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A Member of the Texas Tech University System

Course Syllabus: RADS 3523 Essentials of Research

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

Department of Radiologic Sciences

Course Information

Information	Description
Name	RADS 3523-Essentials of Research
Credit	3 hours
Term	Spring 2026
Dates	January 20- May 8, 2026
Class Meeting Times and Days	Mondays 10:00-11:20 am – Centennial Hall 304
Time Commitment	Students should expect to spend at least 9 hours per week on course material (15-week term)

Professor

Dr. Lynette Watts, Associate Professor, Radiologic Sciences

Email: lynette.watts@msutexas.edu

Use this format in the subject line: 3523_your last name_topic of the message.

Email is the best way to contact me.

Phone: (940) 397-4833

Office location: Midwestern State University

3410 Taft Blvd

Centennial Hall 430K

Wichita Falls, TX 76308

Office hours: *Please make an appointment by email*.

Course Description

This course introduces research methods specific to radiologic sciences.
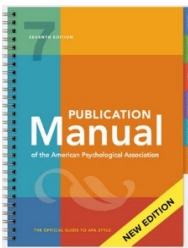
Course Objectives

Upon completion of this course, the student will:

- **Discuss the importance of research in medical imaging.**
- **Differentiate between the types of research: quantitative, qualitative, literature review, mixed methods, and evidence-based practice.**
- **Discuss the ethical and legal aspects of research.**
- **Demonstrate the ability to synthesize current literature findings in medical imaging by producing a scholarly literature review.**

Course Materials

Required

American Psychological Association. (2019). *Publication manual of the American Psychological Association* (7th ed.). Washington, DC: Author. [ISBN 978-1433832161]. ($14.00+)

Computer Requirements

You need access to an up-to-date computer with an internet connection, a webcam, and a microphone. Additionally, D2L does not work well with Internet Explorer. Use a different browser when working in D2L. Also, **Chromebooks will NOT work.** Only Word documents will be submitted in this course. If using a MAC, documents can be saved as Word files. Video: [How to save an Apple Pages document as a Microsoft Word file (.doc & .docx)](#)

Teaching Methodology/Class Activities and Assignments

- Independent Module Readings
    - Module 1: D2L Welcome Week
    - Module 2: D2L Beginning Phase-Choosing a Topic & Forming a Research Question
    - Module 3: D2L Source Retrieval-Gathering Phase
    - Module 4: D2L Organization Phase
    - Module 5: D2L Synthesis & Writing Phase
    - Module 6: D2L Formal Elements Phase-Introduction, & Methods
    - Module 7: D2L Formal Elements Phase-Conclusions & Future Research
    - Module 8: D2L Formal Elements Phase-Abstract
    - Module 9: D2L Finalizing Submission & Dissemination Phase
    - Module 10: D2L Finalizing Miniature Literature Review

- Assignments (70%)
    - Topic Proposal
    - Synthesis Matrix

- o   Title Page & Reference List
- o   First Paragraph
- o   Title Page, Introduction, Methods, Paragraphs 1-5, Reference List
- o   Final Literature Review Paper
- Quizzes (10%)
  - o   Introduction to APA Manual
  - o   Types of Research
  - o   Plagiarism/AI
- Participation (20%)
  - o   Students must participate in class activities, projects, and discussions. Evidence of class participation includes attendance, being on time, participating in class discussions, **bringing assignments to class**, and submitting assignments on time. Each unexcused absence (see attendance) will be a 5-point deduction.

Important Dates and Course Schedule – 23:59 p.m. is 11:59 p.m.

Important Dates

Date	Lecture	Assignment
January 20	Class opens	
January 20	Online Module 1 – Welcome Week • Introduction • Syllabus & Course Overview	
January 22		Syllabus Acknowledgment due in the discussion board by 23:59
January 26	10-11:20 am Class Meeting CE 304 Module 2 -Beginning Phase: Choosing a Topic & Forming a Research Question • Choosing a Topic • Topic Proposal Form	
January 27		Introduction Discussion Board Due by 23:59 Introduction to the APA Manual Quiz Due by 23:59
***February 2	10-11:20 am Part of the **Class meets in the library computer lab on the second floor(30 students)** Module 3-Source Retrieval-Gathering Phase	
February 3		Types of Research Quiz Due by 23:59

