Course Syllabus: RADS 4773 MRI Applications

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

Department of Radiologic Sciences

Course Information

Information	Description
Name	RADS 4773-MRI Applications(online)
Credit	3 hours
Term	Spring 2025
Dates	January 21- May 9, 2025
Class Meeting Times and Days	Fully Online-Asynchronous (BSRS)/Hybrid (BSRT)
Time Commitment	Students should expect to spend at least 9 hours per week on course material (15-week term)

Professor

Kimberly Onstott EdD, RT(R)(CT)(MR), MRSO(MRSC™) Assistant Professor, Radiologic Sciences

Email: kimberly.onstott@msutexas.edu

Use this format in the subject line: 4773_your last name_topic of the message.

Email is the best way to contact me. If I haven't responded within 72 hours, please email me again.

Phone: (940) 397-4332

Office location: Midwestern State University

3410 Taft Blvd

Centennial Hall 430Q

Wichita Falls, TX 76309

Office hours: Mondays 12-2, Wednesdays 12:30-14:30, & Thursdays 9-10

Please make an appointment by email to be sure I am not meeting with another student at the same time.

Zoom meetings, phone meetings, and any additional hours can be arranged by email request

Course Description

This course provides a functional understanding of the basic MRI parameters and how they are used to image specific parts of the body in the axial, coronal, and sagittal planes. The focus of this course will be on MR sequences and the presentation of anatomy and pathology. This course meets the 16 hours of MRI structured education required by the American Registry of Radiologic Technologists (ARRT).

Course Objectives

To understand the clinical applications of MRI, one must have a basic understanding of the physics of MRI. You should gain a very basic understanding of the physical aspects of MRI, the equipment used, and the instrumentation. This course will deal mainly with the clinical applications and procedures required to produce a diagnostic MRI exam. This course is not designed to qualify you as an MRI technologist but will provide the information necessary to start you on the road to gaining a complete understanding of MRI. Upon completion of this course, the student will:

- Demonstrate knowledge of basic principles of the physics of MRI
- Demonstrate knowledge of pulse sequences, contrast media, special imaging techniques, patient care, and safety aspects of MRI
- Identify appropriate clinical applications of MRI
- Describe the effect of intrinsic and extrinsic parameters on MRI scanning, the patient, and image quality

Teaching Methodology

Independent reading assignments, Desire2Learn (D2L) modules, open book module quizzes, a virtual scenario assignment, a course project, Internet searches, and a proctored D2L closed book Final Exam are used in this course.
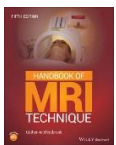
Course Materials

Textbooks

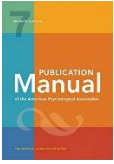### Required

Westbrook, C. (2021). *Handbook of MRI Technique.* (5th ed.). Oxford: Wiley Blackwell Publishers. [ISBN: 978-1-119-75946-1].

Recommended

American Psychological Association. (2019). *Publication manual of the American Psychological Association* (7th ed.). Washington, DC: Author. ISBN-13: 978-1433832161 ISBN-10: 143383216X

Computer Requirements

You need access to an up-to-date computer with an internet connection in this course. Chromebooks do not work. Also, D2L does not work well with Internet Explorer. Use a different browser when working in D2L. Only Word documents will be submitted in this course. If you have a Mac device, you will need to export it as a .docx when you are ready to turn in any assignment in this course. Video: How to save Apple Pages document as Microsoft Word file (.doc & .docx)

Additional Resources (not required)

If you are studying for the MRI Registry, in addition to the textbook for this course, these resources might be helpful:

Textbook

Review Questions for MRI Carolyn Kaut Roth, William Faulkner Wiley- Blackwell; 2nd ed. 2013

Online

- MRI _ARRT – Certification page

ARRT- The American Registry of Radiologic Technologists
ARRT's MRI certification page provides details about MRI certification eligibility, including education, ethics, and examination requirements. ARRT-Earning ARRT Credentials MRI

- ACR Manual on Contrast Safety (updated 2022)
- ACR Manual on MR Safety 2020

Course Requirements

The student must:

- Participate in the course by completing the introductions and by continuously logging in to the D2L course to review instructor updates and news items

