Course Syllabus: **Mammography Quality Practice**
Robert D. and Carol Gunn College of
Health Science and Human Services
RADS 4763- X20/Y21
Spring 2026

Contact Information
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Textbook & Instructional Materials
Required Textbook: Lille, S.L., Marshall, W.J., (2019). *Mammographic Imaging: A Practical Guide* (4th ed.) Wolters Kluwer. [ISBN 978-1-49635-202-6] Other materials are included in the Introduction for each unit.

Course Description
This course introduces regulations and quality control procedures established under the Mammography Quality Standards Act. Credit may be awarded to individuals who are registered in mammography by the ARRT.

This course provides the student with a portion of the educational and clinical requirements necessary to perform mammography exams as a qualified mammographer. This course contains five modules that will cover, Patient Care & Interactions, Digital-DBT Mammography & Quality Control, Advanced Positioning, Compression & Implants, Reports, Accreditation, Certification & Inspection. Course content includes a non-clinical component with specific nonclinical coursework and a clinical component with a portion of the required clinical competencies for both the Mammography Quality Standards Act (MQSA) Initial Training and the American Registry of Radiologic Technologist's (ARRT) Mammography certification exam requirements. Students must complete the Class Project Survey to be placed in clinical or nonclinical aspect of the course.

To fulfill all necessary requirements for MQSA Initial Training and eligibility to sit for the ARRT certification test, this course must be completed concurrently *or* in addition to RADS-4753. Only the successful completion of both RADS-4753 and RAD-4763 will meet the above requirements. Non-clinical student may take this course independently and are required to complete all non-clinical assignments. Taking this course alone will not meet MQSA or ARRT requirements.

Course Objectives

Upon completion of this course the student will know:

- The importance of working with the patient to create a positive patient-centered experience
- The risk factors related to breast cancer
- About Digital Breast Tomosynthesis, it's benefits and how it is performed
- The principals of DBT as it relates to the different vendors DBT, and the image differences related to image quality
- The purpose and requirements of equipment quality control tests related to MQSA
- The use of complementary or replacement imaging during the mammography exam based on the patient or exam assessment
- The technique and positions used in imaging patients with breast implants
- The importance of compression and its effect on image quality
- How to conduct image assessment based on the imaging criteria
- How findings are identified in the breast with established terminology
- The common breast procedures and basics of how they are performed
- The various surgical options and when each is recommended
- The MQSA requirements for mammography reports and lay letters
- The BIRADS exam and breast density categories and their uses within the mammography report and patient lay letter
- What EQUIP is and how it is integrated into a facility

Worksheets & Modules

Each unit has a reading assignment, a fill in the blank worksheet assignment and a corresponding ASRT Module that must be completed. Both make up the assignment grade for each unit. These are to be completed and submitted as instructed for each unit through D2L. Failure to complete both will result in deduction of points for the assignment. All assignments makeup 25% of the overall grade. Each unit assignment is weighted evenly. Assignments must be received prior to the due date. Please see the class calendar on page 9 for due dates. A zero will be recorded for assignments not submitted or meeting the deadline. Once graded the worksheet should serve a preparation and study material for the final exam and mammography certification exam if you are pursuing certification. See **Late Work and Extra Credit on page 3.**

Quizzes

Unit quizzes are given through D2L. These quizzes are open book, open note but you have time limits to complete them and must be prepared as there will not be enough time to research every answer. All quizzes together make up 20% of the overall grade. Each unit quiz it weighted evenly and must be completed prior to the due date. Please see the class calendar on page 9 for due dates. Quizzes may not be made up if missed and a zero will be recorded. Quiz grades and answers will be released after the deadline of each quiz. See **Late Work and Extra Credit on page 3.**

Final Exam

The final exam is a comprehensive proctored exam and will be administered within D2L. The Proctored Final is to be taken without the benefit of books, notes, or references and by using LockDown Browser, Respondus Monitor and a webcam for online exams. The final exam contains 100 questions from all five units and is 25% of the overall grade. See **Download Instructions for Final** on pages 7 and 8.

Projects

All students are required to complete the Mammography Course Project for RADS-4753. There is the Clinical Project for student seeking a clinical pathway and the Non-clinical Project for those seeking a non-clinical pathway. These projects have components that require research and citations of references are required. To determine which project to follow, each student is required to complete the Class Project Survey located in the Read First folder in D2L. There is a deadline to complete this survey. Both the Clinical Project and the Non-clinical projects are weighted equally and makeup 30% of the overall grade. All projects must be uploaded to the drop box on or before the project deadline. Please see the class calendar on page 9 for due dates. See **Late Work and Extra Credit on page 3.**

Late Work and Extra Credit

If a student cannot complete a course activity by the indicated due date, the student must contact the course instructor. **Students must contact the instructor for preapproval of late submissions.** If a student has emergency issues, then the student must contact the instructor as soon as possible. Any activity not completed and submitted by the due date will receive a grade of 0. There is no extra credit for this course.

