



Course Syllabus: RADS 4853x30-Essentials of Forensic Medical Imaging

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

Department of Radiologic Sciences

Course Information

Name	RADS 4853x30-Essentials of Forensic Medical Imaging (online)
Credit	3 hours
Term	Summer Long Term 2024
Dates	June 3-August 8, 2024
Time Commitment	Students should expect to spend at least 13 hours per week on course material (10-week term)
Prerequisites	None

Professor

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

Assistant Professor, Advanced Modalities Program Coordinator Radiologic Sciences

E-mail: kimberly.onstott@msutexas.edu

Use this format in the subject line: 4853_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 e-mail 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 9-12:00, Tuesdays 11:30-12:30, Thursdays 9-10:00 CST. Please schedule an appointment by e-mail. Other hours are available by request.

Course Description

This course presents the essentials of forensic medical imaging, including evidence handling, autopsy, virtopsy, investigational radiography on living subjects, and anthropological radiography.

Course Objectives

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

1. Explain the history of forensic imaging.
2. Describe how to preserve evidence and the chain of custody.
3. Discuss imaging techniques for forensic radiography.
4. Identify common pathology imaged for forensic investigations.
5. Discuss emerging trends in forensic imaging, including virtopsy.

Teaching Methodology

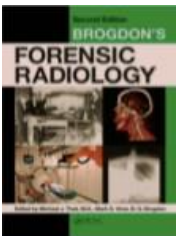
There will be seven module tests, four discussion boards, and one project. See more detailed descriptions of each at the end of this syllabus.

Course Materials

Textbooks

Required

Thali, M.J., Viner, M.D., & Brogdon, B.G. (2010). *Brogdon's forensic radiology* (2nd Ed.). Boca Raton, FL: CRC Press. [ISBN 978-1-4200-7562-5] Note: Either hardback or ebook is acceptable for this course.



This book can be special ordered from the MSU Bookstore for approximately \$215.00. However, an electronic version can be obtained from Amazon for around \$25.00 for a three-month rental or around \$50.00 to purchase.

MedOne Radiology

This online resource is free to MSU students. Access MedOne Radiology through the Moffett Library online databases. Log in to the MSU portal and access the Library Resources. Under the [Research Databases](#) tab, click on Health Sciences and scroll down to MedOne.

MedOne Radiology is a comprehensive online reference for all medical imaging specialists. It provides extensive case libraries and diagnostic guidance for those in training, as well as essential references and procedural guidelines for qualified specialists in clinical practice

Recommended

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (7th Ed.) [ISBN 978-1433832161]



This book is approximately \$35.00 from the MSU Bookstore

Computer Requirements

In this course, you need access to an up-to-date computer with an internet connection. D2L does not work well with Internet Explorer. Use a different browser when working in D2L.

Assignments

The student must:

- Complete reading assignments, visit selected internet websites
- Complete the required online examinations
- 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 1: Introduction

Module 2: Legal Considerations

Module 3: Technical Considerations for the Technologist

Module 4: Identification in Individual and Mass Casualty Incidents Module 5: Violent Crime

Module 6: Non-violent Crime

Module 7: Virtopsy

Evaluation

Grade Distribution

- 25% Discussions
- 50% Module Quizzes
- 25% Course Project

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 e-mail notification (to the e-mail 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 4853 course home page
2. Select Notifications
3. Check the e-mail address you wish to send e-mail notifications. Select "Change your e-mail settings" and enter the new e-mail address if you need to change this. This e-mail address should be an e-mail 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 e-mail notification.

You can e-mail 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 below). Assignments must be submitted by the time posted in the course schedule below. All times are Central Standard Time. If a student fails to meet a deadline, the student will receive no credit for the assignment not submitted on time. The student must 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, e-mail 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, 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 e-mail 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. 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.

Technical Difficulties

Occasionally, you may experience problems with accessing D2L, accessing class files located within D2L, connecting with your internet service, or other computer-related problems. 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 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 e-mail should be e-mailed 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 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 4:00 pm on July 31, 2024. 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 first be addressed by the student and the course professor. If there is no resolution, students must follow this sequence:

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

Honor System

RADS 4853 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 4853 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.