- Complete reading assignments, watch instructional videos, visit selected internet websites
- Successfully complete the required online examinations, including a proctored final exam
- Write and present a research presentation
- Complete the virtual scenario assignment
- Meet all submission deadlines

Assignments

Date	Assignment
Jan 21	**Class opens** **Review course syllabus**
Jan 28	**Introductions in Discussion Board due by 23:59**
Jan 28	**Research Presentation Topic to Discussion Board due by 23:59**
Feb -TBA	**BSRT (non-registered entry-level students-hybrid) Only** Seminar pm (Required of all BSRT students) **(BSRS classification-registered technologists- online students will not come to the seminar)**
Mar 4	**Target date for completion of Modules 1-7**
Mar 9	**Virtual Scenario opens (Modules 1-5 must have been completed before you have access)**
Apr 7	**Alternate Non-Clinical MR Trends Project-Presentation to the discussion board by 23:59**
Apr 9	**Target date for completion of Modules 8-14**
Apr 22	**All quizzes close at 23:59**
Apr 29	**Virtual Scenario Projects are due by 23:59**
Apr 29	**Discussion Board MR Trends Project-Clinical and Non-Clinical** **Peer-Reviews- due to Discussion Board by 23:59**
May2	**All students-Completed MR Trends Project-Clinical and Non-Clinical to Dropbox due by 23:59**
April 15- April 29	**Proctored final exam.** **Due on April 29, 2025 23:59** **Available on Apr 15, 2025, 00:01 until April 29, 2025, 23:59**
April 30	**Last day to withdraw with a "W" grade by 4:00 pm campus time**

There will be chapter quizzes, a virtual scenario project, one research presentation project, two discussion boards, a course project, and one final examination. See more detailed descriptions of each at the end of this syllabus

Important Dates

All times are Central Standard Time (CST)

Course Modules

Module	Title
Module 1	Introduction to MRI basics & Chapter 1-How to use this book
Module 2	MRI Safety & Chapter 6-Patient care and safety
Module 3	Chapter 2-Parameters and trade-offs
Module 4	Chapter 3-Pulse sequences
Module 5	Chapter 4-Flow phenomena and artefacts
Module 6	Chapter 5-Gating and respiratory compensation techniques
Module 7	Chapter 7-Contrast agents
Module 8	Chapter 8-Head and neck
Module 9	Chapter 9-Spine
Module 10	Chapter 10-Chest
Module 11	Chapter 11-Abdomen
Module 12	Chapter 12-Pelvis
Module 13	Chapter 13-Upper limb
Module 14	Chapter 14-Lower limb

Evaluation

Grade Distribution

- 25% Unit Quizzes (14)
- 20% MRI Trends Project-Clinical or Non-Clinical
- 5% Discussions Participation
- 20% Virtual Assignment
- 30% Comprehensive Final Exam

Grade Scale

A=100-90
B=89-80

C=79-70
D=69-60
F=59 and below

NOTE: You must make a C average (70%) or above for this course to be applied to the Radiology Program degree.

Grading Cycle

All assignments are graded together as a group to maintain a higher level of consistency. Grading begins on the first business day after a due date, outside of university holidays and professional meetings, and is typically completed before the next due date. You may track your progress through the Gradebook in D2L.

Feedback

Feedback varies throughout the course. The News section of the course is where I will send messages to the entire class. It is best to set up your D2L account to receive an email notification (to the email of your choice) when News items are posted75 so you do not miss critical updates.

Setting Up Notifications in D2L

1. Click the down arrow in the News section on the 4773 course home page
2. Select Notifications
3. Check the email address you wish to send email notifications to. Select "Change your email settings" and enter the new email address if you need to change this. This email address should be an email address you check frequently.
4. If you want to receive these updates on your mobile, select "Register your mobile."
5. Check the box next to "News - new item available" and then check any other boxes you wish to receive an email notification.