Date	Lecture	Assignment
***February 4**	10-11:20 am The other part of the **Class meets in the library computer lab on the second floor** (10 students) Module 3-Source Retrieval-Gathering Phase	
February 9	10-11:20 am Class Meeting CE 304 Module 4 – Organization Phase • APA Workshop • Matrix • *Print & bring articles to class*	
February 10		Topic Proposal Due by 23:59 Plagiarism/AI Quiz Due by 23:59
February 16	10-11:20 am Class Meeting CE 304 Module 4 – Organization Phase Continued • APA Workshop • Title Page • Reference List/In-Text Citations • *Print & bring the matrix & articles to class*	
February 17		Matrix Due by 23:59
February 23	10-11:20 am Class Meeting CE 304 Module 5 (Week 1) – Writing Phase-Writing Assignment: Paragraph 1 • AI guidance • In-Text Citations • Begin writing the first paragraph *You will bring this to class next week*	
February 24		Title Page & Reference Page Due by 23:59
March 2	10-11:20 am Class Meeting CE 304 Module 5 (week 2) –Writing Assignment: Paragraph 2 & AI Assignment • *Print and Bring Paragraph 1 to class for peer review*	

Date	Lecture	Assignment
	• Begin writing Paragraph 2 • Begin the AI Assignment • Prepare to bring Paragraph 2 and the AI Assignment to class on March 16.	
March 3		First Paragraph Due by 23:59 to the dropbox
March 9-14	No Class – Spring Break	
March 16	10-11:20 am Class Meeting CE 304 Module 5 (week 3) – Writing Assignment: Paragraph 3 • Common mistakes & Suggestions • *Print and Bring Paragraph 2 to class for peer review* • Prepare to bring Paragraph 3 to class next week.	
March 17		Second Paragraph Due by 23:59 to the Discussion Board
March 23	10-11:20 am Class Meeting CE 304 Module 5 (week 4)–Writing Assignment: Paragraphs 4 & 5 and maybe 6 • Common mistakes & Suggestions • *Print and Bring Paragraph 3 to class* • Work on the remaining body paragraphs (2-3 more). Prepare to bring Paragraphs 1-5 to class next week.	
March 24		Third Paragraph Due by 23:59 to the Discussion Board
March 30	10-11:20 am Class Meeting CE 304 Module 6 – Formal Elements Phase-Introductions/Methods • Explanation of what is included in the Introduction and Methods sections • Work on Introductions and Methods in class.	

Date	Lecture	Assignment
	• *Print and bring at least 5 Body paragraphs to class	
April 1		1-5 Body Paragraphs Due by 23:59 to the Discussion Board
April 2– April 4	Holiday Break	
April 6	10-11:20 am Class Meeting CE 304 Module 7 – Formal Elements Phase - Conclusion/Future Research • Work on Conclusions in class: 1 sentence to recap the purpose. 1-2 sentences for each theme to recap what was found. 1-2 sentences for future research using sentence starters. • *Print and bring Title Page, Introduction, Methods, at least 5 Body paragraphs, and updated Reference Page to class	
April 7		Title Page, Introduction, Methods, at least 5 Body paragraphs, and updated Reference Page to the discussion board and the dropbox by 23:59
April 13	10-11:20 am Class Meeting CE 304 Module 8 – Formal Elements Phase-Abstract • Common mistakes & Suggestions • Explanation of what is included in the Abstract • Work on Abstracts in class • *Print and bring Title Page, Introduction, Methods, at least 5 Body paragraphs, updated Reference Page, and conclusion to class*	
April 14		Title Page, Introduction, Methods, at least 5 Body paragraphs, updated Reference Page, and conclusion to the discussion board by 23:59
April 20	10-11:20 am Class Meeting CE 304 Module 9– Final Submission &	

Date	Lecture	Assignment
	Dissemination Phase • Common mistakes & Suggestions • Peer Review • ***Print and Bring** Complete Paper to class: Title Page, Abstract, Introduction, Methods, at least 5 Body Paragraphs, Conclusion, and Reference List	
April 21		Complete paper: Title Page, Abstract, Introduction, Methods, at least 5 Body Paragraphs, Conclusion, and Reference List to the discussion board by 23:59
April 27	Module 9–-Final Submission & Dissemination Phase • Partner Peer-Review • Last Look Audit • ***Bring final paper to class***	
April 28		Final Paper Due by 23:59
April 29	Last Day for "W". Drops after this date will receive grades of "F."	
May 4	10-11:20 am Class Meeting CE 304 Module 10: Beyond the Classroom – Publishing & Professional Recognition • Publishing • Contests • ACERT, ASRT, TXSRT • Reflections	

Information contained in the course syllabus, besides the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.

Evaluation

Grade Distribution

- Assignments 70%
- Participation 20%
- Quizzes 10%

Grade Scale

- A=100-90
- B=89-80
- C=79-70
- D=69-60
- F=59 and below

NOTE: You must make a C average (70%) or above to continue in the Radiologic Technology Program.

