Healthcare Information Technology
Course #: PADM 611
Credits: 3
Syllabus Version: v082624

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Office Hours: Wednesdays, 4:30-6:00 PM and by appointment
Term: Fall 2024
Class: Mondays, 6:00-8:30 PM, Mitchell Hall, Room 119 & Zoom

Course Description

"What gets measured, gets managed"

-Peter Drucker

This course introduces key concepts and issues surrounding the adoption and use of information systems within health service organizations. The technical aspects of information gathering within health service organizations will be discussed within the context of how management uses information to execute various health quality, clinical, legal, and strategic systems. Current issues surrounding the gathering, storage, and usage of health information will be discussed.

The success of this course relies heavily upon how engaged participants are in the various components of the course. The role of the instructor is to facilitate and guide learning through class discussions, activities, assignments, and feedback. The course favors an active role for participants over the more passive role taken in a lecture-oriented format. Be prepared to engage the course material and each other to draw on assigned readings and your experiences—whether those experiences are drawn from a summer internship or managing an entire department. We will work from the premise that all participants bring unique knowledge, skills, experiences, and insights, regardless of experience level in healthcare administration, to the course that we can draw upon to create a successful collaborative learning experience.

Course Learning Objectives

1. Categorize and describe the major types of administrative and clinical information systems used in population health management and value-based payment models
2. Explain the causes of current issues pertaining to the use of health data systems including interoperability, usability, safety, and security
3. Summarize project management best practices in acquiring and implementing a health care information system update or overhaul
4. Conduct a workflow analysis to demonstrate how IT interventions affect population health providers across units or organizations
5. Analyze health care data and construct evidence-based policy aimed at improving healthcare organization performance
6. Apply data visualization best practices to effectively communicate evidence to health care professionals and the public
7. Conduct a technical presentation on a disruptive health information technology

Course Materials

Required Textbook:
   Wager, K. A., Lee, F. W. and Glaser, J. P. (2017). *Health Care Information Systems: A Practical Approach for Health Care Management, 4th Edition*. San Francisco: Jossey-Bass Publishers. ISBN: 978-1-119-33718-8

The book is available for sale OR you can rent it (hardcopy or electronic download). You do not need the most recent, 5th Edition. This book has also historically been available for free via the UNM Library: permalink. There are likely many other free or low-cost sources for the book.

Course Expectations

Contacting the Instructor

I want to hear from you, particularly if you are struggling in the course!

Contacting me by email: At some points in the term, my inbox gets quite full, but I do want to hear from you. If you email me and don't hear back from me within two business days, please send a follow up email. I will appreciate the gentle reminder.

Contacting me by text: In general, a text message will be responded to quicker than an email.

Participation & Attendance

The course is comprised of weekly modules that must be completed in order. Except for Module 1A, all modules are not accessible until the completion of the prior module. The modules are comprised of video recordings, slides, student presentations, and

discussion boards. Each weekly module component must be entirely completed before the following Wednesday. Students who fall behind in any module must reach out to the instructor with a plan for catching up.

This course's assignments and exams will be the easiest for those who keep up to date with the modules, take robust notes while watching recordings, complete the readings, participate in discussion boards and group work, and reach out to the instructor when clarification is needed.

Course Conduct

I am committed to creating a positive learning environment where diverse perspectives are recognized and valued as a source of strength. I request that all students work with me to create a classroom culture based on open communication, mutual respect, and inclusion. As a class we will approach all discussions with respect and civility. Disagreements and debates in academic discourse are expected and welcome, but personal attacks are never OK and will not be tolerated. I strive to ensure an open and welcoming online classroom for all students. If I ever miss the mark, please don't hesitate to come and talk to me.

I am committed to building with you a positive classroom environment in which everyone can learn. I reserve the right to intervene and enforce standards of respectful behavior when classroom conduct is inconsistent with University expectations [and/or classroom community agreements]. Interventions and enforcement may include but are not limited to required meetings to discuss classroom expectations, written notification of expectations, and/or removal from a class meeting. Removal from a class meeting will result in an unexcused absence. Two or more unexcused absences may result in permanent removal and a drop from the course (see attendance policy). The University of New Mexico ensures freedom of academic inquiry, free expression and open debate, and a respectful campus through adherence to the following policies: [D75: Classroom Conduct](#), [Student Code of Conduct](#), [University Policy 2240 – Respectful Campus](#), [University Policy 2210 – Campus Violence](#).

Take-home Assignments

Three take-home assignments serve as an opportunity to demonstrate your knowledge and application of the content covered in class. Combined, the three take-home assignments will account for 51 percent of your total grade (each assignment is equally weighted at 17 percent). Assignments are due at 11:59PM on the date noted on the course schedule below. All assignments must be turned in via Canvas.

