the literature or from colleagues. - Literature support is not relevant to the topic or major literature contributions are missing. - Post strays from topic with much irrelevant information and does not address the intent of the assignment. - No references cited.
Contribution to the learning community	<ul style="list-style-type: none"> - Posting shows an astute awareness of the needs of the learning community with an interest in their growth and knowledge acquisition. - Attempts to move colleagues into meaningful dialogue and presents creative approaches that are open to discussion. - Post contributes to the progression of health care delivery as a scholarly community but is presented in a clear, enlightening, and engaging way 		mid		<ul style="list-style-type: none"> - Posting is largely aimed at self-expression without consideration of the reader. - There is no room for dialogue or disagreement and no acknowledgment of the potential contributions of others. - The posting is a rehash of old ideas without consideration of how these can advise the future. - No evidence is found of making the material consumable or reader friendly.
Punctuality and timeframe	Posted well before deadline with opportunity for student interaction and feedback. (Posting 4 or more days before due date)		< 3 days		Posting is late leaving little opportunity for student colleague feedback and interchange (Posting on due date)

You will be graded on how close you come to the ideal, as indicated in Column 5, and how far you range away from the minimal, as evidenced in Column 1. Faculty discretion will be used to set the actual point value.

Rubric for response to other posts:

Responds to another student in a logical, clear, insightful manner using respectful language and engages discussion by adding a new idea or solidifies original post.	No point deductions
Responds to another student but the response is very terse, does not contribute to the body of knowledge, and does not move discussion in a meaningful dialogue.	Deduction of 2 points
Does not respond to any other student	Deduction of 4 points

Total point value will be determined by the value of your original post minus deductions (if any) for not responding to one other student.

Modules

Module	Week of	Chapters	Module Topic	Assignments Due
1	21-Aug	Chapters 1 & 2	Synchronous (August 22): Introduction to Health Informatics	N/A
2	28-Aug	Chapter 4	Metcalfe: Informatics-Related Standards and Standard Setting	- C 1&2 Quiz - Phone a Friend - Introduce Yourself
3	4-Sep	Chapter 5	Metcalfe: Evaluation of Health Information Systems	- Chapter 4 Quiz
4	11-Sep	Chapters 3 & 6	Synchronous (Sept 12): Webster: Health Systems and Technical Infrastructure	- Chapter 5 Quiz Module 3 discussion
5	18-Sep	Chapter 14	Webster: Digital Health: Managing Health and Wellness	- C 3&6 Quiz
6	25-Sep	Chapter 12	Metcalfe: Clinical Decision Support	- Chapter 14 Quiz Module 4 &/5 discussion
7	2-Oct	Chapter 16	Metcalfe: Social Media Tools for Health Informatics	- Chapter 12 Quiz
8	9-Oct	Chapter 8	Webster: Administrative Applications in Healthcare	- Chapter 16 Quiz Module 6&7 discussion
9	16-Oct	N/A	Synchronous (Oct 17): Mid-Term	- Slides/Recorded Presentations due Oct 16th
10	23-Oct	Chapters 15 & 28	Webster: Personal Health Records & Privacy and Security	- Chapter 8 Quiz - Module 8 discussion
11	30-Oct	Chapter 23	Metcalfe: Data Science and Analytics in Healthcare	- C 15 & 28 Quiz
12	6-Nov	Chapter 22	Webster: Improving the User Experience for Health Information Technology	- Chapter 23 quiz
13	13-Nov	Chapter 30	Synchronous: (Nov 14) Metcalfe: Health Policy and Health Informatics	- Chapter 22 quiz - Module 10&/12 discussion
	20-Nov	N/A	Thanksgiving Holiday	N/A
14	27-Nov	Chapter 27	Webster: Legal Issues, Federal Regulations and Accreditation	-Chapter 30 quiz - Module 13 discussion
15	4-Dec		Finals	Final Exam



Class Policies:

Attendance:

Regular or punctual attendance is expected. If a student misses a class, the student is responsible for obtaining any information distributed during those times. Make-ups are possible only under certain instances. Arrangements for any make-ups should be discussed directly with the instructor for that day's class.

Participation:

Attendance and participation in class is important. Students will be frequently asked to review concepts and online presentations prior to the scheduled class, so that class time can be used for hands-on activities and work on assignments.

Academic Honesty:

Any student who commits an act of academic dishonesty is subject to discipline. Academic 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 published in the academic calendar and Graduate Bulletin. 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 mid-semester require approval of the Dean. Each student is responsible for their own enrollment status with the university.

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

****Instructors reserve the right to change this syllabus**