

#### MIDWESTERN STATE UNIVERSITY

Course Syllabus: Health Informatics
Robert D. & Carol Gunn College of Health & Human Services
HSAD 5223 Section X20 & Y21
Spring 2025: January 21 – May 16

#### **Contact Information**

Instructor: Erica Judie

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# Course Description

This course provides for the highest cognitive and affective understanding of applied health care informatics in health services organizations. Theoretical frameworks and empirical analyses will be used to emphasize organizational and provider services. These services will be assessed in relation to capacities and competencies within the health care industry and patient/client needs and wants.

### **Textbook & Instructional Materials**

Brown, G. D., Pasupathy, K. S., & Patrick, T. B. (2019). Health Informatics: A systems perspective (2nd ed.). Health Administration Press; Association of University Programs in Health Administration. ISBN: 9781640550056

#### Student Handbook

Refer to: Student Handbook

### Academic Misconduct Policy & Procedures

Academic Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given). Additional guidelines on procedures in these matters may be found in the Office of Student Conduct.

### AI-Powered Writing Assistance

Since writing, analytical, and critical thinking skills are part of the learning outcomes of this course, all writing assignments should be prepared by the student. Developing strong competencies in this area will prepare you for a competitive workplace. Therefore, AI-generated submissions are not permitted and will be treated as plagiarism.

# Moffett Library

Moffett Library provides resources and services to support student's studies and assignments, including books, peer-reviewed journals, databases, and multimedia materials accessible both on campus and remotely. The library offers media equipment checkout, reservable study rooms, and research assistance from librarians to help students effectively find, evaluate, and use information. Get started on this <a href="Moffett Library webpage">Moffett Library webpage</a> to explore these resources and learn how to best utilize the library.

# In-person meeting dates

The course instructor will meet face-to-face on the following dates listed below to facilitate students studying on F-1 visas or other visa types. International students studying on visas are required to meet in person with the instructor during face-to-face meetings. If the instructor/graduate program coordinator at any point feels the student is neglecting to meet course requirements and "make normal progression towards a program of study," they would have the authority to require an in-person makeup class day/work and/or dismissal. Lack of inperson attendance will negatively affect student visa status and the global education office will be notified. All other online students enrolled in the course are welcome to attend the in-person meetings but are not required to attend.

Table 1: Class Meeting Dates and Times

Class will meet from 2:01pm- 3:00pm on the following dates in CE 240
January 27
February 10
March 3
March 31
April 14
April 28

# Grading

Course Grade - Graded assignments with their percentage of total grade. Any student who receives two grades of C or less, or one F will be administratively removed from the program the term following the second C or D or the one F. The student in the master's or the graduate certificate programs may repeat one course in which a grade of C or lower has been earned with the approval of the department's academic review committee. A 3.0 overall grade point average is required for graduation, and students must have a grade of B or better in all courses in the major. Students who are seeking the graduate certificate must earn a grade of B or better in each of the courses to be awarded the certificate.

Table 2: Percentage allocated to each assignment

Assignments	Percentage
Discussions	35%
Applied Health Information Problem Analysis Paper	20%
Presentation of a Health Information Product	15%
Position Paper	30%
Total Percentage	100%

Table 3: Total points for final grade.

Grade	Points
Α	90 to100%
В	80 to 89%
С	70 to 79%
D	60 to 69%
F	Less than 60%

#### **Discussions**

I will post a specific question/case study/or discussion topic for certain weeks throughout the semester. Whenever possible the professor will try to design cases and questions that will help you explore issues that will help you in your future career. Each discussion topic will contain a variety of questions that will be explored during the discussions.

Student responses should be provided in the text window within the discussion area and NOT as an attachment.

Your responses must be carefully thought out, and draw upon the readings or other appropriate outside sources. For each discussion, students should post his/her discussion and also respond to others' posts (at least two classmates'). Initial discussion posts should include at least two peer-reviewed sources in addition to your text. Initial discussion posts should be between 250-300 words and responses should be at least 75-150 words. Peer responses should include at least one peer-reviewed source. The points earned depend on your context, the quote of the literature, your response to others, etc. Responses to others' posts should be thoughtful and add to the discussion – a response of "I agree" will not earn any points. Online discussions are meant to replace in-class discussions.

For the weeks designated with a discussion assignment, your initial entry should be posted by 11:59pm on Wednesday and your two responses should be posted by 11:59pm on Sunday. For example, your first week's assignment includes a discussion covering Chapter 1. The week begins on Monday. Your initial

discussion post must be made by Wednesday and your responses must be posted by Sunday. Late posts will result in reduced points.

