Course Syllabus: MRI Applications

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

Shimadzu School of Radiologic Sciences

Course Information

Information	Description
Name	RADS 4773x20-MRI Applications (online)
Credit	3 hours
Term	Spring 2022
Dates	January 11- April 29, 2022
Time Commitment	Students should expect to spend at least 9 hours per week on course material (15 week term)
Prerequisites	None

Professor

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

E-mail: kimberly.onstott@msutexas.edu

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

E-mail is the best way to 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 &Tuesdays 12:30-14:30, & Wednesdays 8:30-9:30. Make an appointment by e-mail. Additional hours by 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 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 information necessary to start you on the road to gaining a more 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

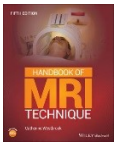
Independent reading assignments, Desire2Learn (D2L) modules, open book module quizzes, virtual scenario assignment, research presentation assignment, Internet searches, and proctored D2L closed book Final Exam are used in this course.

Course Materials

Textbooks

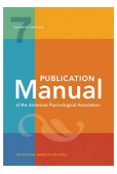
Required

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. 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 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)

Proctor Specifications

You will be required to use ProctorU a proctoring service for your final exam. Here are the specifications for your equipment. Detailed instructions for ProctorU are at the end of this syllabus.

Type	Minimum	Recommended
Webcam	640x480 resolution	1280x720 resolution
PC Users	Windows Vista	Windows 10 (10 S not supported)
Mac Users	Mac OS X 10.5 or higher	Mac OS x 10.13 High Sierra
Internet Download Speed	.768 Mbps	1.5 Mbps
Internet Upload Speed	.384 Mbps	1 Mbps
RAM	1024 MB	2 GB
Connectivity Ports	1935, 843, 80, 443, 61613, UDP/TCP	1935, 843, 80, 443, 61613, UDP/TCP

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 MR Safety (updated 2020)
- ACR Manual on Contrast Media 2021

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
January 10	Class opens Review course syllabus
January 18	Introductions in Discussion Board due by 23:59
January 25	Research Presentation Topic to Discussion Board due by 23:59
January 27 9am-12pm	BSRT (non-registered entry-level students-hybrid) Only Seminar 9am-12pm (Required of all BSRT students) (BSRS classification-registered technologists- online students will not come to seminar)
February 22	Target date for completion of Modules 1-7
February 22	BSRT (non-registered entry-level students-hybrid) Only February Presenters submit PowerPoint to the dropbox
February 24 9:30am -12pm tentative	BSRT (non-registered entry-level students-hybrid) Only Seminar (tentative time) 9:30am-12pm (Required of all BSRT students) (BSRS classification-registered technologists- online students will not come to

	seminar)
March 1	Virtual Scenario opens (Modules 1-5 must have been completed before you have access)
March 21	Last day to withdraw with a "W" grade by 4:00 pm campus time
March 29	All students-Completed Presentation to Dropbox due by 23:59
March 31 9:30am-12pm	BSRT (non-registered entry-level students-hybrid) Only Seminar 9:30am-12pm (Required of all BSRT students) (BSRS classification-registered technologists- online students will not come to seminar)
April 12	Target date for completion of Modules 8-14
April 12	Virtual Scenario Projects are due by 23:59
April 12	All quizzes close at 23:59
April 12-22	Proctored final exam. Due on Apr 22, 2022 23:59 Available on Apr 13, 2022 00:01 until Apr 22, 2022 23:59

There will be chapter quizzes, a virtual scenario project, one research presentation project, 2 discussion boards, 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)
- 15% MRI Trends Research Presentation
- 15% Discussions (2)
- 15% Virtual Assignment
- 30% Comprehensive Final Exam

Grade Scale

A=100-90

B=89-80

C=79-70

D=69-60

F=59 and below

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 posted, so you do not miss important updates.

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. If you need to change this, select "Change your email settings" and enter the new email address. 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 from.

You are welcome to email questions to clarify concepts or look for further explanations. If I come across 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 located there.

Late Work

Due Dates

Most assignments are due on Tuesdays (see Important Course Dates above). Assignments must be submitted by 23:59 (11:59 pm) 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. It is the student's responsibility to consult with the professor if an assignment due date has been missed.

Emergency Extension

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

1. The assignment may be up to one week late and still qualify for full credit. After the one-week extension has passed, 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 to let the professor know 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. 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 be repeated according to the current radiology program policies.

Technical Difficulties

On occasion, you may experience problems with accessing D2L, accessing class files located within D2L, connecting with your internet service, or you may encounter other computer related problems. Make the

professor aware of a technical problem as soon as possible. If a problem occurs on our end, such as D2L failure, then a due date extension will typically be granted. However, keep in mind 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.