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 email notifications (to the email address of your choice) when News items are posted, so you do not miss critical updates.

Setting up notifications in D2L

1. Click the down arrow in the News section on the 3523-course home page
2. Select Notifications
3. Check the email address you wish to send email notifications to. 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 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 located there.

Late Work

Due Dates

Most assignments are due on Tuesdays (see Important Course Dates below). Assignments must be submitted by 23:59 (23:59) Central Standard Time on scheduled due dates in the course schedule. If a student fails to meet a deadline, the student will receive no credit for the assignment.

Progression

Each assignment in this course is built on the previous assignment. Therefore, if any assignment has not been completed, NO other assignments will be accepted for grading. The student must consult with the professor if an assignment due date has been missed.

Emergency Extension

If you have a significant event, such as a death in the family, illness, hospitalization, or other extenuating circumstances, email the professor at lynette.watts@msutexas.edu as soon as possible, on or before the

scheduled due date. I 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 has passed, ten (10) 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. ***Please avoid End of Course Late Work***: Please note there are University deadlines for submitting grades at the end of the semester. Therefore, 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.

Attendance

Class Meeting Date and Time

Wednesdays 10:00 am – 11:20 am Centennial Hall, Room 304

Attendance Policy

Tardiness

Any student who arrives at class/lab after the starting time designated in the university catalog of classes will be tardy. If a student arrives tardy, two (2) points will be deducted from their attendance (participation) grade for each tardy. Three tardies constitute one (1) unexcused absence, resulting in a deduction of five (5) points from the student's attendance (participation) grade.

Absent from Class

A student will be considered absent from class/lab if the student does not appear after fifteen (15) minutes have elapsed. If the student has an unexcused absence, five (5) points will be deducted from their attendance (participation) grade. Three (3) separate unexcused absences will result in failure of the course and possible dismissal from the program. There will be no exception to this policy.

A student will be considered as having an excused absence from class/lab if the following criteria have been established:

1. Death of an immediate family member. An immediate family member is considered a grandparent, parent, sibling, spouse, in-law, aunt, uncle, or child.

2. Summons to appear in court or for jury duty. A copy of the summons is required.

3. Call to military service. A copy of your orders to report is required.

4. University-sponsored event. Members of athletic teams, college bowl participants, etc., will be excused with proper notification.

5. Debilitating illness or disability will be addressed on an individual basis. If a student is affected by an illness that is not debilitating (i.e., COVID, flu, viral infection), which may cause the student to miss more than one consecutive class/lab session, that student will be marked as unexcused for the number of days missed unless a doctor's note is provided. A doctor's note must have a statement to the effect that you were seen in the office or that you are cleared to return to classes. It does not have to state what you were seen for. There will be no exception to this policy. If a student is affected by an illness that is not debilitating and only requires missing one class/lab session, a doctor's note is not required; however, contact with the instructor must be made BEFORE the designated class time to be considered excused.

Personal Appointments

Students should refrain from making appointments that will take them out of class/lab. Routine doctor or dentist visits are an example of this. If you leave class/lab early for an appointment or any other reason, the occurrence will be treated the same as tardiness. Doctor visits will be approved only with an accompanying release note.

Campus Closure Policy

In the event of campus closure due to weather or any other unscheduled event, this course will move fully online. Course due dates for assignments and quizzes will remain the same. If the event prevents you from accessing a computer or the internet, use whatever means you have to send a note to your professor as soon as you are able (e.g., a phone message, an email from a phone, or a friend's phone).

Classroom Etiquette

Civility

You must respect every student's right to learn. Talking during class, leaving or entering the room repeatedly during class, or any other type of disruptive behavior may result in your being asked to leave the classroom. If this should occur, you will not be allowed to return to class that day, and it will be treated as an unexcused absence with a 5-point deduction from your attendance grade. Repeat offenders will be sent directly to the program chair's office. Cell phones are not to be used in class.

Mental Health

We all experience stressful and difficult events as a normal part of life. As your instructor, I believe your mental health is an important part of your academic success. Success in this course depends heavily on your health and well-being. You should recognize that stress is an expected part of the college experience and can often be compounded by unexpected setbacks or life changes outside the classroom. I strongly encourage you to reframe challenges as unavoidable pathways to success. Reflect on your role in caring for yourself throughout the term, before the demands of exams and projects reach their peak. Please feel free to reach out to me about any difficulties that may affect your performance in this course as soon as they occur and

before they become unmanageable. In addition to your academic advisor and me, I strongly encourage you to contact the many other support services on campus that stand ready to assist you.