Applied Health Information Problem Analysis Paper
The purpose of this assignment is to identify one specific technology/health
information need or problem experienced by health care providers in a health
care organization or clinic. The issue can be specific to one type of health
organization or be a general issue related to health care delivery. The paper
should include a summary of existing technology related to the issue/problem
and propose a solution to the problem identified. This assignment will require
that students select FOUR articles regarding the chosen topic from recent peerreviewed health care journals that identify and discuss a particular information
need/problem. Students will provide a description of the problem/issue by
critically summarizing the literature, discuss how the issue/problem impacts
health care delivery, and propose a solution to the problem/issue. Additional
research may be required to complete this assignment and to help generate a
proposed solution.

The applied health information problem analysis paper should be a maximum of 5 pages not including the title page, reference page, or appendices. The student should follow current APA writing guidelines and include a minimum of 4 references.

Presentation of a Health Information Product
The purpose of this PowerPoint presentation is to research an existing
computerized information system product and to share it with the class.

The presentation should define the following:

- Product's application
- Identify its key features and functions
- Discuss its current usage in the field (including whether it is an established or emerging product, how much a part of the marketplace the produce is, is it used a lot or just emerging, is it new or has it been around for a while, is the product 'big' or 'small')
- The product's vendors
- The benefits of the product related to healthcare delivery, an example of where the product is currently used
- Your position regarding the products usefulness and viability

This presentation should include a title slide, an introduction and conclusion slide, an APA-formatted reference page slide, and an additional 12-15 slides for content. Total this assignment should be 15-20 slides. Presentations will be graded based on content and overall presentation. It is recommended you use the note section on PowerPoint to expand your thoughts and analysis. All content slides must be appropriately referenced.

### Position Paper

The purpose of this paper is to identify and explore one aspect of health care informatics or health information technology that is of special interest to you by developing a position paper on the topic and a logical defense of your position. The topic you select should be focused on a health topic that is enabled or impacted by the use of information technology. You may select a topic from the course content, one of the topics mentioned below, or one of your own choosing (which must be approved by the course instructor).

# The paper should:

- Define your topic and list key words used to research your topic
- Discuss the background, emergence, and future role of your topic (how your topic fits into the future of health information systems in health care)
- Discuss current use and status of your topic within the field of health information including strengths and weaknesses related to your topic
- Discuss barriers and key challenges to implementation and/or adoption
- Discuss any variance or incongruous opinions related to your topic from the literature (including all viewpoints)
- Discuss in detail your position related to the topic (status, current and future uses)

Complete and logical reasoning for your position should be presented and supported by literature. This assignment should be approached from an application focus, discussing how your topic is applied to improve health care delivery.

# Some Possible Topics

- Electronic Medical Records
- eHealth applications
- Telemedicine
- Patient Care applications
- Computer Prescriber Order Entry
- Clinical Guidelines
- Decision Support Systems
- HIPAA Security Provisions
- Management
- Simulation
- Health care and the Internet
- Mobile Technology
- New Technology/Equipment/Devices

- Data Security
- Data repositories (specific focus on one)
- Artificial Intelligence
- Cybersecurity

This paper should be 8-10 pages, not including title page, references, or appendices and should follow current APA guidelines. Title page, introduction, and conclusion required.

Extra Credit

Extra credit will not be granted in this course.

Late Work

Late work will not be accepted.

Important Dates

Last day for term schedule changes: January 24 Deadline to file for graduation: February 17 Last Day to drop with a grade of "W:" April 30

Refer to: Drops, Withdrawals & Void

Desire-to-Learn (D2L)

Extensive use of the MSU D2L program is a part of this course. Each student is expected to be familiar with this program as it provides a primary source of communication regarding assignments, examination materials, and general course information. You can log into <u>D2L</u> through the MSU Homepage. If you experience difficulties, please contact the technicians listed for the program or contact your instructor.

### Attendance

This is an online course and students are required to regularly login and check for any announcements posted. Students are expected to attend all meetings of the classes in which they are enrolled. Although in general students are graded on intellectual effort and performance rather than attendance, absences may lower the student's grade where class attendance and class participation are deemed essential by the faculty member. In those classes where attendance is considered as part of the grade, the instructor should so inform students of the specifics in writing at the beginning of the semester in a syllabus or separate attendance policy statement. An instructor who has an attendance policy must keep records on a daily basis. The instructor must give the student a verbal or written warning prior to being dropped from the class. Instructor's records will stand as evidence of absences. A student with excessive absences may be dropped from a course by the instructor. Any individual faculty member or

college has the authority to establish an attendance policy, providing the policy is in accordance with the General University Policies.

