

Midwestern State University

Robert D. & Carol Gunn College of Health Sciences & Human Services
Revised July 2023

Course Number: RADS 4533 3 credits Fall 2023

Course Title: Informatics and Imaging

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Course Overview:

This course introduces the concepts of information technology as it relates to health care and radiology. Healthcare data trends, electronic health records architecture of information systems, health information privacy and security, ethics, mobile technology, telemedicine, PACS, quality improvement, and patient safety.

Course Objectives:

Upon completion of this course, students will be able to:

- Discuss the concept of health informatics as it relates to healthcare facilities
- Describe the architecture of healthcare information systems
- Relate the importance of healthcare ethics and patient safety to health information technology
- Explain the PACS system and processes.

Textbook:

Hersh, W.R. (2022). *Health Informatics: Practical Guide*. (8th ed). http://informaticseducation.org/ [ISBN: 978-1-387-85475-2]

MSU Bookstore prices: New: \$116.25

Used: \$87.25

Additional Resources:

It is recommended that students download Google Chrome (a free download through Google) or Mozilla Firefox and use one of those as the default browser for ALL D2L courses. This appears to eliminate 99% of technical issues often encountered with Internet Explorer, Apple Safari, etc.

Students MUST have reliable computer and internet access. ALL STUDENTS MUST HAVE A WEBCAM AND MICROPHONE – NO EXCEPTIONS!

Communication with the Instructor:

Communication will be through the student's Midwestern State University email account. An email account is created for every MSU student. If you have not accessed this account yet, please do so by logging into the Portal and clicking the student email account icon located in the Portal.

You have the option to have any messages sent here to be forwarded to the email account of your choice.

The instructor will respond or at least acknowledge email messages from students within a maximum of five (5) business days when MSU is in session. Beyond standard university holidays and breaks, the instructor will notify students of any extended periods of time when email contact is not practical (professional meetings, etc.).

When emailing the instructor, please include your full name, course and section number, and a thorough explanation in your message. This will help expedite your request or needs.

Students should also periodically check the 'News' section within D2L for course updates and other important information.

Class Meeting Date and Time:

Since this is an online course, there are no mandatory face-to-face sessions. However, the student should be vigilant in logging into D2L. Regular checks will ensure messages from the instructor are received in a timely manner. This course is on a schedule that will be strictly adhered to. See the Course Schedule at the end of this syllabus for specific information about activities and due dates. The instructor will be available to meet face-to-face with any interested students. This meeting is optional and must be confirmed by email ahead of time with the instructor.

Methodology/Teaching Strategies:

This is an online course. All notes and additional reading material (other than the textbook) will be delivered through D2L.

Evaluation Method:

Percentage Distribution	Value
Module Quizzes	35%
Discussions	35%
Comprehensive Final Exam	30%

Grading Scale:

Grade	Range
A	90-100
В	80-89
С	70-79
D	60-69
F	59 or below

The last opportunity to drop this course with a grade of "W" is 4:00pm October 30, 2023. Please refer to the Undergraduate Bulletin for details about receiving a grade of "Incomplete" in a course.

In an emergency or extenuating circumstance, a student may request a grade of "Incomplete" in a course before grades are submitted.

If the instructor grants the "Incomplete," the student has until thirty (30) days after the beginning of the next long semester to complete the course requirements. If the student does not complete the course requirements within the deadline, the grade of "Incomplete" will automatically convert into a grade of "F."

Student Responsibilities:

As a student enrolled in this course, you will be responsible for adhering to and meeting posted deadlines and due dates. All activities for this course are listed at the end of this syllabus.

Activities such as quizzes have expiration dates. Please take note that expiration dates for quizzes will differ from deadlines for assignments and activities.

Quizzes and assignments/activities are spaced in a manner that will allow you ample time to complete them. Assignments/activities will be accepted on or before the posted due date and deadline. Late assignments will be accepted on a case by case basis. If a student cannot complete a course activity by the indicated due date, the student must contact the course instructor immediately. Please note that late submissions may not be graded unless prior approval has been granted. If a student

has emergency issues, then the student must contact the instructor as soon as possible (within a day or two).