Steps to forward D2L email to another email address

1. Click on the **Envelope Icon** in the top menu bar.

2. Click **Email**.

3. Click **Settings** in the top right corner of the inbox.

4. Scroll down to **Forwarding Options**, type in the new email, or uncheck the box to turn forwarding off.

5. Click **Save**.

6. Remember to go to the new email and click to verify the email address.

Viewing feedback in Tests

1. Go to the place where you took the quiz,

2. Click on the down arrow next to the exam,

3. Select submissions,

4. Click on the attempt,

5. The feedback for the entire exam is displayed under Attempt Feedback

6. The feedback for each question is under the View Feedback button under each question

Viewing feedback in Assignment dropbox

Tip: You can also view assignment feedback from User Progress and Grades.

1. On the navbar, click Assignments.

2. From the Assignments page, locate your assignment and click Unread in the Evaluation Status column.

3. You can view your submission feedback, rubric assessment, and grade from the View Feedback page.

4. If your instructor added annotated feedback to the assignment, click View Inline Feedback. The annotation view opens in a new tab, displaying annotated feedback using highlighting, freehand drawing, shapes, and associated commenting.

5. To download the annotated assignment as a PDF, click Download.

6. When you are finished viewing feedback, navigate back to the View Feedback page and click Done.

If you have technical difficulties accessing the course or any other technical issues, please contact distance.learning@msutexas.edu.

You are welcome to email questions to clarify concepts or look for further explanations. If I encounter repeated questions, I will provide feedback or supplementary resources in the News section of the course so that everyone can benefit from it. You might look there first because your questions and answers may be there.

Late Work

Due Dates

Most assignments are due on Tuesdays (see Important Course Dates above). Assignments must be submitted by 23:59 (23:59) Central Standard Time on scheduled due dates in the course schedule. If a student fails to meet a deadline, the student will receive no credit for the assignment not submitted on time.

Emergency Extension

If you have a significant event such as a death in the family, illness, hospitalization, or other extenuating circumstances, email the professor at kimberly.onstott@msutexas.edu as soon as possible and on or before the scheduled due date. I will grant extensions on an individual basis. If an extension is granted, the following guidelines will typically be followed.

1. The assignment may be up to one week late and still qualify for full credit. After the one-week extension, ten points per day can be deducted until the assignment is no longer worth any credit.
2. When the assignment is completed, you must send a follow-up email informing the professor that it is ready to grade. Failure to notify the professor could lead to a grade of zero.
3. **Avoid End of Course Late Work:** Please note there are University deadlines for submitting grades at the end of the semester. Therefore, all work must be turned in at least a week before grades must be posted.
4. If a course includes interaction between students in the discussion board, and if extenuating circumstances will prevent you from participating, an alternate assignment may be considered at the discretion of the professor.

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.

Final Course Grade

A final course score of 70% is required to pass this course. Letter grades of "D" or "F" cannot be used for graduation and will require the course to be repeated according to the current radiology program policies.

Attendance

Attendance

This is an asynchronous online course, and there are no mandatory sessions. However, the student should be vigilant in logging in to D2L. Regular checks will ensure that messages from the instructor are received in a timely manner.

Campus Closure Policy

In the event of campus closure due to weather or any other unscheduled event, course due dates for assignments and quizzes will remain the same. If the event prevents you from accessing a computer or the internet, use whatever means you have to send a note to your professor as soon as possible (e.g., phone message, email from phone, friend's phone).

Classroom Etiquette

You must respect the right of every student in the classroom to learn.

Mental Health

We all experience stressful and challenging events as a normal part of life. As your instructor, I believe your mental health is essential to your academic success. Success in this course depends heavily on your health and well-being. You should recognize that stress is an expected part of the college experience, and it often can be compounded by unexpected setbacks or life changes outside the classroom. I strongly encourage you to reframe challenges as unavoidable pathways to success. Reflect on your role in taking care of yourself throughout the term before the demands of exams and projects peak. Please feel free to contact me about any difficulty you may have that may affect your performance in this course as soon as it occurs and before it becomes unmanageable. In addition to your academic advisor and me, I strongly encourage you to contact the many other support services on campus that stand ready to assist you.

- Counseling Center– or call 940-397-4618 to schedule an appointment

- BetterMynd- free virtual counseling for students looking for evening appointments

Technical Difficulties

Occasionally, you may experience problems accessing D2L, accessing class files located within D2L, connecting with your internet service, or other computer-related issues. Make the professor aware of a technical problem

as soon as possible. A due date extension will typically be granted if a problem occurs on our end, such as D2L failure**. However, remember that 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 a reason for the instructor to allow students extra time to submit assignments, tests, or discussion postings.*

Dropbox assignments that can be attached in an email should be emailed to the professor as soon as a problem is encountered. Failure to do so may result in lost points, regardless of connection issues.

