



*Gunn College of Health Sciences and Human Services
Department of Radiologic Sciences
Bachelor of Science, Radiologic Technology Program
Course Syllabus - Dr. Rodney Fisher*

RADS 4853 Essentials of Forensic Medical Imaging

Fall 2023 Online

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Office Hours: Student Specific: Mondays 3:00 – 4:00, Tuesdays 1:00 – 3:00, and Wednesdays 10:00 – 12:00. Appointments always take preference over walk-ins. If calling, please email for a time first.

WHY ARE YOU TAKING THIS COURSE?

In this course, you will learn how medical imaging can be used for legal reasons.

Among the topics we will discuss this semester:

- The history of forensic imaging.
- How to preserve evidence and the chain of custody.
- Imaging techniques for forensic radiography.
- Common pathology imaged for forensic investigations.
- Emerging trends in forensic imaging, including virtopsy.

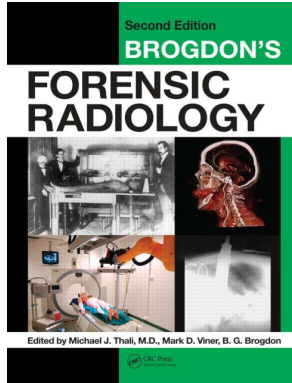
The Course is made up of the following modules:

- 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

THE TEXTBOOKS YOU WILL NEED

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.

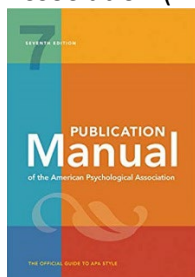
MedOne Radiology

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 Health Sciences and scroll down to MedOne.

MedOne Radiology is a comprehensive online reference for all medical imaging specialists. It provides extensive case libraries, diagnostic guidance for those in training, and 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.

HOW TO CONTACT ME

I prefer email for most contacts. This gives me a written record of our discussion so I do not forget anything important. Also, I am often away from my desk and may be hard to reach by telephone. If you need to call or see me in my office, please email me for an appointment. The appointment will ensure that I have everything ready for your visit and that we will not be disturbed.

ATTENDANCE

While there is no attendance policy for this course because it is online, it is very important that you log into D2L at least once a week. I may post news items that will require your attention. It is also good to check your email several times during the week. Please make sure your email is kept up-to-date with the university. You may do this through the MSU Portal.

HOW I GRADE THIS COURSE

I use the following grading scale:

- A = 100 – 90
- B = 89.99 – 80
- C = 79.99 – 70
- D = 69.99 – 60
- F = 59.99 and below

While I do not round individual assignments, I will round your semester grade up to the next grade if you are within 0.5 points of the next grade. Late assignments are not accepted without my prior approval. If I do accept any late assignments, they are subject to a late penalty.

Your semester grade will be made up of the following type of assignments:

D2I Module Tests (7)	50%
Discussion Boards (4)	25%
Course Project (Paper or Poster – your choice)	25%

WHAT IS THE CLASS SCHEDULE / DUE DATES?

Notes:

- All assignments are due at 11:59 pm campus time on the date listed.
- The schedule is subject to change if needed

Date	Assignment
August 28	Course opens in D2L
September 12	Module 1 Test Discussion Board 1
26	Module 2 Test Project topic and format (paper or poster) in the appropriate discussion board
October 10	Module 3 Test Discussion Board 2
24	Module 4 Test
30	4:00 PM Last Day to Withdraw and Receive a "W" Instead of an "F"
November 7	Module 5 Test Discussion Board 3
21	Module 6 Test Discussion Board 4
December 5	Module 7 Test Course Project

WHAT ARE THE ASSIGNMENTS?

D2L Module Tests (7) 50%

Students should complete the reading assignments, answer the chapter objectives, and review the questions at the end of the chapter before attempting the module tests.

When a student has reviewed a module and is ready for the test, they will log into D2L and receive a customized timed module test consisting of randomized multiple-choice questions. Tests contain 25 random questions; students will have 60 minutes to complete. Only one attempt is allowed for any given test.

All tests must be completed by the due date. Incomplete tests will be given a score of zero. 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. Acceptance of an extenuating circumstance is at the discretion of the professor. Since all module tests are open for two months, only the most extraordinary circumstances will be considered.

If students have technical difficulties during a test, they should use the 'Help' link on the top toolbar within D2L to contact the MSU Information Systems Support Staff and email the course professor explaining what happened.

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

- Module Test Number (1-7)
- Question Stem
- Rationale Supporting Why the Student's Answer is Correct
- Include Page Numbers When Referencing the Textbook

For example, a student cannot send the message: "I think question number ten is wrong on test four," because each student gets a test of randomly generated test items. The professor has to know the question stem to find the question in the database. After reviewing the situation, if the course professor thinks a revision is justified, the student's test score will be revised to reflect the additional points.

