

PUBHHMP 7682: Information Systems for Health Services Organizations 1.5 credits – Autumn, 2025 Mondays, 2:20 – 5:00. Cunz Hall- Room 330

Course Instructor

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Instructor's Office Hours

By appointment (preference is before and after work hours)

Faculty Feedback & Response Time:

The following gives you an idea of my intended availability during the course:

- **Grading:** You can generally expect feedback within 7 days.
- E-mail: I will reply to e-mails (sent via Carmen) within 48 hours on school days.
- **Discussion board:** Either the TA or the instructor will check and reply to messages in the discussion boards at least every 12 hours on school days, and every 24 hours on weekends, unless a different turnaround time (due to travel, etc.) is announced.

Graduate Teaching Assistant (GTA)

Pejmon (PJ) Noghrehchi, noghrehchi.1@buckeyemail.osu.edu

GTA Responsibilities

The GTA assigned to the course will hold regular office hours and can answer basic questions about the course, materials, instructions, etc. The TA may assist with scoring assignments; however, final grades will be assigned by the professor. **Any questions regarding grading should be directed to the professor and not the TA.**

Course Description

As information technology becomes increasingly pervasive, complex, and resource intensive, managers are challenged to understand the potential for IT to meet strategic business needs, to effectively implement IT, and to maximize the business value of IT resources. This course is designed to provide students with an understanding of issues in the management of information and information technology in health care organizations, the role of information technologies in improving organizational performance, and the application of information technologies in health service organizations and health care services delivery. This is not a course on computing and/or data analysis. The course draws from the health services and general business literature to present core information systems concepts, issues, and challenges. Health services applications are integrated throughout the course via lecture material, readings, and speakers. Case studies and other assignments will allow students to translate lecture material and readings to IT applications and problems. Quizzes and homework will be used to highlight key takeaways of selected readings.

Prerequisites

None

Course Learning Objectives

Objective	MHA Competency
Understand the potential for information technology to solve problems	Management Functions (1, 4)
in healthcare. We will discuss and understand some of the current	Health Systems and Policy (3)
technology capabilities that exist within healthcare.	
Discuss the need to start with the strategic business drivers for solving	Management Functions (1, 6)
healthcare problems – so that tech is not implemented just for the sake	Leadership and
of implementing it.	Professionalism (6)
	Business and Analytical Skills
	(1, 2, 4, 6)
Learn the high-level considerations to be mindful of when	Management Functions (4, 7)
implementing technology solutions	Business and Analytical Skills
	(1, 2, 4, 6)
Learn the tools and techniques to make sure that every implementation	Business and Analytical Skills
has the potential to maximize business value and continues to do so	(1, 2, 4, 6)
through the life of the implementation.	

Text/Readings:

Included with the course outline.

Carmen

There is a Carmen site for this course: https://osu.instructure.com/courses/188548 All course materials are available via Carmen.

You will need to use BuckeyePass (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass -Adding a Device help article for step-by-step instructions (https://admin.resources.osu.edu/buckeyepass/adding-a-device)
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the Duo Mobile application (https://admin.resources.osu.edu/buckeyepass/installing-the-duo-mobile-application) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357(HELP) and IT support staff will work out a solution with you.

Class Format: How this course works

- Mode of delivery: In person.
- Credit hours and work expectations: This is a 3-credit-hour course. According to Ohio State policy (go.osu.edu/credithours), students should expect around 3 hours per week of time spent on direct instruction in addition to 3-5 hours of homework/active learning activities to receive a grade of (C) average.

 Attendance and participation requirements: The class relies heavily on in class instructions and discussions. All efforts should be made to attend the 6 lectures in this series. Class participation is graded.

Course Technology

Technology skills needed for this course

- Basic computer and web-browsing skills
- Navigating Carmen (go.osu.edu/canvasstudent)

Required equipment

- Computer: current Mac (Mac OSX) or PC (Windows 10+) with high-speed internet connection
- **Calculator:** Students should have access to a scientific calculator that can perform basic arithmetic, square roots, logarithms, and exponentiation.
- Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication

Required software

Microsoft 365 Copilot (formerly Office 365)

All Ohio State students are now eligible for free Microsoft 365 Copilot (formerly Office 365). Full instructions can be found at go.osu.edu/office365help.

Technology support

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at and support for urgent issues is available 24/7.

Self-Service and Chat support: http://it.osu.edu/help

Phone: 614-688-4357(HELP)Email: servicedesk@osu.edu

Assignments/Assessments

Final Presentation: 25%

The final examination will be in the form of an individual presentation. It will cover concepts discussed in class. The emphasis will be on the student identifying potential technology solutions to a stated healthcare problem and discussing the implementation considerations to keep in mind. Further details will be provided in class.

Homework: 60%

This course will use the homework to evaluate comprehension and application of materials discussed in class as well as materials provided as case studies. This will help to sharpen your skills in understanding health care decision support systems and to present data in meaningful and effective manners.

In Class Participation: 15%

Class participation is important for this course. A lot of the learning in this course comes from students asking questions, proposing solutions, working through real life examples, and engaging with guest speakers. Therefore, active participation in class is essential.

Grading

Here, the weighting scheme for the course needs to be described (e.g., % each assignment counts towards final grade).

