CONTEMPORARY TRENDS IN RADIOLOGIC SCIENCES

RADS 5013 Contemporary Trends in Radiologic Sciences   Section 290 Spring 2023

COURSE DESCRIPTION

Prerequisite: Admission to the MSRS Program.
Hybrid course exploring current professional issues in imaging sciences and radiation therapy.

COURSE INSTRUCTORS

Lynette K Watts, PhD, RT(R)
lynette.watts@msutexas.edu
(940) 397.4833

Beth L. Veale, PhD, RT(R) (QM)
beth.veale@msutexas.edu
(940) 397.4611

COURSE OBJECTIVES

Upon successful completion of this course, the students will:

- Discuss current administrative, educational, and advanced clinical practice trends in imaging sciences and radiation therapy.
- Evaluate the relevancy of research data to current professional practice.
- Analyze research articles related to current trends in imaging sciences and radiation therapy.
- Synthesize peer-reviewed articles related to professional practice in a scholarly research paper.
- Demonstrate proper use of the American Psychological Association (APA) writing style.
- Create an oral and poster presentation summarizing the scholarly research paper.
- Actively participate in a hybrid classroom.

COURSE EXPECTATIONS

- Read the syllabus in its entirety. It contains important information to succeed in this course.
- Regularly log into Desire2Learn (D2L), and check the course and email for updates and information from instructors. Often, acknowledgment of an email will be requested.
- Be punctual during the weekend class seminars. Tardiness results in a participation grade reduction.
- Be an active learner. Fully participate during the face-to-face and online components of this course.
- Contact instructors with any questions or concerns. Instructors' preferred method of contact is email (include both instructors in emails). Telephone calls must be scheduled accordingly.
- Be respectful to peers and instructors.

TEXTBOOKS

Required

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). Washington, DC: Author. [ISBN: 9781433832161] - $18.00+

Recommended

Aaron, J. E. (2014). *The little brown handbook*. Boston: Pearson. [ISBN: 978-0-321-87256-2] - $15.00+

Galvan, J. L. (2014). *Writing literature reviews: A guide for students of the social and behavioral sciences* (6th ed.). Glendale, CA: Pyrczak Publishing. [ISBN: 9781936523375] - $24.00+

GRADING

- 75% Scholarly Research Paper (Literature review)
  - 10% Article Critiques
  - 05% Synthesis Matrix
  - 15% Title Page and Reference List
  - 15% Rough Draft
  - 30% Final Paper
- 15% Oral and Poster Presentation
- 10% Class Participation
  - 05% In-class/online discussion/engagement
  - 05% Self-assessment (APA/writing quiz)

GRADING SCALE

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

ATTENDANCE

Without exception, students must attend and participate in both graduate weekend seminars to receive credit for this course.

COURSE SCHEDULE WITH ASSIGNMENT DUE DATES

Date	Activities/Assignments
January 17	**Classes Open! Complete "How I got here" discussion post**
January 23	**Article critiques due**
January 30	**Self-assessment of Writing - Discussion**
February 03	**First Weekend Seminar on-campus** **Students must be prepared to discuss trends** ***Syllabus Agreement signed to the discussion board***
February 13	Topic Approval
February 27	Synthesis Matrix with references
March 6	Title Page and Reference List
March 23 (Thursday)	*Mid-semester check-in via Zoom – 12:00 p.m.-1:00 p.m. CST*
March 27	*Last day to withdraw with a "W" – 4:00 p.m. CST*
March 27	Rough Draft Due
April 10	Final Paper
April 24	Poster Presentation to the Discussion Board
April 28	**Second Weekend Seminar** **Oral and Poster Presentation**

Note: Assignments are due by 11:59 pm Central Standard Time (CST) unless otherwise indicated.
(Mid-semester check in – 12:00 – 1:00 p.m. CST – March 23, 2023).

The last opportunity to drop this course with a W is 4:00 pm CST on March 27, 2023.

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.** 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.

Instructors understand students who are enrolled in the MSRS Program may be responsible for managing many employees and/or students as well as 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.

ASSIGNMENTS

- Self-assessment Discussion Board
  - Students will participate in a discussion board on D2L prior to coming to campus the first weekend of the semester. They will discuss their perceived strengths and weaknesses in the area of writing. This networking opportunity will help students find writing support for their weaknesses and use their strengths to help classmates. This discussion board will allow the instructors to determine where to focus lecture and learning activities during the first weekend of class.

- Syllabus Agreement Discussion Board
  - Students will need to read the syllabus in its entirety and agree they have read it and understood it. There is a discussion board where students can copy and paste the statement in a new thread and sign the agreement. Please see the course schedule for the due date.

- Trends Discussion – First Seminar
  - Students must research and be ready to discuss a trend in their department or profession. Think about something that has recently emerged, maybe even because of COVID-19 or changes in professional policies. You will upload your outline. There is no specified length; you will be responsible for encouraging and fostering discussion in the live, online meeting.

- Topic Approval
  - Students will investigate and report on an emerging trend in imaging sciences and radiation therapy using graduate-level (scholarly) writing skills. The topics may be related to a new trend, procedure, equipment, or teaching strategy the student is familiar with or to something which the student wants to learn more about. Students must get their topics approved by the date indicated on the course schedule. A discussion board is available for students to submit their topics. Topics will be approved or additional information will be requested within the discussion board. Two students <u>cannot</u> write about the same topic. If duplicate topics exist, the instructors will approve the topic to the student who posted first and will require a different topic from the student with the latter post. A list of students and their respective topics will be available within D2L.
- Journal Article Critiques

  - Students will critique 2 (two) research-based articles from scholarly journals using the article critique Word document available within D2L. The articles MUST be quantitative (survey research or experimental research) in nature. The articles **cannot** be literature review-type articles (examples of phrases in the titles that indicate the article is a literature review: "literature review", "systematic review", or "meta analysis"). Answers must be typed (not handwritten). Students can select any research-related radiologic sciences articles of interest including articles that contribute to their scholarly research paper topic.