Students must use baccalaureate level writing skills including complete sentences, correct grammar, and proper punctuation. All assignments will be graded for accuracy, completeness, quality, spelling, grammar, and integrity.

All assignments will be submitted in a dropbox within D2L. All assignments will be completed in Times New Roman or Arial, 12 point font.

See the course calendar for the specific due date.

HIPAA Requirement:

Do not place ANY patient name on your assignments. Any proper name that appears on an assignment, other than yours will be considered a HIPAA violation and the assignment grade may be dropped to as low as a zero, depending on the severity of the violation.

Order of Content:

Since this course is highly interactive between students with much of the learning occurring in the discussion boards, students are required to complete the course content in the order presented in the course by the dates listed in the course schedule.

If students have technical difficulties, they should use the 'Help' link within D2L, contact the MSU Information Systems Support Staff, and send an email to the professor explaining what happened at the time of the incident.

All assignments must be written at the baccalaureate level and will be graded for accuracy, completeness, quality, spelling, grammar, and integrity. All assignments submitted will be considered complete and graded as such.

All assignments, exams, etc. must be completed and submitted by the due date indicated on the course schedule at the end of this syllabus. If a student cannot complete a course activity by the indicated due date, the student must contact the course instructor *immediately*. Please note that late submissions may not be graded; students must contact the instructor for approval for late submissions. If a student has emergency issues, then the student must contact the instructor as soon as possible (within a day or two). Any activity not completed and submitted by the due date will be addressed on an individual basis.

Independent Module Readings

Module 1: Chapters 1,2,3

- Module 2: Chapter 4
- Module 3: Chapters 5,6,7
- Module 4: Chapters 8,9
- Module 5: Chapters 10,11
- Module 6: Chapters 12,13,14
- Module 7: Chapters 18,19
- Module 8: Chapters 21,22,23

D2L Module Quizzes (35%)

Students should complete the reading assignments and be familiar with the chapter objectives before attempting the module quizzes. Quiz questions will be from information learned in the modules.

When a student has reviewed a module and is ready for the quiz, they will log into D2L and receive a customized timed module quiz consisting of randomized multiple choice questions. See the course schedule at the end of this syllabus for the due dates for quizzes. Students will have two attempts at each module quiz. The highest of the two attempts will be recorded.

It is important to know the module content before attempting the module quizzes since the quizzes are timed. Quiz scores will be available immediately after a student submits for grading. Quizzes must be completed by the due dates or a zero (0) will be recorded. Students who know they will miss a due date because of extenuating circumstances should contact the instructor so their situations can be dealt with on an individual basis. Acceptance of an extenuating circumstance is at the discretion of the instructor.

If students have technical difficulties during a quiz, they should use the 'Help' link located on the top toolbar within D2L to contact the MSU Information Systems Support Staff and send an email to the course instructor immediately explaining what happened.

If a student finds a faulty quiz test item or believes a quiz question has been scored incorrectly, they should send an email to the course instructor that includes the following:

- Module quiz number (1-5)
- Question stem
- Rationale supporting why the student's answer is correct
- Include page numbers when referencing the textbook

For example, a student cannot send the message: "I think question number ten is wrong on quiz four" because each student gets a quiz of randomly generated test items. The instructor has to know the question stem to find the question in the database. After reviewing the situation, if the course instructor thinks a revision is justified, the students'

quiz score will be revised to reflect the additional points and the test bank will be updated.

Discussions (35%)

There are 11 discussion topics in this course. Each discussion requires an original post and at least two replies to two of your peers. Please be mindful and post early enough to allow your classmates ample time to respond to your post!

Comprehensive Final Exam (30%)

The final exam is a comprehensive exam and will be administered within D2L. The final exam is timed and can only be completed once for a grade. It will only be available during the times and dates found on the course schedule. The final exam will be an open-book, timed final so studying will be required. This is meant to be an individual effort by the student. Any evidence of collaboration is considered cheating and may be grounds for dismissal from the program.

Special Needs:

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 adjustments in its policies, practices, services, and facilities to ensure equal opportunity for qualified persons with disabilities to participate in all educational programs and activities.