Grading/Assessment

There are 5 Unit assignments worth 25% and 5 Unit quizzes worth 20%. There is a Course Project worth 30% and a Final Exam worth 25% of the final grade. These total 100 and grades are assigned based on the total number of points earned as listed below.

Total points for final grade.

Grade	Points
A	90-100
B	80 to 89
C	70 to 79
D	60 to 69
F	Less than 60

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 D2L through the MSU Homepage. If you experience difficulties, please contact the technicians listed for the program or contact your instructor.

Attendance

This course is an online delivery with asynchronous interactions between students and teacher, and application activities. This strategy gives students the ability to work at their pace and interact with the instructor as necessary. As a student enrolled in this course, you will be responsible for adhering to and meeting posted deadlines and due dates. Activities such as assignments and quizzes have expiration dates. Please see the class calendar on page 9 for due dates. Quizzes and assignments/activities are spaced out in a manner that will allow you ample time to complete them. All activities will be accepted on or before the posted due date and must be submitted in a drop box within D2L.

This course can contain a clinical component that must be completed in a setting where the student has access to real patients and it must be set up at the beginning the course. It also contains a non-clinical component for students that do not have a clinical setting or have no desire to obtain mammography certification. All students are required to complete a Mammography Course Project. You MUST complete the Class Project Survey located under the Read First tab on the content page and determine the Clinical and Non-clinical Class Project pathway.

Instructor Response Policy

Communication will be primarily through D2L and 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 messages from students within a maximum of three (3) 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 to help expedite your request or needs.

Instructor Class Policies

This course is intended for students to work independently and at their pace. To keep students progressing through the course the schedule will be strictly adhered to. See the Course Schedule on page 9 for specific information about activities and due dates. If circumstances arise that a student needs assistance with, contact the instructor using the email listed at the top of the syllabus. The instructor can be available to meet with a student if necessary. Meetings must be confirmed by email ahead of time with the instructor. See **Late Work and Extra Credit on page 3**.

Online Computer Requirements

This is an online course and *may* have mandatory face-to-face sessions based on your degree plan. Please complete the Class Project Survey located under the Read First Tab on the Content page in D2L to determine your specific 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. Computers are available on campus in various areas of the buildings as well as the Academic Success Center. 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 a 100% 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 Disability Support Services.

Student Handbook

Refer to: Student Handbook-2021-22

Academic Misconduct Policy & Procedures

RADS-4753 adheres to the MSU Code of Conduct. 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. 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-4753 are designed to represent the efforts of each student individually and are NOT to be shared. Submitting someone else's work as your own or improperly cited work constitutes plagiarism. Please see the MSU 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.

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 individuals to whom credit is given). Additional guidelines on procedures in these matters may be found in the Office of Student Conduct. [Office of Student Conduct](#)

Artificial Intelligence (AI)-Declaration of Generative AI in Academic Writing
For all writing assignments, the student will not use generative artificial intelligence (AI) to construct the content of the assignment. Doing so is similar to plagiarism, and the assignment may be subject to a grade of zero or failure of the course, depending on the severity of the incident. AI-assisted technologies should only be used to improve readability and language. If used, it is the responsibility of the student to carefully review and edit this content, as AI can generate incorrect, incomplete, or biased information. Using these technologies requires human oversight and control. Additionally, AI and AI-assisted technologies should not be listed as an author or co-author or cited as an author. If the student uses AI-assisted technologies, a disclosure must appear at the end of the document in a separate section before the references, using the following format.
Declaration of Generative AI and AI-Assisted Technologies in the Writing Process
Statement: During the preparation of this work the author(s) used [NAME TOOL / SERVICE] in order to [REASON]. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.
Academic dishonesty will not be tolerated in this class. When unsure whether a situation will be interpreted as academic dishonesty, you should ask your professor for clarification. If you are guilty of academic dishonesty, a grade of zero (0) will be given for the quiz, assignment, etc. Cases may also be referred to the Dean of Students for possible dismissal from the University.

Administrative Process
Unresolved issues related to this course should first be addressed between the student and the course
professor. If there is no resolution, students must follow this sequence:
1. Interim Department Chair – Dr. Lynette Watts (940-397-4575)
2. College Dean - Dr. Jeff Killion (940-397-4594)
3. Dean of Students – Matthew Park (940-397-7500)

College Policies

Smoking/Tobacco Policy
College policy strictly prohibits the use of tobacco products in any building owned or operated by MSU TEXAS Adult students may smoke only in the outside designated-smoking areas at each location.