Artificial Writing Generators

The use of 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 that are attributed to an artificial writing source will automatically receive a zero (0) for a grade and there will be no making up of the assignment. This is a form of both cheating and 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 plagiarism.

Senate Bill 11

Senate Bill 11 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](#). If you have questions or concerns, please contact MSU Chief of Police [Patrick Coggins](#) by e-mail 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 e-mail so there is a record of the communication and often the professor is away from her desk.

4853_your last name_ topic of message

Example: 4853_Smith_Title Page question

When there is a need to contact a student, the professor will use the student's students.msu.edu e-mail account. The professor is not responsible for sending e-mails to any other e-mail account (set up your e-mail to forward messages to an e-mail you check often to avoid potentially missing any correspondence). Faculty members will not be responsible for keeping up with other e-mail 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 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 subject line of the e-mail.

RADS 4853 Assignment Details

Late Work

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.

Module Quizzes -50%

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 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 based on information learned in the modules. Be sure to read all required reading assignments and course notes for each Module. Quiz scores will be available immediately after a student submits their quiz for grading.

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 (<https://msutexas.edu/it/>), and send an e-mail to the course instructor explaining what happened. Screenshots 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 e-mail 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.

Discussions -25%

There are four discussion topics in this course. Each discussion requires an original post and at least two replies to two of your peers. Your first post must be posted within 72 hours of the due date to receive full credit. This gives your peers ample time to reply.

Course Project -25%

Two choices are available for the course project: A 3 – 4-page literature review in APA format or a poster presentation (36”x 48”). Posters must not be printed; only the printable PDF file must be submitted. For either project, the student must pick and have approved an appropriate topic in forensic imaging. In the appropriate discussion board, the student should post the proposed project title, a sentence or two explaining the subject matter, and the format in which the project will be presented (paper or poster). An example of a post would be:

Title: “The Use of 3D Modeling in Forensic Investigation”. This poster will discuss how CT/MR DICOM files from forensic cases are used to create 3D models. These models may then be used by investigators or presented as evidence to a jury.

Another example might be:

Title: “Virtopsy as a Replacement for Medicolegal Autopsies.” This paper will discuss the current and future trends in virtopsy. Virtopsy is being seen as a viable replacement for many traditional autopsies, saving both time and money.

Paper Requirements

A paper should include the following:

- Title page (separate page)
- Abstract (separate page)
- 3 – 4-page discussion including introduction, method section, discussion, and conclusion
- Reference list (separate page)

Each of the above items should be a separate page(s). When turned in, a paper with all the required components will be 6 or 7 pages. The paper should be in APA format. If there is any question as to what “APA formatting” is, the APA Manual (7th Ed), which is a recommended textbook, should be consulted.

Poster Requirements

A poster should include the following:

- Title
- Information in text boxes with the appropriate headings
- Minimum of 5 images with citations
- Reference list

The poster should be made using a PowerPoint template for a 36”x48” poster. The file should be saved as a PDF file for uploading. All references and citations should be in APA format as outlined in the APA Manual (6th Ed.) NOTE: The professor will print a “proof” copy of your poster on 8.5x11 paper for grading. For details on easy formatting, please see the instructions on D2L.

Course Schedule

All times are Central Standard Time (CST)

Date	Assignment
June 3	Class opens All Tests Open Review the Course Syllabus
June 11	Module 1 Quiz Due by 23:59
June 18	Module 2 Quiz Due by 23:59 Discussion Board 1 Due (Post-mortem computed tomography compared to medico-legal autopsy – Pathologies in the torso and limbs) Project topic and format posted in the discussion board
June 25	Module 3 Quiz Due by 23:59
July 2	Discussion Board 2 Due (Public awareness of the use of clinical CT machines for postmortems)
July 9	Module 4 Quiz Due by 23:59

Date	Assignment
July 16	Module 5 Quiz Quiz Due by 23:59 Discussion Board 3 Due (The diagnostic value of forensic imaging in fatal gunshot incidents: A review of literature)
July 23	Module 6 Quiz Due by 23:59
July 30	Module 7 Test Discussion Board 4 Due (Critical review of discussion post)
July 31	Last day to withdraw with a "W" grade by 4:00 pm campus time
July 31	Course Project Due

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.