Grading Scale

Α	93 to 100	Outstanding work that reflects mastery of the material and the ability to apply it
A-	90 to <93	Excellent work that reflects mastery of the material
B+	87 to <90	Good work that reflects mastery of most of the material
В	83 to <87	Good work that reflects mastery of some of the material
B-	80 to <83	Good work that reflects mastery of a few aspects of the material
C+	77 to <80	Mediocre work that reflects familiarity with, but not mastery of the material
С	73 to <77	Mediocre work that reflects familiarity with most of the material
C-	70 to <73	Mediocre work that reflects little familiarity with the material
D+	67 to <70	
D	60 to <67	
E	Below 60	

Class Participation will be graded on the following rubric:

Performance Elements and Levels	Inadequate (5 point)	Developing (10 points)	Accomplished (12 points)	Exemplary (15 points)
Engagement and Active Participation	Student is absent or never participates in class discussion; fails to respond to direct questions	Few contributions to class discussions; seldom volunteers but responds to direct questions	Proactively contributes to class discussion; asks questions and responds to direct questions	Proactively and regularly contributes to class discussion; initiates discussion on issues related to class topic
Listening skills	Does not listen when others talk (not paying attention); interrupts or makes inappropriate comments	Does not listen carefully; comments are often nonresponsive to discussion	Listens and appropriately responds to the contributions of others	Listens without interrupting and incorporates and expands on the comments of other students
Relevance of contribution of topic under discussion	Does not contribute or contributions are off-topic or distract from discussion	Contributions are sometimes off-topic or distract from discussion	Contributions are always relevant	Contributions are relevant and promote deeper analysis of the topic
Preparation	Student is not adequately prepared; does not seem to have read the assigned material before class	Student has read the material but not closely, or has read only some of the material before class	Student has read and thought about the material before class	Student is consistently well prepared; sometimes adds relevant information beyond the assigned reading

Copyright Statement

This syllabus and all course materials (e.g., homework assignments, solution keys, course materials) are under copyright by the instructor and cannot be posted elsewhere without written permission.

Generative AI Policy

This course will have a discussion of the use of AI in healthcare. The students will also have an opportunity to explore use cases of AI. AI use to enhance the student's learning experience is encouraged. However, the use of AI (unless explicitly stated by the instructor) for completion of homework and assignments is not allowed. If I suspect that you have used GenAI on an assignment for which it is prohibited, I will ask you to explain your process for completing the assignment in question. Submission of GenAI-generated content as your own original work is considered a violation of Ohio State's Academic Integrity policy and Code of Student Conduct (opens in new window) because the work is not your own. The unauthorized use of GenAI tools will result in referral to the Committee on Academic Misconduct.

Office of Student Life: Disability Services

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are ill and need to miss class, including if you are staying home and away from others while experiencing symptoms of a viral infection or fever, please let me know immediately. In cases where illness interacts with an underlying medical condition, please consult with Student Life Disability Services to request reasonable accommodations. You can connect with them at slds@osu.edu; 614-292-3307; or slds.osu.edu.

Mental Health Services

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

Religious Beliefs or Practices Accommodations

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the <u>Civil Rights Compliance Office</u>. (Policy: Religious Holidays, Holy Days and Observances)

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-48.7 (B)). For additional information, see the Code of Student Conduct.

Intellectual Diversity

Ohio State is committed to fostering a culture of open inquiry and intellectual diversity within the classroom. This course will cover a range of information and may include discussions or debates about controversial issues, beliefs, or policies. Any such discussions and debates are intended to support understanding of the approved curriculum and relevant course objectives rather than promote any specific point of view. Students will be assessed on principles applicable to the field of study and the content covered in the course. Preparing students for citizenship includes helping them develop critical thinking skills that will allow them to reach their own conclusions regarding complex or controversial matters.

Grievances and Solving Problems

A student who encounters a problem related to his/her educational program has a variety of avenues available to seek resolution. According to University Policies, if you have a problem with this class, you should seek to resolve the grievance concerning a grade or academic practice by speaking first with the instructor or professor. Then, if necessary, you may take your case to the department chairperson. Specific procedures are outlined in Faculty Rule 3335-8-23, the CPH Graduate Student Handbook, and the CPH Undergraduate Student Handbook. Grievances against graduate, research, and teaching assistants should be submitted first to the supervising instructor, then to the chairperson of the assistant's department.

Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Civil Rights Compliance Office:

Online reporting form at http://civilrights.osu.edu/, Call 614-247-5838 or TTY 614-688-8605, Or Email civilrights@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Civil Rights Compliance Office to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

Course Outline

Week	Date	Readings & Topics
1	09/08/2025	Course introduction
		Potential for Information Technology
		Case Study - Physician Burnout in the EHR Era-Are We Ignoring the
		Real Cause
		The Ultimate Starter Kit for Remote Patient Monitoring
		HW: Questions for Next Week's Guest Speaker
2	09/15/2025	Potential for Information Technology (Continued)
		Guest Speaker – Phil Weiss
		Article – 4 common challenges for hospital contact centers in 2024 -
		Spok Inc.; Challenges Healthcare Call Centers Face Today
		HW: Questions for Next Week's Guest Speaker
3	09/22/2025	Strategic Business Needs
		Guest Speaker – Michael Moran
		Case Study - TBD
		HW: Questions for Next Week's Guest Speaker
4	09/29/2025	Effectively Implement Information Technology
		Guest Speaker – Denise Zabawski
		HW: AI Homework with Prompts
5	10/06/2025	Maximize Business Value
		Pulling it all together
6	10/13/2025	Final Presentations