

Course Syllabus: CT Applications

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

Department of Radiologic Sciences

Course Information

Name	RADS 4783x30 CT Applications Syllabus Spring 2022 Onstott
Credit	3 hours
Term	Spring 2022
Dates	January 11- April 29, 2022
Time Commitment	Students should expect to spend at least 13 hours per week on course material (10 week term)
Prerequisites	RADS 4703 Principles of CT or instructor approval

Professor

Kimberly Onstott EdD, RT(R)(CT)(MR), MRSO

Assistant Professor, CT Program Coordinator Radiologic Sciences

E-mail: kimberly.onstott@msutexas.edu

Use this format in the subject line: 4783_your last name_topic of the message

E-mail is the best way to reach me. If I have not responded within 72 hours, please email me again.

Phone: (940) 397-4332 or (866) 575-4305 Please leave a message and I will get back to you.

Office location: Midwestern State University 3410 Taft Blvd Centennial Hall 430Q Wichita Falls, TX 76308

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 is a continuation of the use of computed tomography as an imaging tool from the technologist's perspective. Topics include a review of patient care, contrast media and adverse reactions, and imaging protocols for the chest, abdomen, pelvis, extremities, and special considerations in pediatric imaging and critical care imaging. Access to a CT scanner or instructor consent required.

Course Objectives

Upon completion of this course, the student will:

- Demonstrate knowledge of patient care interactions and management in computed tomography
- Demonstrate a basic knowledge of contrast media used in computed tomography
- Identify the correct imaging parameters for a computed tomographic examination
- Explain the rational for particular imaging parameters
- Describe the result of changes in the imaging parameters
- Identify pathology related to computed tomography examinations

Teaching Methodology

Desire2Learn (D2L) modules, Independent reading assignments, D2L open book module quizzes, Dropbox assignments, Discussion Boards, and a Comprehensive Exam is used in this course.

Course Materials

Textbooks

Required

Seeram, E. (2016). *Computed tomography* (4th Ed.). St. Louis, MO.: Saunders/Elsevier. ISBN: 9780323312882 (required)



Required

Grey, M., Ailinani, J. (2018). *CT & MRI Pathology: Pocket Atlas* (3rd Ed.). New York, NY: McGraw-Hill Education/Medical. (or any edition) ISBN: 9781260121940



Required (Borrow one from the library or a friend if you do not plan to take the ARRT CT Registry Exam)

A CT Registry Review Book -Your choice

(if you already have a registry review book that is different than the ones below, let me know before you buy another one-if it is fairly current it may be acceptable for this course)

Snowden, S. (2016). LANGE Review: Computed Tomography Examination. McGraw-Hill ISBN: 9780071843867



DeMaio, D. (2017). Mosby's Exam Review for Computed Tomography. Elsevier ISBN-13: 9780323544931



Recommended

Kelley, L. & Petersen, C. (2013). *Sectional anatomy for imaging professionals*. St. Louis, MO: Elsevier/Mosby. (Any edition)



No Proctor Requirements

You will not need a Proctor for your comprehensive exam or for any other exams in this course.

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.

Assignments

The student must:

- Should have access to CT imaging equipment (access to equipment is the responsibility of the student). Extenuating circumstances may be considered and an equivalent assignment may be allowed at the discretion of the instructor (inform the instructor as soon as possible).
- Complete reading assignments, watch instructional videos, visit selected internet websites
- Successfully complete the required online examinations, including a non-proctored comprehensive exam.
- Complete case studies and other course activities.
- Participate in asynchronous discussion threads.

- Perform internet searches.
- Meet all submission deadlines.

See detailed descriptions and due dates at the end of this syllabus.