# Online Computer Requirements

Taking an online class requires you to have access to a computer (with Internet access) to complete and upload your assignments. It is your responsibility to have (or have access to) a working computer in this class. Assignments and tests are due by the due date, and personal computer technical difficulties will not be considered reason for the instructor to allow students extra time to submit assignments, tests, or discussion postings. Computers are available on campus in various areas of the buildings as well as the Academic Success Center. Your computer being down is not an excuse for missing a deadline!! There are many places to access your class! Our online classes can be accessed from any computer in the world which is connected to the internet. Contact your instructor immediately upon having computer trouble If you have technical difficulties in the course, there is also a student helpdesk available to you. The college cannot work directly on student computers due to both liability and resource limitations however they are able to help you get connected to our online services. For help, log into D2L.

# Change of Schedule

A student dropping a course (but not withdrawing from the University) within the first 12 class days of a regular semester or the first four class days of a summer semester is eligible for a100% refund of applicable tuition and fees. Dates are published in the Schedule of Classes each semester.

# Refund and Repayment Policy

A student who withdraws or is administratively withdrawn from Midwestern State University (MSU) may be eligible to receive a refund for all or a portion of the tuition, fees and room/board charges that were paid to MSU for the semester. HOWEVER, if the student received financial aid (federal/state/institutional grants, loans and/or scholarships), all or a portion of the refund may be returned to the financial aid programs. As described below, two formulas (federal and state) exists in determining the amount of the refund. (Examples of each refund calculation will be made available upon request).

#### Services for Students with Disabilities

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Clark Student Center, Room 168, (940) 397-4140. Current documentation of a disability will be required in order to provide

appropriate services, and each request will be individually reviewed. For more details, please go to <u>Disability Support Services</u>.

# College Policies

# Campus Carry Rules/Policies

Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. The new Constitutional Carry law does not change this process. Concealed carry still requires a License-to-carry permit, and openly carrying handguns is not allowed on college campuses. For more information, visit <a href="Campus Carry Rules">Campus Carry Rules</a> and Policies

# Smoking/Tobacco Policy

Midwestern State University seeks to provide a safe, healthy, pleasant environment for its faculty, staff, and students. To this end, the use of tobacco products, including smoke and smokeless tobacco, and the advertising, sale, free distribution, and discarding of tobacco products shall be prohibited in all indoor and outdoor facilities and in all university vehicles. The policy extends to faculty, staff, students, vendors, quests, and visitors.

# Alcohol and Drug Policy

To comply with the Drug Free Schools and Communities Act of 1989 and subsequent amendments, students and employees of Midwestern State are informed that strictly enforced policies are in place which prohibits the unlawful possession, use or distribution of any illicit drugs, including alcohol, on university property or as part of any university-sponsored activity. Students and employees are also subject to all applicable legal sanctions under local, state and federal law for any offenses involving illicit drugs on University property or at University-sponsored activities.

### Active Shooter

The safety and security of our campus is the responsibility of everyone in our community. Each of us has an obligation to be prepared to appropriately respond to threats to our campus, such as an active aggressor. Please review the information provided by the MSU Police Department regarding the options and strategies we can all use to stay safe during difficult situations. For more information, visit MSUReady – Active Shooter. Students are encouraged to watch the video entitled "Run. Hide. Fight." which may be electronically accessed via the University police department's webpage: "Run. Hide. Fight."

### **Grade Appeal Process**

Students who wish to appeal a grade should consult the Midwestern State University <u>Undergraduate Catalog</u>

### \*Notice

Changes in the course syllabus, procedure, assignments, and schedule may be made at the discretion of the instructor.

### Course Schedule:

The following is a recommended schedule. We will work on a Monday thru Sunday schedule. Please note that the last day of the semester is May 11, 2025.