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 points being lost, regardless of connection issues.

For help options:

- For D2L issues go online go to the Distance Education Helpdesk
- By phone call the Distance Education office at 940-397-4868 between 8am and 5pm.
- Use the D2L help link in D2L.
- Contact your professor.
- For other computer access issues, go online to the MSU Information Technology Website.

Attendance

This is an online course and there are no mandatory sessions. However, the student should be vigilant in logging in to D2L. The student should expect to log in at least 3 times per week. Regular checks will ensure that messages from the professor are received in a timely manner**.** This course is on a schedule that will be strictly adhered to. See the Important Dates section above for specific due dates.

Requesting a Withdrawal

The last opportunity to drop this course with a grade of "W" is 4:00pm on March 21, 2022. All withdrawals **must be initiated by the student**. 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 complete the course requirements within the deadline, the grade of "Incomplete" 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 opportunity 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. 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. If the matter remains unresolved, the

Office of Disability Services for resolution will provide advice and/or assistance. 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)397-4618, TDD (940)397-4515, or 3410 Taft Blvd., Clark Student Center Room 108.

Administrative Process

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

1. Interim Department Chair – Dr. 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, academic dishonesty, however small, creates a breach in academic integrity. A student's participation in this course comes with the expectation that his or her 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.

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 for identification of 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, by paraphrase or direct quotation without correct citation in the text and in 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" research presentations is also plagiarism.

Academic dishonesty (cheating, plagiarism, etc.) will not be tolerated in this class. Whenever a student is unsure of whether a particular situation will be interpreted as academic dishonesty, he/she should ask the professor for clarification. If students 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. 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

Please Note

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 student's work/project in order 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 to detect for plagiarism.

Senate Bill 11/House Bill 1927

Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to the University's campus carry webpage.

House Bill 1927, also known as Constitutional Carry, allows an individual 21 years of age or older, who may legally possess a firearm and who is not otherwise prohibited by state or federal law from possessing a firearm, to do so concealed or unconcealed (but holstered), without obtaining or possessing a License to Carry (LTC) became effective midnight, September 1, 2021.

In keeping with existing university policy prohibiting firearms on campus, Midwestern State University (MSU Texas), along with other components of the Texas Tech University System, has chosen to exercise the authority granted to it in Section 30.05 of the Texas Penal Code (Criminal Trespass), to prohibit persons from entering onto University property, while in possession of a firearm. On and after September 1, 2021, an individual will not be allowed to possess a firearm on MSU Texas property, unless such individual possesses a LTC issued by the Texas Department of Public Safety (or an agency of another state authorized to issue such license and with which Texas maintains a reciprocity agreement). To reiterate, this prohibition does not forbid a person who possesses a valid License to Carry from carrying a concealed handgun at MSU Texas unless Section 30.06 signage is also present: all privileges, duties and responsibilities granted by law to a bona-fide LTC holder remain in full-effect at MSU Texas. Section 30.06 signs, which prohibit all handguns, may be found in certain labs, meeting rooms or other specific areas of campus.

If you have questions or concerns, please contact MSU Chief of Police Patrick Coggins by email at mpatrick.coggins@msutexas.edu.

Communicating with the Professor

Contact information for the professor 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.

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 check often to avoid potentially missing any correspondence). Faculty members will not be responsible for keeping up with other email addresses for students. If you have not established this account or you need help forwarding messages, do so as soon as possible by contacting information systems.

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

MRI Applications Assignment Details

- 25% Unit Quizzes (14)
- 15% MRI Trends Research Presentation
- 15% Discussions
- 15% 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 discussions 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 of 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 2 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 email 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 email 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 in 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 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 baccalaureate level effort
- Submit to the dropbox as a single Word document by the due date in the course schedule.

Discussions -15%

There are 3 discussion topics 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 are part of your participation grade.

MRI Question discussions (original post and 2 replies)

Post a copy of an applications type MRI question in the discussion board by the dates in the course schedule. Review and reply to at least two of your classmates' case studies. View the instructions in the course for specific requirements

Research presentation discussion/s (original post and 4 replies)

> **Online** students will be uploading a research Powerpoint Presentation in the appropriate discussion board. Each student is required to view and comment on at least four of your classmates' presentations.
>
> **Hybrid** students will present in class and will comment on four of your classmates' online presentations in the appropriate discussion board.

See the discussion sections for specific details.

MRI Trends Research Presentation Project (15%)

Each student will be presenting a research presentation about a topic concerning MRI Trends. Each

student will prepare a 7-10-minute PowerPoint presentation about a current trend in MRI. This presentation may be about new procedures, new equipment, or other noteworthy events currently happening in the field. All presentations must be directly related to MRI and the topic must be approved beforehand.