For help options:

- For D2L issues, go online go to the [Distance Education Helpdesk](#)
- Call the Distance Education office at 940-397-4785 between 8 AM and 5 PM.
- Use the D2L help link in D2L.
- Contact your professor.
- For other computer access issues, go to the MSU [Information Technology Website](#).

Requesting a Withdrawal

The last opportunity to drop this course with a grade of "W" is 4:00 PM on April 30, 2025. The student must initiate all withdrawals. After this date, dropping the course results in a grade of "F."

In an emergency or extenuating circumstance, a student may request a grade of "Incomplete" before grades are submitted. If the professor 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 meet the course requirements within the deadline, the " Incomplete " grade will automatically convert into a grade of "F".

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 opportunities for qualified persons with disabilities to participate in all educational programs and activities.

[The Office of Disability Services (ODS)](#) provides information and assistance, arranges accommodations, and serves as a liaison for students, professors, and staff. In addition, the ODS has assistive devices such as books on tape, recorders, and adaptive software, which can be loaned to qualified individuals. A student/employee who seeks accommodations based on disability must register with the Office of Disability Services in the Counseling Center, Clark Student Center, Room 108. Documentation of disability from a competent professional is required.

Individuals with grievances related to discrimination or lack of accommodation based on a disability are encouraged to resolve the problem directly with the area involved. The Office of Disability Services for resolution will advise and assist if the matter remains unresolved. The grievance procedure may be found in the Student Handbook and Activities Calendar.

The Director of the Counseling Center serves as the ADA Coordinator and may be contacted at (940)397-4140

or 3410 Taft Blvd., Clark Student Center Room 168.

Administrative Process

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

1. Department Chair – Beth Veale (940-397-4575)
2. College Dean - Dr. Jeff Killion (940-397-4594)
3. Dean of Students – Matthew Park (940-397-7500)

Honor System

RADS 4773 adheres to the [MSU Code of Conduct.](#)

In particular, however small, academic dishonesty breaches academic integrity. A student's participation in this course comes with the expectation that their work will be completed in full observance of the MSU Code of Student Conduct. A student should consult the current Student Handbook for answers to any questions about the code.

Plagiarism

All components of RADS 4773 are designed to represent the efforts of each student individually and are NOT to be shared, copied, or plagiarized from other sources. When students submit their efforts for grading, they are attesting they abided by this rule.

An online plagiarism service will be used in this course. Student assignments will be uploaded to the service to identify similarities to other student papers and published works.

Cheating includes but is not limited to

- Use of any unauthorized assistance in taking quizzes, tests, or examinations;
- Dependence upon the aid of sources beyond those authorized by the professor in writing papers, preparing reports, solving problems, or completing other assignments or
- 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 paraphrasing or direct quotation without correct citation in the text and the reference list,
- The published or unpublished works of another person.
- Students may NOT submit papers and assignments previously submitted for this or other courses.
- Using materials generated by agencies engaged in "selling" term papers is also plagiarism.

Academic dishonesty (cheating, plagiarism, etc.) will not be tolerated in this class. Whenever a student is unsure whether a particular situation will be interpreted as academic dishonesty, they should ask the professor for clarification. If students are guilty of academic dishonesty, a zero (0) grade will be given for the quiz, assignment, etc. Cases may also be referred to the Dean of Students for possible dismissal from the university. Students are encouraged to review the tutorials and suggested websites for more information about plagiarism. If you have any questions about what constitutes plagiarism, please consult:

- The University Academic Dishonesty Policy
- The website Plagiarism.Org, or
- The professor

Artificial Writing Generators

Using any artificial writing generator (ex, Chat GPT) is strictly prohibited. The use of artificial writing generators can and will be deemed a violation of the university's honor system. Any or all parts of a written assignment identified as having elements of writing attributed to an artificial writing source will automatically receive a zero (0) for a grade, and there will be no make-up of the assignment. This is a form of both cheating and plagiarism.