Course Modules

Module	
Introductions and Course Expectations (must complete this module first)	
Module 1: Modern CT: A Review	
Module 2: CT Pediatric Imaging	
Module 3: CT Contrast Media Injection Considerations	
Module 4: CT Pathology of the Head, Neck, and Spine	
Module 5: Data Acquisition and Image Quality	
Module 6: CT Pathology of the Chest, Abdomen, and Pelvis	
Module 7: CT Pathology of the Musculoskeletal Anatomy, Vascular System, and Other CT Procedures	
Module 8: Research and Review	

Evaluation

Grade Distribution

- 15% Module Quizzes (7)
- 15% CT Trends Research Presentation
- 15% Case Studies (5)
- 15% Discussions (7)
- 15% QC/Scanning Laboratory Assignment (or alternate)
- 10% Mock Registry Assignment
- 15% Comprehensive 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 4783 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 below). 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 may 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 I<u>kimberly.onstott@msutexas.edu</u> 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 <u>Distance Education Helpdesk</u>
- By phone call the Distance Education office at 940-397-4785 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. 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 4783 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 4783 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" term papers 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 <u>Plagiarism.Org</u>, 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 <u>University's campus carry webpage</u>.

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 <u>Patrick Coggins</u> by email at <u>mpatrick.coggins@msutexas.edu.</u>

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.

4783_your last name_topic of message

Example: 4783_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.

RADS 4783 Assignment Details

Order of Content

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

Semester Long Activities

The QC/Lab Assignment, Scavenger Hunt, and Mock Registry Assignment should be done throughout the course to avoid a compilation of work at the end of the semester. Reminders will be given in each of the module instructions.

If extenuating circumstances occur that may cause a delay in completing an assignment or quiz by the deadline the student should contact the instructor before the assignment is due (see the section on late work above); such cases will be dealt with on an individual basis.

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.

Introductions

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.

Pre-Course Survey

The purpose of this survey is to familiarize you with the layout of this course and to get an idea of where you are in your CT Program progress. This will give you a good idea of what you need to accomplish before attempting the CT registry examination and it will give me some insight of what you may need guidance with throughout this course. After looking over the D2L Course Shell, the Introduction Module, and the Syllabus, complete the Pre-Course Survey.

QC/Scanning Assignment- (15%)

Throughout this course, you will be logging the clinical experiences you have completed. For this project, specific QC tests must be included as well. They are listed on the **provided log sheet**. A total of 25 must be completed by the end of this course, but you may complete more if you are able. Try to average at least 3 per week. Remember, the ARRT requires 125 logged experiences to sit for the registry. For those of you who completed the CT clinical experience log in Principles of CT, this assignment is a continuation of that assignment. It is highly recommended students complete the clinical experiences as they are taking this course, however, I understand some facilities either do not have a scanner or may not allow a student to obtain these experiences at their facility.

If you are unable to complete these exams or if you prefer not to scan an alternative assignment must be completed.

Review the module for specific instructions.

Modules

The course content is divided by modules. Additional resource material is available through the Internet. Each module requires readings, video presentations, activities, and a quiz. See the Course Schedule at the end of this syllabus for deadlines.

Students should read each assigned chapter, review any internet resources associated with each chapter, and watch the instructional videos for each module.

Module Quizzes -15%

When a student has reviewed a module and is ready for the quiz, they will log on to D2L and receive a customized timed module quiz consisting of randomized multiple choice questions. See the course schedule for the due dates for the quizzes.

It is important to know the module content before attempting the module quizzes because they are **timed**. Quiz questions will be from information learned in the modules. Be sure to read all required reading assignments, watch all video presentations, and perform all of the internet searches for each module. Quiz scores will be available immediately after a student submits his or her quiz for grading.

The quizzes are designed to encourage practice with the material, so you may take each quiz up to 3 times before the due date of each quiz (this does not include the comprehensive exam in Module 7). The grade will be an average of all attempts. Note: Only one attempt is required so you do not have to complete the quiz 3 times, however, it is highly recommended as it will give you additional practice with the material for your CT registry exam. Quizzes not completed by the due dates, may receive a zero (0). If extenuating circumstances have occurred that will prevent you from meeting the due dates, please let me know as soon as possible.

If students have technical difficulties during a quiz, they should use the Help link at the top toolbar in D2L, contact the MSU Information Systems Support Staff (<u>https://msutexas.edu/it/</u>), and send an email to the course instructor explaining what happened. Screen shots and/or taking a picture of your screen may help in diagnosing the problem

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

- Module Quiz Number (I -VI)
- Answer the student thinks should be correct
- Rationale supporting why the student's answer is correct
- Page numbers must be included when referencing the textbook in a rationale

After reviewing the case, if the course instructor 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.

