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*Gunn College of Health Sciences and Human Services  
Department of Radiologic Sciences  
Bachelor of Science, Radiologic Technology Program  
Course Syllabus - Rachel Whatley*

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**RADS 4853 Essentials of Forensic Medical Imaging**

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**Course Information**

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<b>Name</b>	RADS 4853x30-Essentials of Forensic Medical Imaging (online)
<b>Credit</b>	3 hours
<b>Term</b>	Summer 2022
<b>Dates</b>	May 31, 2022 – July 31, 2022
<b>Time Commitment</b>	Students should expect to spend at least 9 hours per week on course material in a 15-week term or 12 hours per week in a 10-week term
<b>Prerequisites</b>	None

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**Professor**

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**Rachel Whatley, MSRS, RT(R)**

**Assistant Professor, Radiologic Sciences**

**E-mail:** Rachel.Whatley@msutexas.edu

**Phone:** (940) 397-4571      **Fax:** (940) 397-4845

**Office:**            Midwestern State University  
                          3410 Taft Blvd, Centennial Hall 430F  
                          Wichita Falls, TX 76309

**Office hours:** Student Specific: Tuesday 9am – 10am, Wednesday 9am – 11am, and Thursdays 9am – 11am Central Time. Appointments always take preference over walk-ins. If calling, please email for a time first.

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**Communicating with the Professor**

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I prefer email so there is a record of the communication and often I am away from my desk. Phone calls may be answered by email when appropriate. I will respond or at least acknowledge all student communications within five (5) business days. If this time period will be longer because I am out of town or for another reason, a news item will be posted online in D2L for the class. Please always give me the time asked for to respond before repeating your request.

## Course Description

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

## Course Objectives

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Upon completion of this course, the student will:

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

## Teaching Methodology

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Independent reading assignments; D2L module quizzes; directed discussion boards, and a choice of a literature review as either a paper or poster project.

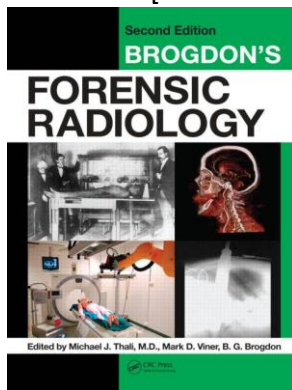
## Course Materials

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### Textbooks

#### Required

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



#### Required

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, and essential references and procedural guidelines for the qualified specialist in clinical practice.

## Recommended

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



## 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

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

## Important Dates

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All times are MSU campus time

Date	Assignment
<b>May 31</b>	Class opens All quizzes open Review course syllabus
<b>June 21</b>	<b>Report topic and format due 11:59 pm posted in the discussion board</b> <b>First Discussion Board post due 11:59 pm</b>
<b>July 5</b>	<b>Second Discussion Board post due 11:59 pm</b>
<b>July 7</b>	<b>Last day to withdraw with a "W" grade by 4:00 pm campus time</b>
<b>July 19</b>	<b>Third Discussion Board post due by 11:59 pm</b>
<b>July 31</b>	<b>All quizzes close at 11:59 pm</b> <b>Fourth Discussion Board post due by 11:59 pm</b> <b>Course Project due by 11:59 pm in the dropbox</b>

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## Course Modules

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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

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### Grade Distribution

- 50% D2L Module Quizzes (7)
- 25% Discussion Boards (4)
- 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 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 4853 course home page
2. Select Notifications
3. Check the box next to "News - new item available" and then check any other boxes you wish to receive an email notification from.
4. 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.

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 question may be located there.

## Late Work

### Due Dates

Most assignments are due on Tuesdays except for the last week of class (see Important Course Dates above). Assignments must be submitted by 23:59 (11:59 pm) Central time, on scheduled due dates in the course schedule. If a student fails to meet a deadline the student will receive no credit for the assignment not submitted on time.

### Emergency Extension

If you have a major event such as a death in the family, illness, hospitalization, or other extenuating circumstances, email the professor at [rodney.fisher@msutexas.edu](mailto:rodney.fisher@msutexas.edu) as soon as possible and on or before the scheduled due date. Extensions are granted 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.

## 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

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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

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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

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The last opportunity to drop this course with a grade of “W” is in the Course Schedule. 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

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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

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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 Vealé (940-397-4611)
2. College Dean - Dr. Jeff Killion (940-397-4594)
3. Dean of Students – Matthew Park (940-397-7500)

## Honor System

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RADS 4853 adheres to the [MSU Code of Conduct](#).

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 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.

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 [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

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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 email at [mpatrick.coggins@msutexas.edu](mailto:mpatrick.coggins@msutexas.edu).

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## Essentials of Forensic Medical Imaging Assignment Details

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There are seven modules, seven quizzes, four discussion boards and one project in this course.

- 50 % D2L Module Quizzes (7)
- 25 % Discussion Boards (4)
- 25 % Course Project

### D2L Module Quizzes (7)-50%

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

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

All quizzes must be completed by the July 31th due date. Incomplete quizzes 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 of the module quizzes are open for two months, only the most extraordinary of circumstances will be considered.

If students have technical difficulties during a quiz, they should use the 'Help' link located on the top toolbar within D2L to 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 (1-7)
- 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 quiz four" because each student gets a quiz 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 quiz score will be revised to reflect the additional points.



## CT Course Project-25%

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The course project is designed to give the student experience working with CT protocols. Before beginning this project, the student survey must be submitted and acknowledged by the instructor in the gradebook. No project will be graded without approval by the instructor. The survey will be used to determine if a student will perform the CT Clinical Experience Project or the Alternate CT Presentation Project.

In order to perform the CT Clinical Experiences, a student must have permission to perform exams on actual patients from their facility. In addition, some states regulations will not allow distance students to perform assignments at facilities within their state's borders. When you submit your approval form the professor will review your state's guidelines on a case-by-case basis.

There are instructions within the course for both the CT Clinical Experience Project and the Alternate CT Presentation Project.

No student will begin a project without obtaining the professor's approval. Every student must submit one form of the CT Course Project to the appropriate drop box by the scheduled due date.

## Course Project-25%

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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 do not have to be printed, only the printable PDF file needs to 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 make a post with the proposed title of the project, 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 to 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). A paper with all the required components will be 6 or 7 pages when turned in. The paper should be in APA format. If there is any question as to what "APA formatting" is, the APA Manual (6<sup>th</sup> Ed) which is a recommended text book 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 (6<sup>th</sup> 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.

**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 (below).

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

Scroll down to view the Course Schedule.

### Course Schedule

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All times are MSU campus time

Date	Assignment
<b>May 31</b>	<b>Class opens All quizzes open Review course syllabus</b>
<b>June 21</b>	<b>Report topic and format due 11:59 pm posted in the discussion board First Discussion Board post due 11:59 pm</b>
<b>July 5</b>	<b>Second Discussion Board post due 11:59 pm</b>
<b>July 7</b>	<b>Last day to withdraw with a "W" grade by 4:00 pm campus time</b>
<b>July 19</b>	<b>Third Discussion Board post due by 11:59 pm</b>
<b>July 31</b>	<b>All quizzes close at 11:59 pm Fourth Discussion Board post due by 11:59 pm Course Project due by 11:59 pm in the dropbox</b>