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 universitysponsored 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.

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 has 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 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 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

Update as needed. Students who wish to appeal a grade should consult the Midwestern State University MSU Catalog

Writing Proficiency Requirement

All students seeking a bachelor's degree from Midwestern State University must satisfy a writing proficiency requirement once they've earned 60 hours. You may do so by passing either the Writing Proficiency Exam or English 2113. Please keep in mind that, once you've earned over 90 hours, you lose the opportunity to take the $25 exam and have no option but to enroll in the three-credit hour course. If you have any questions about the exam, visit the Writing Proficiency Office website at Writing Proficiency Exam, or call (940) 397-413

Download Instructions for Final

This course requires the use of LockDown Browser and a webcam for the final exam. The webcam can be the type that's built into your computer or one that plugs in with a USB cable. Watch this brief video to get a basic understanding of LockDown Browser and the webcam feature. https://www.respondus.com/products/lockdown-browser/student-movie.shtml

Download Instructions

- Select the quiz in the course
- Under Quiz Requirements you will see "To take this quiz you must use the Respondus LockDown Browser"
- Below this will appear: "You can use the button below if you have not already downloaded Lock Down Browser". Click the button to go to the download page and then follow the instrucions
- Use the link to download Respondus LockDown Browser to your computer; follow the installation instructions
- Return to the Quiz page in Brightspace (it may still be open in another tab) and select the quiz
- Select "Launch LockDown Browser"

The quiz will now start

Note: LockDown Browser only needs to be installed once to a computer or device. It will start automatically from that point forward when a quiz requires it.

Guidelines

When taking an online quiz, follow these guidelines:
- Ensure you're in a location where you won't be interrupted
- Turn off all other devices (e.g. tablets, phones) and place them out of reach
- Before starting the test, know how much time is available for it, and that you've allotted
- sufficient time to complete it
- Clear your desk or workspace of all external materials not permitted - books, papers, other devices
- Remain at your computer for the duration of the test
- If the computer, Wi-Fi, or location is different than what was used previously with the "Webcam Check" and "System & Network Check" in LockDown Browser, run the checks again prior to the exam
- To produce a good webcam video, do the following:

- Avoid wearing baseball caps or hats with brims
- Ensure your computer or device is on a firm surface (a desk or table). Do NOT have the computer on your lap, a bed, or other surface where the device (or you) are likely to move
- If using a built-in webcam, avoid readjusting the tilt of the screen after the webcam setup is complete
- Take the exam in a well-lit room, but avoid backlighting (sitting back to a window) o Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

Getting Help

Several resources are available if you encounter problems with LockDown Browser:
- The Windows and Mac versions of LockDown Browser have a "Help Center" button located on the toolbar. Use the "System & Network Check" to troubleshoot issues. If an exam requires you to use a webcam, also run the "Webcam Check" from this area
- Respondus has a Knowledge Base available from support.respondus.com. Select the "Knowledge Base" link and then select "Respondus LockDown Browser" as the product. If your problem is with a webcam, select "Respondus Monitor" as your product

If you're still unable to resolve a technical issue with LockDown Browser, go to support.respondus.com and select "Submit a Ticket". Provide detailed information about your problem and what steps you took to resolve it.

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Notice

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

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Important Dates

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Last day for term schedule changes: Check date on Academic Calendar. Deadline to file for graduation: Check date on Academic Calendar.
Last Day to drop with a grade of "W:" Check date on Academic Calendar. Refer to: Drops, Withdrawals & Void

Your success in this course is

dependent on the energy you put into

it. It is labor intensive but rewarding at the end.

Find your passion in Mammography!

Course Schedule

Date	Activity
January 20	Classes begin
January 30	Class Project Survey (Under Surveys Tab in Assesments)
February 6	Unit 1 Worksheet Assignment Due
February 13	Unit 1 Quiz Due
February 20	Unit 2 Worksheet Assignment Due
February 27	Unit 2 Quiz Due
March 6	Unit 3 Worksheet Assignment Due
March 9-13	Spring Break
March 20	Unit 3 Quiz Due
March 27	Unit 4 Worksheet Assignment Due

April 3	Unit 4 Quiz Due
April 10	Unit 5 Worksheet Assignment Due
April 17	Unit 5 Quiz Due
April 29 May 1	Last day to drop for a "W" Mammography Course Project Due
May 8	Last day of class Finals Open May 4-16
May 15	Last day to take Final
May 16	Commencement

Course outline with assigned course topics, assigned readings, and assignments are required for certification courses.