Discussion Boards (4) 50%

There are four discussion boards. Think of each discussion board as a mini-paper. For the first three discussion boards, you will be given a PDF file to read. You will then need to do outside research, finding at least two peer-reviewed articles which are not your textbooks. You will then write 3 – 4 paragraphs about the topic using APA formatting. Here are the topics you will discuss:

- Discussion Board 1: Post-mortem computed tomography compared to medico-legal autopsy
- Discussion Board 2: Public awareness of the use of clinical CT machines for postmortems
- Discussion Board 3: The diagnostic value of forensic imaging in fatal gunshot incidents

Discussion Board 4 requires you to review one of your classmate's posts from one of the first three discussion boards. You will need to do outside research with at least two peer-reviewed articles. The goal of this post is to add something to the other student's post, either by agreeing and elaborating further on their post or by disagreeing and showing differing data. Please read the full instructions on D2L for more information on how to write your posts.

Course Project 25%

There are two choices 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 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 (6th 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.

Essentials of Forensic Medical Imaging Course Policy Details

Professional Conduct

All students are expected to comport themselves professionally while in class or working on course projects with other students on or off campus. If students have questions about what the proper professional conduct should be, please reference the University Student Handbook located on the [Office of Student Rights and Responsibilities](#) webpage and the Shimadzu School of Radiologic Sciences Academic and Clinical Handbook for the student's current cohort located on the [BSRT Program](#) webpage. Violations of either set of standards or policies may result in grade reduction and referral for disciplinary action.

Attendance

While there is no attendance policy for this course because it is online, it is very important that students log into D2L at least once a week. The professor may post news items that will require the student's attention. It is also good to check for students to check their email several times during the week. Students should ensure their email address is kept up-to-date with the university. This may be done through the MSU Portal.

Requesting a Withdrawal

The last opportunity to drop this course with a grade of "W" is 4:00 pm on October 30, 2023. The student must initiate all withdrawals. After this date, dropping the course results in a grade of "F." Withdrawal from this course will result in the student being dismissed from the BSRT program.

In an emergency or extenuating circumstance, a student may request an incomplete grade 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 incomplete grade will automatically convert into a grade of "F."

Technical Difficulties

Occasionally, students may experience problems accessing D2L, accessing class files located within D2L, connecting with their internet service, or other computer-related problems. Make the professor aware of a technical problem as soon as possible. A due date extension is typically granted if a problem occurs

on the university's end, such as D2L failure. **However, remember that students are responsible for having (or accessing) a working computer in this course. Assignments and tests are due by the due date, and personal computer technical difficulties will not be considered a reason for the instructor to allow students extra time to submit assignments, tests, or discussion postings.**

Dropbox assignments that can be attached in an email should be emailed to the professor when 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
- By phone, call the Distance Education office at 940-397-4868 between 8 am and 5 pm.
- Use the D2L help link in D2L.
- Contact your professor.
- For other computer access issues, visit the MSU Information Technology Website online.

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 between the student and the professor.

If there is no resolution, students must follow this sequence:

1. Department Chair – Dr. Beth Vealé (940-397-4611)
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, however small, academic dishonesty creates a breach of 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 or each student group as appropriate 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/artificial writing detection service may be used in this course. Student assignments may be uploaded to the service for identification of similarities to other student papers and published works or the use of artificial writing generators in place of the student's own work.

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 from 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 they have previously submitted for this or other courses.
- The use of materials generated by agencies engaged in "selling" term papers is also plagiarism.

Using of Artificial Writing Generators includes but is not limited to

- Using any artificial intelligent agent (e.g., Chat GPT) to generate written work that the student uses within their course paper, poster, presentation, or any other project, with or without proper citation, or;
- Using any artificial writing generator as a primary source, or;
- Using any artificial writing generators in place of traditional research methods to obtain sources and any interpretations about the content of those sources.

This course will not tolerate academic dishonesty (cheating, plagiarism, artificial writing generators, etc.). Whenever a student is unsure whether a situation will be interpreted as academic dishonesty, the student 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., and the student will not be given an opportunity to resubmit the assignment for a grade. Based on the severity of the cheating, plagiarism, or use of artificial writing generators, the professor reserves the right to fail the student in the course and refer the student to the department chair for further disciplinary action, which could include permanent dismissal from the program. Cases may also be referred to the Dean of Students for possible dismissal from the university and the ARRT as a possible ethics violation.

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" to 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 or the use of artificial writing generators.

Campus Carry / Active Shooter

Campus Carry

Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. The new Constitutional Carry law does not change this process. Concealed carry still requires a License to Carry permit, and openly carrying handguns is not allowed on college campuses. For more information, visit [Campus Carry](#).

Active Shooter

The safety and security of our campus is the responsibility of everyone in our community. Each of us has an obligation to be prepared to appropriately respond to threats to our campus, such as an active aggressor. Please review the information provided by MSU Police Department regarding the options and strategies we can all use to stay safe during difficult situations. For more information, visit [Safety / Emergency Procedures](#).