



## RESEARCH METHODS II

### RADS 6773 RESEARCH METHODS II – Fall 2022

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#### COURSE DESCRIPTION

*Prerequisite:* RADS 5003 – Research Methods I

Online course providing opportunities to develop skills in information literacy, including critical analyses of published research. Students develop a substantial, scholarly research paper that demonstrates graduate-level writing. Students must register for this course each semester until the scholarly paper is satisfactorily completed.

#### COURSE OBJECTIVES

Upon successful completion of this course, the students will:

- Complete a substantial scholarly paper (literature review) on an approved topic of interest in imaging sciences and radiation therapy using the American Psychological Association (APA) writing style.
- Prepare a personal reflection.

#### TEXTBOOKS

*Required*

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (7<sup>th</sup> ed.). Washington, DC: Author. [ISBN: 9781433805615] If you started with the 6<sup>th</sup> ed., let me know.

#### GRADING

50% Scholarly Research Paper (Literature review)  
25% Personal Reflection  
15% Synthesis Matrix  
10% Class Participation



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#### COURSE SCHEDULE WITH ASSIGNMENT DUE DATES

Course schedule

Date	Assignment/Activity
	Class Starts
	Topic Approval - Dropbox
	Synthesis Matrix - Dropbox
	Zoom meeting for questions, help, etc.
	First Draft - Dropbox
	Second Draft (if needed) - Dropbox
	Third Draft (if needed) - Dropbox
	Final Paper - Dropbox
	Personal Reflection - Dropbox

**Note:** Assignments are due by 11:59pm on Fridays CST unless otherwise indicated.  
**The last opportunity to drop this course with a grade of W is 4:00pm CST on TBA, 2022.**

#### ATTENDANCE

This is an online course. Students should regularly access D2L and check their emails for important communications from the instructor.

#### GRADING SCALE

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

Deadlines for submission of assignments are provided in this syllabus. Failure to comply with the established deadlines may result in a grade reduction. **Assignment submissions are considered complete and graded as such.** Be sure to look at all requirements including the grading rubrics before submitting course assignments within D2L.



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#### **PROGRESSION POLICY**

Graduate students are expected to do uniformly high quality work on all MSRS coursework pursued (final course grades of A or B). Only grades of A or B are acceptable for graduate courses transferred from another university.

Graduate students may earn a grade of C in one or two graduate courses and be allowed to continue in the MSRS program as long as their cumulative GPA is 3.0 or higher. If a graduate student earns a grade of C in three or more graduate courses, the student will be dismissed from the MSRS program. Any grade below a C will also result in dismissal from the MSRS program.

#### **ASSIGNMENTS**

##### **Topic Approval**

Students must obtain instructor approval for their RADS 6773 research paper topics. The research paper topics will be based on the foundations established in RADS 5003, Research Methods I. Appropriate topics include those directly related to IMAGING SCIENCES or RADIATION THERAPY issues or strategies and must be relevant to the students' major.

NOTE: If the instructor and student determine the research paper should include a survey or any other research design that requires approval or exemption by the MSU Institutional Review Board (IRB), the student should expect the process will require more than one semester. Due dates may be adjusted accordingly.

##### **Synthesis Matrix**

After a comprehensive review of the resources, students will create a synthesis matrix by the due date indicated on the course schedule. The matrix should include in-text style citations of the sources next to each article block in the matrix. Although the final paper may deviate from the matrix somewhat, it should reflect the organization of this matrix content. Therefore, students must be very familiar with their resources to create an accurate and realistic matrix. A sample of a matrix and corresponding discussion section are located in this syllabus.



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#### Scholarly Research Paper (Literature Review)

The scholarly paper will demonstrate the student's critical analysis of published research and graduate level writing skills using appropriate APA format. The paper should be long enough to provide thorough coverage of the topic, but should be appropriately concise to conform with professional standards. **Typically, the body of the paper (excluding components such as the title page, abstract, reference list, appendices, etc.) will be 20 - 30 pages.**

The literature review should be based on scholarly and peer-reviewed resources published within the past five (5) years. ***Students who choose to include other resources will have to satisfactorily defend those choices.*** The paper should demonstrate the student's ability to gather and discriminate pertinent resources, the ability to SYNTHESIZE information from a variety of sources, the ability to apply new information to a topic, and the ability to correctly use the APA writing style.

#### Personal Reflection

Students will submit a personal reflection of the research process they experienced in the sequence of MSRS courses:

RADS 6443 Survey Design in Radiologic Sciences

RADS 6553 Graduate Data Analysis in Radiologic Sciences

RADS 5003 Research Methods I

RADS 6773 Research Methods II

The reflections should include clearly labeled sections to address each of the following points:

- Understanding - How has your understanding of the research process changed as a result of being in the MSRS Program?
- Challenge - What was the most challenging aspect of the research process for you? What suggestions do you have for future students to manage this challenge?
- Reward - What was the most rewarding aspect of the research process for you?
- Self-Awareness - What did you learn about yourself while completing the research and producing this scholarly paper?
- Publication Potential - Do you have plans to submit either this or another manuscript for publication in the future? Why or why not?



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- Professionalism - How has your experience in the MSRS Program changed your perspective on professionalism?

Students should submit the completed reflection (3 – 6 pages in length) as Microsoft Word document in the appropriate D2L dropbox by the due date indicated on the course schedule.