  - Students should submit the completed critique Word document along with the articles by the due date indicated on the course schedule.

- Synthesis Matrix
  - After a comprehensive review of the resources, students will create a synthesis matrix and submit it to the appropriate dropbox within D2L by the due date indicated on the course schedule. The matrix should include in-text style citations of the sources in each article block of 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 synthesis matrix is located in this syllabus. Be certain to review the grading rubric for this assignment within D2L.

- Title Page and Reference List
  - Students should review the course resources and *APA Manual* (7th ed.) for proper formatting of the title and reference pages. Reference lists must include at least eight sources from reliable, scholarly sources such as peer-reviewed journals and government reports. Sources should be current and published within the past five years. Submit the title page and reference list as a single document to the appropriate drop box within D2L

by the due date indicated on the course schedule. **Do not use any pre-formatted template or citation editor to create your reference list.**

- o Other format/requirements include Microsoft Word file, Times New Roman, 12-point font, 1" margins on all sides, and double-spaced. Be certain to review the grading rubric for this assignment within D2L.

- Rough Draft (Body of the Paper with Abstract)
  - o Students should review the course resources and *APA Manual* (7th ed.) for pointers about the structure of a literature review in APA format. Students should follow the guidelines for writing a literature review provided during the first weekend seminar to be sure all sections are included (Abstract, Introduction, Methods, Discussion, and Conclusion).

  - o This paper should reflect graduate level effort. It 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.

  - o Other format/requirements include Microsoft Word file, Times New Roman, 12-point font, 1" margins on all sides, and double-spaced. The body of the paper, excluding the title page, abstract, and reference list, should be five to seven pages in length.

  - o Students should review the course resources and *APA Manual* (7th ed.) for proper formatting and writing of an abstract. The abstract should be between 150-250 words. Additional requirements (including keywords) can be found in the *APA Manual* (7th ed.) on page 38.

  - o This assignment should include the revised title page and reference list in correct APA format. Submit as one document to the appropriate dropbox within D2L by the due date indicated on the course schedule. **PLEASE NOTE: The rough draft is to be submitted as a COMPLETE PAPER (title page, abstract, body, and reference list) to ensure maximum feedback from the instructors.**

- Final Paper
  - o After making all the necessary revisions or providing justification for omitting changes, submit the final paper (title page, abstract, body, and reference list) to the appropriate dropbox within D2L by the due date indicated on the course schedule. Be certain to review the grading rubric for this assignment within D2L.

- Poster Presentation
    - Many local, state, national, and international conferences include poster presentations as a convenient method to document scholarly productivity and attract participants. Using the PowerPoint poster template provided within D2L, students will turn their research paper into a poster presentation. The poster presentation is a condensed summary of the literature review manuscript. Sample poster presentations will be shared during the first weekend class seminar. It is important for students not to change the default settings in the PowerPoint poster presentation template. These settings are necessary in order to print a full-size poster. Exemplary poster presentations may be displayed during MSU's various research endeavors. Students should upload their presentations to the appropriate dropbox within D2L before the second weekend seminar. The poster presentation is part of the grading rubric for the oral presentation.

    - Be certain to review the grading rubric for this assignment within D2L. The poster presentation is also assessed on the oral presentation grading rubric.

- Oral Presentation
    - Students will formally present their paper topics during the second weekend seminar. Each presentation will be limited to 10-15 minutes in length. Students are encouraged to interact with their classmates and use the poster slide as background information on the screen. Include an interactive piece to your presentation. Examples of this are quick quizzes/questions and answers, thought-provoking exercises, or games (Jeopardy, Wheel of Fortune, BINGO, Kahoot, etc.) reinforcing the main points of the presentation content.

    - In-text citations are required on the poster slide; however, a reference list is not required. Citations are written in research manuscripts as: (Author, Year).

    - Students should upload their oral presentations to the appropriate discussion board within D2L on or before the second weekend seminar (see due date in the course schedule). Presentations will be graded on speaking ability, class engagement, poster design/readability, and professionalism. We will discuss the presentation requirements in the course; the rubric will be available in the course for review.

- Class Participation
    - Being prompt for the weekend seminars, submitting the course assignments on time, paying attention during presentations, and completing classroom activities all affect the class participation grade. Each student should be prepared to fully participate in class discussions and activities, including preparing questions to ask on EACH presentation. The instructors will

evaluate the quality, relevancy, and consistency of each student's class participation based on the following criteria:

- Quality and quantity of both verbal and nonverbal participation (online and in class)
- Cognizance of group process and supportive behavior toward others
- Demonstration of familiarity with the reading assignments
- Timeliness in attending class and submitting assignments
- The APA/writing self-assessment

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.

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.

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 is not limited to the right to reproduce the students' work product to verify originality and authenticity and for educational purposes.

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.

PRONOUNS

Names and pronouns are deeply personal. Assumptions about them can cause harm. In this class, we will respectfully use whatever name and pronouns peers, authors, and community members ask us to use. If we make a mistake, we will respectfully correct ourselves. To learn more about personal pronouns and why they are important, please visit MSU Texas' Guide to Pronouns and pronouns.org

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.

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.

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 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 get in touch with MSU Interim Chief of Police Steven Callarman by email at steven.callarman@msutexas.edu.

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. 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."*