• Counseling Center – or call 940-397-4618 to schedule an appointment

• BetterMynd- free virtual counseling for students looking for evening appointments

Technical Difficulties

Occasionally, you may experience problems accessing D2L, accessing class files in D2L, connecting to your internet service, or other computer-related issues. 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, remember that 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 to an email should be emailed 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 to the MSU Information Technology Website.

Requesting a Withdrawal

The last opportunity to drop this course with a grade of "W" is 4:00 pm on April 30, 2026. The student must initiate all withdrawals. After this date, dropping the course results in an "F" grade.

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 meet 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 opportunities 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. In addition, 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. The Office of Disability Services for resolution will provide advice and assistance if the matter remains unresolved. 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) 397-4140 or at 3410 Taft Blvd., Clark Student Center, Room 168.

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. Lynette Watts (940-397-4833)
2. College Dean - Dr. Jeff Killion (940-397-4594)
3. Dean of Students – Matthew Park (940-397-7500)

Honor System

RADS 3523 adheres to the MSU Code of Conduct.

In particular, however small, academic dishonesty breaches academic integrity. A student's participation in this course is expected to 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.

Plagiarism

All components of RADS 3523 are designed to represent each student's individual efforts and are NOT to be shared, copied, or plagiarized from other sources. When students submit their work for grading, they attest that they have complied with this rule.

An online plagiarism service will be used in this course. Student assignments will be uploaded to the service to identify 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 paraphrasing or direct quotation without a correct citation in the text and the reference list,
- The published or unpublished works of another person.
- Students may NOT submit papers and assignments previously submitted for this or other courses.
- Using 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 whether a particular situation constitutes academic dishonesty, they should ask the professor for clarification. If students are guilty of academic dishonesty, a zero (0) grade 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

Artificial Intelligence (AI) Usage Policy

In this course, the use of Generative AI tools (such as ChatGPT, Claude, Gemini, etc.) is permitted with specific limitations to ensure academic integrity and the development of critical research skills.

Research & Sourcing: You may use AI tools for preliminary research and topic exploration. However, to ensure the validity and scholarly weight of your work, at least 50% of the sources cited in any assignment must be retrieved directly from the MSU Moffett Library online databases.

Writing & Content: The use of AI in the writing process is strictly limited to spelling and grammar correction, unless otherwise noted within the writing assignments (see instructions). AI tools are not permitted to generate text, arguments, analysis, or the bulk content of any assignment, including the final research paper and discussion board posts.

Verification: To maintain the integrity of your research, you must be prepared to provide PDF copies of all sources used upon request. Additionally, some assignments require you to specifically copy and paste the text and pages where you gathered the information. We will demonstrate how to do this in class.

Consequences: Failure to adhere to these guidelines will be treated as a violation of academic integrity. A violation will result in a grade of zero for the assignment. Egregious cases of academic dishonesty involving AI may result in a failing grade (F) for the course.

Submission Policy

All assignment submissions made by students in D2L are considered final submissions. It is the student's responsibility to ensure that the correct and complete file has been uploaded. If a student submits an incorrect document, an incomplete draft, or any unintended version, the assignment will be graded as submitted. Students are strongly encouraged to double-check their upload before finalizing the submission.

Additionally, Apple file formats, such as .pages or Keynote files, will **not** be accepted. All submissions must be uploaded in Microsoft Office formats—such as .doc, .docx, .ppt, or .xlsx—or as otherwise specified in the assignment instructions.

Intellectual Property

By enrolling in this course, the student expressly grants MSU a "limited right" to all intellectual property created by the student for this course. The "limited right" shall include, but shall not be limited to, the right to reproduce the student's work/project 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 detect plagiarism.

Senate Bill 11/House Bill 1927

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 are 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 the MSU Police Department on options and strategies we can all use to stay safe in difficult situations. For more information, visit Safety / Emergency Procedures. In addition, students are encouraged to watch the video entitled "*Run. Hide. Fight.*" which may be electronically accessed via the University police department's webpage: *"Run. Hide. Fight."*

If you have questions or concerns, please contact MSU Chief of Police Steven Callarman by email at steven.callarman@msutexas.edu

Communicating with the Professor

Contact information for the professor is listed at the top of the first page of this syllabus. The professor prefers email because it provides a record of communication and because she is often away from her desk.

3523_your last name_topic of message

Example: 3523_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 often check to avoid potentially missing any correspondence). Likewise, faculty members will not be responsible for keeping up with other students' email addresses. 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 to or acknowledge all student communications within five (5) business days. If this time 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 email's subject line.