The Office of Disability Support Services (DSS) provides information and assistance, arranges accommodations, and serves as a liaison for students, instructors, and staff. The DSS has assistance devices such as books on tape, recorders, and adaptive software, which can be loaned to qualified individuals. A student/employee who seeks accommodations on the basis of disability must register with the Office of Disability Support Services in the Clark Student Center Room 168 or call 940-397-4140 for more information. Documentation of disability from a competent professional is required.

Individuals with grievances related to discrimination or lack of accommodation on the basis of a disability are encouraged to resolve the problem directly with the area involved. If the matter remains unresolved, advice and/or assistance will be provided by the Office of Disability Services for resolution. The grievance procedure may be found in the Student Handbook and Activities Calendar.

The ADA Coordinator may be contacted at (940) 397.4140, or 3410 Taft Blvd., Clark Student Center Room 168.

Conduct/Honesty/Honor System:

RADS 4533 adheres to the MSU Code of Conduct. In particular, academic dishonesty, however small, creates a breach in academic integrity. A student's participation in this course comes with the expectation that his/her work will be completed in full observance of the MSU Code of Student Conduct. A student should consult the Student Handbook for answers to any questions about the code.

Students are encouraged to take full advantage of many resources available including Internet sites, handouts, other textbooks & journals, faculty, and peers. This interactive collegial learning environment is conducive to life-long learning.

Specific components of RADS 4533 are designed to represent the efforts of each student individually and are NOT to be shared. These components include the written assignment submitted for a grade. Submitting someone else's work as your own or improperly cited work constitutes plagiarism. Please see the Midwestern State University Catalog for further discussion of plagiarism. Plagiarism will constitute in an F for the course and the student will be referred to administration for further action. When students submit their efforts for grading, they are attesting they abided by this rule. Quizzes and exams are not to be copied in any form or shared in any form. Students caught engaging in such activity will receive an F for the course and be referred to University administration for dismissal.

Cheating includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or completing other assignments; or (3) the acquisition of tests or other academic materials belonging to the university faculty or staff without permission.

Plagiarism includes, but is not limited to: the use of, by paraphrase or direct quotation without correct citation in the text and on the reference list, the published or unpublished works of another person. Students may not submit papers and assignments that they have previously submitted for this or other courses. The use of materials generated by agencies engaged in "selling" term papers is also plagiarism. Students are encouraged to review the tutorials and suggested websites for more information about plagiarism.

By enrolling in this course, the student expressly grants MSU a limited right in all intellectual property created by the student for the purpose of this course. The limited right shall include but shall not be limited to the right to reproduce the students work product in order to verify originality and authenticity, and for educational purposes.

Campus Carry:

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 Campus Carry.

Active Shooter:

The safety and secutiry 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 MSU Police Department regarding the options and strategies we can all use to stay safe during difficult situations. For more information, visit Safety/Emergency Procedures. Students are encouraged to watch the video entitled <a href="Run, Hide, Fight."

Administrative Process:

Unresolved issues related to this course should be first addressed between the student and the course instructor. If there is no resolution, students must follow this sequence:

- 1. Department Chair: Dr. Beth Vealé (940) 397.4611
- 2. College Dean: Dr. Jeff Killion (940) 397.4594
- 3. Dean of Students: Matthew Park (940) 397.7500

Tentative Course Schedule

Date	Activity All assignments are due by 11:59pm CST on the indicated due date
August 28	Classes begin All quizzes and assignments open
	Review the Welcome Module and the Course Syllabus Note: Each Chapter has discussion topics
September 5	Module 1 Discussions & Quiz
September 12	Module 2 Discussions & Quiz EHR Practice Fusion Exercise due Oct 17
September 26	Module 3 Discussions & Quiz
October 10	Module 4 Discussions & Quiz
October 17	Module 5 Discussions & Quiz
October 31	Module 6 Quiz
November 14	Module 7 Discussions & Quiz
November 28	Module 8 Discussions & Quiz
December 5	Final Exam Opens at 6AM
December 5	Final Exam Closes at 11:59PM