#### Class Participation

Timeliness of submitting assignments and responsiveness to emails affect the class participation grade. Check the schedule within this syllabus for important dates.

#### Sample Matrix

Title: The Flipped Classroom in Radiologic Science Education

Sample Matrix			
	Students' Perceptions	Instructors' Responsibilities	Implications in RS Education
Clark & Watts, 2015	Active engagement	Instructor = facilitator	X
Johnston, 2014	Hands-on learning	Technology considerations	X
Killion et al., 2014	Active learning	Video technology	Flipped imaging course
Onstott, Fischer, & Killion, 2015	X	Students not prepared for class	X
Sanders & Wynne, 2015	Real-world applications	Tips for technology usage	Additional flipped activities
Watts, 2016	Active participation	Planning and preparation	X

How the Matrix Develops the Discussion Section of the Literature Review



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*The Flipped Classroom in Radiologic Science Education (Title of the Paper)*

*Students' Perceptions*

*(First Major Header of the Discussion Section = Level 1 Heading)*

*Active Engagement (Clark & Watts, 2015; Killion et al., 2014; Watts, 2016)*

*(First Subheader for Students' Perceptions = Level 2 Heading)*

*Hands-on Learning (Johnston, 2014; Sanders & Wynne, 2015)*

*(Second Subheader for Students' Perceptions = Level 2 Heading)*

*Instructor Responsibilities*

*(Second Major Header of the Discussion Section = Level 1 Heading)*

*Technology Considerations (Johnston, 2014; Killion et al., 2014; Sanders & Wynne, 2015)*

*(First Subheader for Instructor Responsibilities = Level 2 Heading)*

*Opportunities and Obstacles (Clark & Watts, 2015; Onstott, Fischer, & Killion, 2015; Watts, 2016)*

*(Second Subheader for Instructor Responsibilities = Level 2 Heading)*

*Implications in Radiologic Science Education*

*(Third Major Header of the Discussion Section = Level 1 Heading)*

*Flipping an Imaging Course (Killion et al., 2014; Sanders & Wynne, 2015)*

*(First Subheader for Implications in Radiologic Science Education = Level 2 Heading)*

## **LATE SUBMISSION OF ASSIGNMENTS**

All assignments have due dates indicated on the course schedule. Due dates are in place to keep students on target for the semester and allow instructors the time to provide detailed, constructive feedback. Assignments not turned in on time will result in a 0 being recorded for that assignment.

With that being said, the instructors understand students who are enrolled in the MSRS program may be responsible for managing many employees and/or students as well as



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personal family matters. If students need any assistance regarding a deadline, they must contact the instructors at least two days before the due date to discuss the issue. “After the fact” stories are not accepted and will result in a grade of 0. Emergencies (death, severe illness, etc.) occur so students should contact the instructors as soon as possible to resolve any due date conflicts. Assignment extensions are decided on a case-by-case basis.

### **INCOMPLETE GRADES**

Incomplete grades are given only at the instructors’ discretion and must be requested by the student. If the instructors grant the incomplete, the student has until 90 days after the beginning of the next regular semester (fall or spring) to complete the course requirements. If the student does not complete the course requirements within this deadline, the grade of incomplete will automatically convert into a grade of F. Please note incomplete grades are given only in an emergency or when there are extenuating circumstances. Refer to the Graduate Catalog for additional details about receiving a grade of incomplete in a course.

### **ACADEMIC DISHONESTY**

This course adheres to the MSU Code of Student 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. Students should consult the MSU Student Handbook for answers to any questions about the code of conduct.

Some components of this course are designed to be highly interactive with students helping each other learn; however, all assignments are designed to represent the efforts of each student individually and not to be shared. When students submit their efforts for grading, they are attesting they have abided by this rule.



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#### PLAGIARISM

*Plagiarism is not tolerated in this course whether intentional or not.* 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* includes but not limited to the right to reproduce the students work product to verify originality and authenticity and for educational purposes.

#### SPECIAL NEEDS

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Disability Support Services in Room 168 of the Clark Student Center, (940) 397-4140. Documentation of disability from a competent professional is required.

#### GRADUATE COMPETENCIES

Graduates of the MSRS program should be able to:

- Use knowledge of current and future trends and well-developed skills to lead a medical imaging department, teach in a radiologic sciences program, or perform advanced clinical procedures.
- Use critical thinking strategies and communication skills to develop an ethical and legal framework for the resolution of concerns and issues in radiologic administration, education, or advanced clinical practice.
- Demonstrate leadership skills and knowledge of the political process to effect change within administration, education, or advanced clinical practice settings.
- Evaluate, design, and conduct research studies for the improvement of radiologic science administration, education, or advanced clinical practice.
- Demonstrate a sound academic foundation to support lifelong learning and to prepare for future matriculation in post-master or doctoral programs.





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#### **ADMINISTRATIVE PROCESS**

Unresolved issues related to this course should be first addressed between the student and the course instructors. If there is no resolution, students must follow this sequence:

Department Chair – Dr. Beth Veale (940) 397.4611

College Dean – Dr. Jeff Killion (940) 397.4594

Dean of Students – Mr. Matthew Park (940) 397.7500

#### **CAMPUS CARRY**

Senate Bill 11 passed by the 84<sup>th</sup> 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 [Campus carry](#).