Intellectual Property

By enrolling in this course, the student expressly grants MSU a "limited right" to all intellectual property created by the student for this course. The "limited right" shall include but shall not be limited to the right to reproduce the student's work/project to verify originality and authenticity and for educational purposes. Specifically, faculty may submit student papers and assignments to an external agency to verify originality and authenticity and detect plagiarism.

Senate Bill 11/House Bill 1927

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 security of our campus are 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 Safety / Emergency Procedures. In addition, students are encouraged to watch the video "*Run. Hide. Fight.*" which may be electronically accessed via the University police department's webpage: *"Run. Hide. Fight."*

If you have questions or concerns, please get in touch with MSU Chief of Police Steven Callarman by email at steven.callarman@msutexas.edu

Communicating with the Professor

The professor's contact information is listed at the top of the first page of this syllabus. The professor prefers email, so there is a record of the communication, and often the professor is away from her desk.

Use the following format in the subject line of the email.

4773_your last name_topic of message

Example: 4773_Smith_Title Page question

When there is a need to contact a student, the professor will use the student's students.mwsu.edu email account. The professor is not responsible for sending emails to any other email account (set up your email to forward messages to an email you often check to avoid potentially missing any correspondence). Likewise, faculty members will not be responsible for keeping up with other students' email addresses. If you have not established this account or need help forwarding messages, contact [information systems](#) as soon as possible.

The professor will respond or acknowledge all student communications within five (5) business days. If this time will be longer because the professor is out of town or for other reasons, a news item will be posted online in D2L for the class. Please always give the professor the time asked to respond before repeating your request. Always include your course number and topic in the email's subject line.

MRI Applications Assignment Details

- 25% Unit Quizzes (14)
- 20% MRI Trends Research Presentation
- 5% Participation
- 20% Virtual Assignment
- 30% Comprehensive Final Exam

Order of Content

Students can proceed through the course content at their own pace within the boundaries set by the Course Schedule and the MSU Academic Calendar. See the Course Schedule for specific information about activities and due dates. The units are NOT taught in the order presented in the textbook. Each module has a quiz. PowerPoint slides are provided as a supplement to the modules, but quiz questions will be from information learned from the textbook. Be sure to read the chapters in your textbook.

Introductions

Introduce yourselves in the introduction discussion board and reply to at least two of your peers by the due date in the course schedule. After your introductions, you may use the discussion as an area to talk with your classmates. Introductions are required and are part of your participation grade.

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.

Independent Reading

Students should read each assigned chapter, review any internet resources associated with each chapter,

and review the PowerPoint presentations for each module.

Unit Quizzes -25%

When a student has reviewed a module and is ready for the quiz, he or she will log on to D2L and receive a customized timed unit quiz consisting of randomized multiple-choice questions. See the course schedule for the open and close dates for the quizzes.
It is important to know the module content before attempting the unit quizzes because they are **timed**.
Quiz scores will be available immediately after a student submits his or her quiz for grading.
All quizzes are open the day that classes begin, so you can work ahead. A target date for each quiz is provided so you can keep abreast of your progress. These are not due dates, and the quizzes do not close until the due date in the course schedule. Quizzes not completed by the due date will receive a zero (0).
The quizzes are designed to encourage practice with the material, so **you may take each quiz up to 2 times** before the due date at the end of the course (this does not include the comprehensive final exam). The grade will be an average of the attempts. Note: Only one attempt is required, so you do not have to complete the quiz two times. However, it is highly recommended as it will give you additional practice with the material for your final exam.
Quizzes not completed by the due dates may receive a zero (0). Students who know they will miss a due date because of extenuating circumstances should contact the professor as soon as the circumstance is known. Each circumstance will be considered on an individual basis.
If students have technical difficulties during a quiz, they should use the 'Help' link located on the top toolbar within D2L, contact the [MSU Information Systems Support Staff](#), and send an e-mail to the course professor explaining what happened.
If a student finds a faulty quiz item or believes a quiz question has been scored incorrectly, he/she should send an e-mail to the course professor that includes the following:

- Module Quiz Number (1-6)
- Question Stem
- Rationale Supporting Why the Student's Answer is Correct
- Include Page Numbers When Referencing the Textbook

After reviewing the situation, if the course professor thinks a revision is justified, the student's quiz score will be revised to reflect the additional points, and the test bank will be updated.