Case Studies -15%

After completing your readings and reviews in five of the modules you will be documenting, researching, and discussing a CT imaging exam surrounding material learned in the perspective modules. These will be abbreviated case studies due to the time constraints of this course. However, these should be meaningful as they will provide a pathway for discussions with your peers. There is a template that must be used for each topic to speed things up a little.

Optimally, each case will be a case describing a CT patient exam that you have personally scanned, however, you may use an exam you have observed or researched if the case aligns with your learning in the module. You must consider HIPAA laws when completing these assignments. Do not include any identifying information. Any case that is so unique that it may be traced back to the actual patient should not be used! HIPAA violations in this course may result in a grade of zero for the assignment.

Specific instructions are included in each module. Each of them is a little different, so be sure to read the requirements thoroughly and use the templates.

Images

You will be including at least one CT image of the anatomy or pathology scanned, depending on the module. Remember, you **must** obtain permission from the facility if you will be using an image from the actual scan. Do not do this without permission. Most likely you will have to find an equivalent image available on the internet or in your textbooks.

Videos

You may also include a YouTube video link if you find a good explanatory video of the CT pathology. If you are so inclined, you may even create an explanatory video of your own (if you do, and you need help publishing as a private video to YouTube, please let me know).

Writing Intent

When writing these case studies, please remember two items.

- 1. You are writing to convey that you understand how to apply the knowledge you have learned, and
- 2. You are writing to inform your classmates of the techniques they may be able to use if they encounter a similar case which requires them to perform a CT exam.

Make sure your information is accurate, supported by evidence (cited in APA format), and of course

interesting. If you find disparities in the scanning techniques of studies you observed or researched, or in protocols that were used, please point this out with an explanation of what you think should have been done differently. The intent here is to approach these as learning opportunities, so provide as much support from your learning resources as you can.

You will drop each of these studies into both the appropriate dropbox **and** in the appropriate discussion board. You will then discuss these with your peers. View the discussion board guidelines for further instructions.

Module 2: CT Pediatric Imaging Case Study

Module 3: CT Contrast Media Case Study

Module 4: CT Pathology Case Study Assignment-CT Pathology of the Head, Neck, and Spine

Module 6: CT Pathology Case Study Assignment-CT Pathology of the Chest, Abdomen, and Pelvis

Module 7: CT Pathology Case Study Assignment- Musculoskeletal Anatomy, Vascular System, and Other CT Applications

Optional: You may complete an additional case study for each of the five modules for an additional 1% added to your grade for each additional case study. You could earn as much as a 5% increase in your final grade in this course if you completed one for each of the case study modules.

CT Trends Research Presentation Project (15%)

Each student will be presenting a research presentation about a topic concerning CT Trends. Each student will prepare a 7-10-minute PowerPoint presentation about a current trend in computed tomography. 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 computed tomography 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)

For BSRT students, 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.

Discussions -15%

There are 7 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.

Case study discussions (original post and 1 thorough reply)

There are 5 of these -Post a copy of your completed case study to the discussion board by the dates in the course schedule. Review and reply to at least one of your classmate's case studies. View the instructions in the course for specific requirements

Scavenger hunt discussion (original post and reply as needed)

Note, the document for this discussion should be built throughout this course to avoid a last minute crunch at the end of the semester.

The purpose of this assignment is to gather as many helpful resources as possible for both CT clinical practice help and for studying for the CT registry examination. Ultimately, you will be creating a working document that you can continue to add to once you leave this course. You will be using the template provided as a guide in your search and it will also help keep things organized. View the specific instructions for this assignment in the course.

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' presentations in the appropriate discussion board online.

See the discussion sections for specific details.

CT Mock Registry Assignment - 10%

Sometime during this course, you will take a CT mock registry exam of your choosing from the CT registry review book you chose for this course. The exam can be either a paper version or the online version. A score of 70% is required to receive full credit for this assignment. View the specific instructions for this assignment

in the course.

Comprehensive Exam- 15%

This exam will cover all of the coursework you have completed in this course. This is essentially your final exam. It is not proctored, is timed, and can only be completed once for a grade. It will only be open during the times and dates in the course schedule.