Online students will present virtually via a recorded presentation. **Online** students will be uploading a research Powerpoint Presentation in the appropriate discussion board for peer-review **and** to the dropbox for grading.

Hybrid students will present in class during seminar days. **Hybrid** students will upload a non-narrated PowerPoint presentation to the dropbox and will then be presenting it in class for grading. Students will then comment on four peers' presentations in the appropriate discussion board online.

Presentations are required. No narration or no presentation may result in a zero for the entire project. See the module for specific details about the requirements.

Seminar for Hybrid Students Only

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

There will be three seminar days that are scheduled around your clinical education seminars. The first will be a lecture by three advanced modality professors and the following two will be filled with student presentations. You will be assigned a day to present. You must be present for the **entire time** during all three seminar days. 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 accommodations will be considered on a case-by-case basis. Failure to show for all three 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 proctored final exam will be administered using Desire2Learn (D2L) and ProctorU online proctoring.

What to Bring

- You may bring scratch paper with only ProctorU's phone number on it.
- No smart watches or any other electronic devices will be allowed.
- Students are not allowed to print the final exam.

ProctorU Scheduling

- You may schedule your exam for any time within the testing dates in the course schedule. You must have ALL of your course work complete when you take your final or the final will not be accessible in D2L.

- For ProctorU instructions, please read the ProctorU Student Instruction Guide in the course and visit the MSU ProctorU Webpage.
- Be aware certain equipment is required. Review the ProctorU instructions as soon as possible.
- Contact a ProctorU representative to check your equipment and bandwidth real time before your test date. If anything changes after this check (new computer, updates, ISP changes, etc.), REPEAT the check.
- All appointments should be made at least three days in advance. To make an appointment, simply create an account by visiting the MSU ProctorU Webpage. Once logged in, click on the new exam link and select the exam, date, and time you desire. You must submit payment (based on the length of the exam) at that time - usually about $25.00. You will receive an email confirming your reservation at the email address you provided to ProctorU.
- Late registrations and Take it Now features are subject to availability. Note: If a proctor is not available because you did not schedule your exam in advance, the final is considered missed and a grade of zero will be given.
- Be mindful when you schedule your final exam. If you schedule the exam outside of the 5-day work week (M-F), there may be no one at MSU available to help if you have technical problems.

Technical Problems

- If you are disconnected during your exam, you must immediately send an email to your professor, and immediately contact ProctorU by phone. All exams are monitored and a log is created by the proctor and by D2L.
- *All times will be documented*
- The exam must be taken within the scheduled test dates, regardless of any technical issues that may arise. This is the student's responsibility.
- Late submissions will not be accepted.
- My suggestion is to take the exam during the first days it is available (listed below) to avoid receiving a zero due to technical issues. If you have to reschedule, it must be within the scheduled dates and times.
- See the Technical Difficulties section above for help options.

All course requirements must be completed before a grade is awarded. Students must complete the final and all course work by the dates published in the course schedule.

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.

Scroll down to view the Course Schedule on a single printable page.

Course Schedule

All times are Central Standard Time (CST). Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.

Date	Assignment
January 10	Class opens Review course syllabus
January 18	Introductions in Discussion Board due by 23:59
January 25	Research Presentation Topic to Discussion Board due by 23:59
January 27 9am-12pm	BSRT (non-registered entry-level students-hybrid) Only Seminar 9am-12pm (Required of all BSRT students) (BSRS classification-registered technologists- online students will not come to seminar)
February 22	Target date for completion of Modules 1-7
February 22	BSRT (non-registered entry-level students-hybrid) Only February Presenters submit PowerPoint to the dropbox
February 24 9:30am -12pm tentative	BSRT (non-registered entry-level students-hybrid) Only Seminar (tentative time) 9:30am-12pm (Required of all BSRT students) (BSRS classification-registered technologists- online students will not come to seminar)
March 1	Virtual Scenario opens (Modules 1-5 must have been completed before you have access)
March 21	Last day to withdraw with a "W" grade by 4:00 pm campus time
March 29	All students-Completed Presentation to Dropbox due by 23:59
March 31 9:30am-12pm	BSRT (non-registered entry-level students-hybrid) Only Seminar 9:30am-12pm (Required of all BSRT students) (BSRS classification-registered technologists- online students will not come to seminar)
April 12	Target date for completion of Modules 8-14
April 12	Virtual Scenario Projects are due by 23:59
April 12	All quizzes close at 23:59
April 12-22	Proctored final exam. Due on Apr 22, 2022 23:59 Available on Apr 12, 2022 00:01 until Apr 22, 2022 23:59