Course Schedule

Week Activities/Assignments/Exams Due Date			
1	1 7 7	<b>Discussion:</b> Only	
Jan. 20-26	<ul><li>1. Review Course Syllabus</li><li>2. Discussion:</li><li>"Get to know you" discussion</li></ul>	initial post due this week.	
2 Jan. 27- Feb. 2	<ul> <li>1. Read: <ul> <li>Chapter 1 &amp; 2 in the text</li> <li>Review Chapter 1 &amp; 2 Power Points</li> </ul> </li> <li>2. Discussion: <ul> <li>Exploring the Impact of EMRs on Clinical Practice and EHR Information Management</li> </ul> </li> </ul>	Discussion: Initial Post due Wednesday by 11:59 pm and peer responses due Sunday by 11:59pm.	
3 Feb. 3-9	<ul> <li>1. Read: <ul> <li>Chapter 3 &amp; 4 in the text</li> <li>Review Chapter 3 &amp; 4 Power Points</li> </ul> </li> <li>2. Discussion: <ul> <li>Examining Evidence-Based Practice and Hospital Structures Impact on Decision Making</li> </ul> </li> </ul>	Discussion: Initial Post due Wednesday by 11:59 pm and peer responses due Sunday by 11:59pm.	
4 Feb. 10-16	<ul> <li>1. Read: <ul> <li>Chapter 5 in the text</li> <li>Review Chapter 5 Power Points</li> </ul> </li> <li>2. Discussion: <ul> <li>Challenges in Applying Modeling to Transform Healthcare</li> </ul> </li> </ul>	Discussion: Initial Post due Wednesday by 11:59 pm and peer responses due Sunday by 11:59pm.	
5 Feb. 17-23	Complete the Applied Health     Information Problem Analysis Paper	Assignment: Submit your paper in the dropbox due Feb. 23 by 11:59pm.	
6 Feb. 24 – March 2	<ul> <li>1. Read: <ul> <li>Chapter 6 &amp; 7 in the text</li> <li>Review Chapter 6 &amp; 7 Power Points</li> </ul> </li> <li>2. Discussion: <ul> <li>Exploring CDSS and Nursing Informatics in Patient Care and Education</li> </ul> </li> </ul>	Discussion: Initial Post due Wednesday by 11:59 pm and peer responses due Sunday by 11:59pm.	
7 March 3-9	<ul> <li>1. Read: <ul> <li>Chapter 8 in the text</li> <li>Review Chapter 8 Power Points</li> </ul> </li> <li>2. Discussion: <ul> <li>The Role of Social Media in E-Health</li> </ul> </li> </ul>	Discussion: Initial Post due Wednesday by 11:59 pm and peer responses due Sunday by 11:59pm.	

March 10-16	SPRING BREAK	
8 March 17-23	<ul> <li>1. Read: <ul> <li>Chapter 9 in the text</li> <li>Review Chapter 9 Power Points</li> </ul> </li> <li>2. Discussion: <ul> <li>Balancing Genomic Research and Patient Privacy</li> </ul> </li> </ul>	Discussion: Initial Post due Wednesday by 11:59 pm and peer responses due Sunday by 11:59pm.
9 March 24-30	<ul> <li>1. Read: <ul> <li>Chapter 10 in the text</li> <li>Review Chapter 10 Power Points</li> </ul> </li> <li>2. Discussion: <ul> <li>Exploring Core Metrics in Healthcare</li> </ul> </li> </ul>	Discussion: Initial Post due Wednesday by 11:59 pm and peer responses due Sunday by 11:59pm.
10 March 31- Apr. 6	<ul> <li>1. Read: <ul> <li>Chapter 11 &amp; 12 in the text</li> <li>Review Chapter 11 &amp; 12 Power Points</li> </ul> </li> <li>2. Discussion: <ul> <li>Evidence-Based Systems and</li> <li>Knowledge Representation in</li> <li>Healthcare</li> </ul> </li> </ul>	Discussion: Initial Post due Wednesday by 11:59 pm and peer responses due Sunday by 11:59pm.
11 Apr. 7-13	<ul> <li>1. Read: <ul> <li>Chapter 13 &amp; 14 in the text</li> <li>Review Chapter 13 &amp; 14 Power Points</li> </ul> </li> <li>2. Discussion: <ul> <li>Prioritizing Strategies and</li> <li>Understanding HIT Initiative Failures</li> </ul> </li> </ul>	Discussion: Initial Post due Wednesday by 11:59 pm and peer responses due Sunday by 11:59pm.
12 Apr. 14-20	<ul> <li>1. Assignment</li> <li>Complete the Presentation of a Health Information Product</li> </ul>	Assignment: Submit your presentation in the dropbox due April 20th by 11:59pm.
13 April 21-27	<ul> <li>1. Read: <ul> <li>Chapter 15 &amp; 16 in the text</li> <li>Review Chapter 15 &amp; 16 Power Points</li> </ul> </li> <li>2. Discussion: <ul> <li>IT Infrastructure and Privacy, Security, and Safety in Healthcare</li> </ul> </li> </ul>	Discussion: Initial Post due Wednesday by 11:59 pm and peer responses due Sunday by 11:59pm.

14 April 28- May 4	<ul><li>1. Assignment:</li><li>Work your Position Paper and submit in the dropbox</li></ul>	Assignment: Submit your paper in the dropbox due May 7 by 11:59pm.
15 May 5-11	<ul><li>1. Assignment:</li><li>Complete your Position Paper and submit in the dropbox</li></ul>	Assignment: Submit your paper in the dropbox due May 7 by 11:59pm.
16 May 12-16	Post on discussion board what you found most interesting about this course and improvements you would suggest. This will be a part of your discussion grade.  All work is due by May 16 <sup>th</sup> !!!  Congrats Graduates!!!!	Complete Course Evaluations