Note: In previous years, students have told me that those who formed small, two-, three-, or four-person workgroups reported having an easier time completing their assignments.

State-of-the-Art Presentations

The presentation assignments serve as an opportunity to learn and share with your classmates about a leading healthcare technology. During the first week of class, each student will be assigned to an article provided by the instructor. Presentations cannot exceed 10 minutes. A timer will note the end of your presentation and you will only be graded on the material that is presented. Copies of the presentation must be emailed to the entire class prior to the presentation. Your presentation will account for 15 percent of your total grade. Students can expect a minimum of one exam question to be generated from each presentation.

Exams

One midterm and one final exam will be administered. The exams will consist of multiple choice, true/false, and short answer questions. Combined, the two exams will account for 24 percent of your total grade (each exam is equally weighted at 12 percent).

Final Grade Composition

Discussion Boards:	10 points (1 point per discussion board)
Assignments:	51 points (17 points per assignment)
Exams:	24 points (12 points per exam)
State-of-the-art presentation:	15 points
	100 Total Points

Grading Scale

A+: 99 – 100%
A: 93 – 98%
A-: 90 – 92%
B+: 87 – 89%
B: 83 – 86%
B-: 80 – 82%
C+: 75 – 79%
C: 70 – 74%
C-: 65 – 69%
Fail: Below 65%

Credit Hour Statement

This is a three credit-hour course. Class meets for the equivalent of a 150-minute session of direct instruction for seventeen weeks during the Fall 2024 semester. Students are expected to complete a *minimum* of six hours of out-of-class work (or homework, study, assignment completion, and class preparation) each week.

Attendance Policy

UNM Pathfinder policies apply, which in part means instructor drops based on non-completion are possible. Two or more unexcused absences may result in permanent removal and a drop from the course. After your first late module completion, each subsequent late module completion will result in the reduction of a half letter grade.

Caregiver Responsibilities Policy

I have great respect for students who are balancing their pursuit of education with the responsibilities of caring for children or other family members. If you run into challenges that require you to miss completing a module completion on time, please contact me. There may be some instances of flexibility I can offer to support your learning.

Accommodation Statement

UNM is committed to providing equitable access to learning opportunities for students with documented disabilities. As your instructor, it is my objective to facilitate an inclusive online classroom setting, in which students have full access and opportunity to participate. To engage in a confidential conversation about the process for requesting reasonable accommodations for this class and/or program, please contact Accessibility Resource Center at arcsrvs@unm.edu or by phone at 505-277-3506.

Support: Contact me via email or text or in check-in hours and contact Accessibility Resource Center (https://arc.unm.edu/) at arcsrvs@unm.edu (505) 277-3506.

Respectful and Responsible Learning

We all have shared responsibility for ensuring that learning occurs safely, honestly, and equitably. Submitting material as your own work that has been generated on a website, in a publication, by an artificial intelligence algorithm, by another person, or by breaking the rules of an assignment constitutes academic dishonesty. It is a student code of conduct violation that can lead to a disciplinary procedure. Please ask me for help in finding the resources you need to be successful in this course. I can help you use study resources responsibly and effectively. Off-campus paper writing services, problem-checkers and services, websites, and AIs can produce incorrect or misleading results. Learning the course material depends on completing and submitting your own work. UNM preserves and protects the integrity of the academic community through multiple policies including policies on student grievances (Faculty Handbook D175 and D176), academic dishonesty (FH D100), and respectful campus (FH CO9). These are in the Student Pathfinder (https://pathfinder.unm.edu) and the Faculty Handbook (https://handbook.unm.edu).

Support: Many students have found that time management workshops or work with peer tutors can help them meet their goals. These and are other resources are available through Student Learning Support at the Center for Teaching and Learning.

Title IX

The University of New Mexico and its faculty are committed to supporting our students and providing an environment that is free of bias, discrimination, and harassment. The University's programs and activities, including the classroom, should always provide a space of mutual respect, kindness, and support without fear of harassment, violence, or discrimination. Discrimination on the basis of sex includes discrimination on the basis of assigned sex at birth, sex characteristics, pregnancy and pregnancy related conditions, sexual orientation and gender identity. If you have encountered any form of discrimination on the basis of sex, including sexual harassment, sexual assault, stalking, domestic or dating violence, we encourage you to report this to the University. You can access the confidential resources available on campus at the LoboRESPECT Advocacy Center (https://loborespect.unm.edu), the Women's Resource Center (https://women.unm.edu), and the LGBTQ Resource Center (https://lgbtqrc.unm.edu). If you speak with an instructor (including a TA or a GA) regarding an incident connected to discrimination on the basis of sex, they must notify UNM's Title IX Coordinator that you shared an experience relating to Title IX, even if you ask the instructor not to disclose it. The Title IX Coordinator is available to assist you in understanding your options and in connecting you with all possible resources on and off campus. For more information on the campus policy regarding sexual misconduct and reporting, please see https://policy.unm.edu/university-policies/2000/2740.html and CEEO's website.