Virtual Scenario Project Assignment -15%

The purpose of this project is for students to gain a better understanding of MRI and the associated protocols by observing the day-to-day operations of a virtual MRI suite. Although the Scenario takes place in an online virtual MRI suite, the project is designed to introduce the student to the MRI clinical environment and to allow the student to observe the procedures and protocols he or she is learning about in the course. The virtual Scenario is not available until the end of the first six weeks of class and will not open unless the student has completed Modules 1-5. This is to ensure the student has had enough time to complete the background course material needed for the assignment.

Virtual MRI Suite-

In this virtual simulation scenario of an MRI suite, the student will become a virtual MRI technologist in the online environment. Similar to an actual MRI suite, the student will encounter safety hazards, difficult patients, difficult or unsafe coworkers, critical pathology, and more.

The student will work independently in the environment and at his or her own pace. The student will have to make choices based on a number of variables presented to the student, and the outcome of the Scenario will be affected by the individual choices the student makes. The incorrect choices will not be penalized, so the student may purposefully choose a wrong answer to see what might happen if a wrong choice is made. Questions at the end of the scenarios, however, will provide the professor with an idea of whether or not the correct information was retained.
This activity is intended to be a story-like activity that mimics an actual working MRI suite; however, because it is a virtual space, the instructor was able to build some interesting consequences into the scenarios that would not, hopefully, occur on an everyday basis in an actual MRI suite.
This activity is intended to be informational and fun.
This assignment must be completed within the dates in the course schedule.

Submission

The student's activities will be logged throughout the scenario program. Additionally, the student will complete a worksheet during their virtual activity.

- Each student will submit a **typed** completed worksheet to the Virtual Scenario Dropbox.
- Students must use the following format as the title of the assignment when saving the document:

  Lastname_Virtual Scenario Assignment
- All assignments must reflect a baccalaureate-level effort
- Submit to the dropbox as a single Word document by the due date in the course schedule.

Discussions-5%

There are two discussion topics in this course. These discussions are calculated in the participation grade in this course.

Introductions (original post and reply as needed)

Introduce yourselves in the introduction discussion board and converse with your peers by the due date in the course schedule. After your introductions, you may use the discussion as an area to talk with your classmates. Introductions are required and will contribute to 2% of your participation grade.

MR Trends Project Discussions-Completing this discussion will contribute to 3% of the participation grade. The content of this discussion will also be assessed in MR Trends Clinical or Non-Clinical Project

MRI Trends Clinical or Non-Clinical Project (15%)

Students will perform one of the following projects depending on each student's access to an MR scanner. First, choose the project that suits your needs, then open the instructions below.

1. **Clinical:** This version of the course project consists of actual MR scans and also includes a peer review of one or two classmates' MR Trends presentations.
2. **Non-clinical:** The alternate project does not require any MR scanning. This project consists of developing and recording a presentation on a current MR Trend and then providing a peer review of a classmate's presentation.

Seminar for Hybrid Students Only

(BSRT classification-entry-level students who are not registered technologists)

Two seminar days will be scheduled around your clinical education seminars. There will be no excuses made for work or other activities so be sure to schedule appropriately. If you have a valid excuse (i.e., you are ill, family emergency, etc.), notify your professor as soon as you are able. An alternate assignment or some sort of accommodation will be considered on a case-by-case basis. Failure to attend both seminar days or stay for the entire duration may result in a zero for the entire research presentation assignment.

Proctored Final Exam- 30%

Exam Format

- The final examination is a proctored, "closed-book," comprehensive examination of multiple-choice and short-answer questions. The final exam is a timed, ninety-minute (90 min) test.
- The textbook, study guides, and examinations can be utilized to review for the final.
- The comprehensive exam will be administered using Desire2Learn (D2L) with Respondus Lockdown Browser

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 LockDown Browser." Click the button to go to the download page and then follow the instructions
- 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 on a computer or device. It will start

automatically from that point forward when a quiz requires it.

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 any 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)
- 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

Technical Problems

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.

Note:

All assignments received are considered complete and will be graded as such. Any decision of the instructor is final, and there will be no further changes made..