Exam Format

- The comprehensive examination is of multiple-choice questions. The exam is a timed, sixty minute (60 min) test.
- To prepare for this exam, start with a review of your quizzes, then review your textbook readings, and then review your sectional anatomy.
- The comprehensive exam will be administered using Desire2Learn (D2L) with NO proctor required

Technical problems

- If you are disconnected during your exam, you must immediately send an email to your professor
- 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.

CT Certificate Program Students

If you are in the CT Certificate Program, once you have completed this course and your CT clinical experiences, send your proof of completed experiences to the MSU Radiology Department so that you may receive your Certificate in Computed Tomography from MSU. These clinical experiences can be logged on paper forms or they may be printed from the ARRT website. Good luck on your CT registry exam!

If you are not quite finished with your clinical experiences, or if you will be taking your registry at a later date, this course will cover your ARRT didactic requirements for 2 years. If you need any help, advice, or anything else while you are completing your clinical experiences or while you are studying for your CT registry exam I am always here to help so do not hesitate to contact me. I will do my best to help you in reaching your goals!

See the Course Schedule on the next page.

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

Scroll down to view the Course Schedule.

Course Schedule All times are Central Standard Time (CST)

Date	Assignment
January 10	Class opens
January 18	 Introductions in Discussion Board by 23:59 Pre-Course Survey due by 23:59
January 25	Research Presentation Topic to Discussion Board due by 23:59
	Module 1 Quiz due by 23:59
January 27	BSRT (non-registered entry-level students-hybrid) Only
9am-12pm	Seminar 9am-12pm (Required of all BSRT students)
	(BSRS classification-registered technologists- online students will Not come to seminar)
February 1	Mod 2 Case Study – Pediatric Considerations to dropbox and discussion board by 23:59
February 8	Module 2 Discussions-Pediatric Case Study ends 23:59
	 Module 2 Quiz due by 23:59 Mod 3 Case Study-Contrast Media to dropbox and discussion board by 23:59
February 15	Module 3 Discussions-Contrast Media ends 23:59
	Module 3 Quiz due by 23:59
	 Module 4 Case Study-Pathology of the Head, Neck, and Spine to dropbox and to discussion board by 23:59
February 22	• Module 4 Discussions-Pathology of the Head, Neck, and Spine ends 23:59
	Module 4 Quiz due by 23:59
February 22	BSRT (non-registered entry-level students-hybrid) Only
	February Presenters submit PowerPoint to the dropbox
February 24	BSRT (non-registered entry-level students-hybrid) Only
9:30am -12pm tentative	Seminar (tentative time) 9:30am-12pm (Required of all BSRT students)
	(BSRS classification-registered technologists- online students will Not come to seminar)
March 1	BSRT (non-registered entry-level students-hybrid) Only
	Peer review for two February Presentations due to the discussion board by 23:59
March 1	Module 5- Quiz due by 23:59
	 Mod 6 Case Study-CT Pathology of the Chest, Abdomen, and Pelvis to discussion board and dropbox by 23:59
March 8	 Module 6 Discussions-CT Pathology of the Chest, Abdomen, and Pelvis ends 23:59
	 Module 6 Quiz due by 23:59
	 Mod 7 Case Study-CT Pathology of the Musculoskeletal Anatomy, Vascular System, and Other CT Procedures to discussion board and dropbox by 23:59
March 21	Last day to withdraw with a "W" grade by 4:00 pm campus time
March 22	 Module 7 Discussions- CT Pathology of the Musculoskeletal Anatomy, Vascular System, and Other CT Procedures ends 23:59

	Module 7 Quiz due by 23:59
March 29	All students-Completed Presentation to Dropbox due by 23:59
March 31	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 5	 Scavenger Hunt Assignment to discussion board by 23:59 QC/Scanning Clinical Assignment (or alternate) due to dropbox by 23:59 All students-MRI Trends Presentation replies in the discussion board due by 23:59
April 12	 Module 8 Discussions-Scavenger Hunt ends 23:59. CT Mock Registry Assignment due to dropbox by 23:59
April 12-22 (Available April 12-22)	Comprehensive Exam (not proctored, timed 60 minutes) due by 23:59

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.