If you are pregnant or experiencing a pregnancy-related condition, you may contact UNM's Office of Compliance, Ethics, and Equal Opportunity at ceeo@unm.edu. The CEEO staff will provide you with access to available resources and supportive measures and assist you in understanding your rights.

Citizenship and/or Immigration Status

All students are welcome in this class regardless of citizenship, residency, or immigration status. Your professor will respect your privacy if you choose to disclose your status. As for all students in the class, family emergency-related absences are normally excused with reasonable notice to the professor, as noted in the attendance guidelines above. UNM as an institution has made a core commitment to the success of all our students, including members of our undocumented community. The Administration's welcome is found on our website: http://undocumented.unm.edu/.

Support in Receiving Help and in Doing What is Right

I encourage students to be familiar with services and policies that can help them navigate UNM successfully. Many services exist to help you succeed academically and to find your place at UNM, see students.unm.edu or ask me for information about the right resource center or person to contact. UNM has important policies to preserve and protect the academic community, especially policies on student grievances (Faculty Handbook D175 and D176), academic dishonesty (FH D100), and respectful campus

(FH CO9). These are in the *Student Pathfinder* (https://pathfinder.unm.edu) and the *Faculty Handbook* (https://handbook.unm.edu). Please ask for help in understanding and avoiding plagiarism or academic dishonesty, which can both have very serious disciplinary consequences.

Land Acknowledgement

Founded in 1889, the University of New Mexico sits on the traditional homelands of the Pueblo of Sandia. The original peoples of New Mexico Pueblo, Navajo, and Apache since time immemorial, have deep connections to the land and have made significant contributions to the broader community statewide. We honor the land itself and those who remain stewards of this land throughout the generations and also acknowledge our committed relationship to Indigenous peoples. We gratefully recognize our history.

Wellness

If you do need to stay home due to illness or are experiencing a wellness challenge, please take advantage of the resources below. You can communicate with me and I can work with you to provide alternatives for course participation and completion. Let me, an advisor, or another UNM staff member know that you need support so that we can connect you to the right resources. UNM is a mask friendly, but not a mask required, community. If you are experiencing COVID-19 symptoms, please do not come to class.

- Student Support: Student Health and Counseling (SHAC) at (505) 277-3136.
- TimelyCare: Free 24/7 virtual care services (medical, emotional support, health coaching, self-care, basic needs support).
- LoboRESPECT Advocacy Center (505) 277-2911: help with contacting faculty and managing challenges that impact your UNM experience.

Class Schedule*

Week	Date	Module #	Topic	Reading	Assignment Due
Week 1	19-Aug	1A	The Nature of Health Data	Wager Ch 1	
Week 2	26-Aug	1B	The Nature of Health Data	Wager Ch 1-2	
Week 3	2-Sep		No Class (Labor Day)		
Week 4	9-Sep	1C	The Nature of Health Data	Wager Ch 2	
Week 5	16-Sep	2A	Health Data Visualization		
Week 6	23-Sep	3A	Health Data Analytics		
Week 7	30-Sep	3B	Health Data Analytics		
Week 8	7-Oct	3C	Health Data Analytics		
Week 9	14-Oct		No Class		
Week 10	21-Oct		Midterm		Assignment 1
Week 11	28-Oct	4A	Laws, Standards & Value-Based Programs	Wager Ch 9-10	
Week 12	4-Nov	4B	Laws, Standards & Value-Based Programs	Wager Ch 3-4, 11	
Week 13	11-Nov	4C	Laws, Standards & Value-Based Programs	Wager Ch 3-4	Assignment 2
Week 14	18-Nov	5A	Workflow Analysis		
Week 15	25-Nov	5B	Workflow Analysis		
Week 16	2-Dec	6A	Health Data System Development Life Cycle	Wager Ch 5-6	
Week 17	9-Dec		Final Exam		Assignment 3

Subject to change. Minor changes will be announced in class, major ones provided in writing.

Presentation Schedule*

Date	Presenter	State-of-the-Art Topic
16-Sep		The Availablists: Emergency Care without the Emergency Department
23-Sep		Genomics and electronic health record systems
30-Sep		Audio-Only Telehealth Effective in Treating Underserved Patients
7-Oct		Confronting Health Misinformation
7-Oct		Drones in Healthcare
28-Oct		Ambient artificial intelligence (AI) scribes
4-Nov		Robotic Surgery Is Here to Stay—and So Are Surgeons
11-Nov		CRISPR, The Disruptor
18-Nov		The Rise of At-Home Lab Tests
25-Nov		Project ECHO
2-Dec		EHRs and Antimicrobial Stewardship

Subject to change