



Revised Spring 2025

Course Syllabus: Radiographic Procedures III
College of Health Sciences & Human Services
RADS 3133
Spring 2025

Instructor: Dr. Ludie Tyran, Ed.D., RT(R)(M)(ARRT)
Pronouns: She/Her
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Student Office Hours:

Tuesday 9:00 AM – 10:00 AM
Wednesday 11:00 AM – 12:00 PM; 1:00 PM – 3:00 PM
Thursday 9:00 AM – 10:00 AM
And by Appointment

Course Description:

This course discusses disease processes and concepts related to etiological considerations with emphasis on radiographic appearance and modification of exposure factors.

Course Objectives:

Upon completion of this course the student will be able to:

- Define terminology used in the study of disease
- Describe the general principles and mechanisms of disease
- Describe the common causes of disease
- Identify common tests used to diagnose disease or injury
- Identify and discuss radiographic pathology

*The textbook contains chapter-specific objectives that will be helpful in providing direction. Please review these objectives along with the chapters prior to the date

scheduled and take notes for yourself, summarizing key points. All of the content within the textbook is testable material for the module of the course for which it is assigned.

Course Resources:

***Required Textbooks:**

Kowalczyk, N. (202). *Radiographic Pathology for Technologists*. (8th ed.). St Louis, MO: Elsevier. [ISBN 978-0-323-79129-8]

American Psychological Association. (2020). *Publication Manual of the American Psychological Association*. (7th ed.). Washington DC: Author. [ISBN 9781433832161]

Current prices for course resources can be found through the [MSU Bookstore](#).

Additional Resources:

**It is recommended that students download Google Chrome (a free download through Google) or Mozilla Firefox and use one of those as the default browser for ALL D2L courses. This appears to eliminate 99% of technical issues often encountered with Internet Explorer, Apple Safari, etc.*

**Students MUST have reliable computer and internet access.*

Communication with the Instructor:

Communication will be through the student's Midwestern State University email account. An email account is created for every MSU student. If you have not accessed this account yet, please do so by logging into the Portal and clicking the student email account icon located in the Portal.

The instructor will respond or at least acknowledge email messages from students within a maximum of five (5) business days when MSU is in session. Beyond standard university holidays and breaks, the instructor will notify students of any extended periods of time when email contact is not practical (professional meetings, etc.).

***When emailing the instructor, please include your full name, course and section number, and a thorough explanation in your message. This will help expedite your request or needs.**

Students should also periodically check the 'News' section within D2L for course updates and other important information.

Class Meeting Date and Time:

Class meetings are Tuesday and Thursday each week from 10:00am – 11:20am in CE 101. However, the student should be vigilant in logging into D2L. Regular checks will ensure messages from the instructor are received in a timely manner.

See the Course Schedule at the end of this syllabus for specific information about activities and due dates.

Student Responsibilities:

As a student enrolled in this course, you will be responsible for adhering to and meeting posted deadlines and due dates. All activities for this course are listed at the end of this syllabus.

Quizzes and assignments/activities are spaced out in a manner that will allow you ample time to complete them. Assignments/activities will be accepted on or before the posted due date and deadline. ****As a reminder, there is no grade deduction for late assignments as late assignments are not accepted for a grade.*** If a student cannot complete a course activity by the indicated due date, the student must contact the course instructor immediately. If a student has emergency issues, then the student must contact the instructor as soon as possible (within a day or two). Any activity not completed and submitted by the due date will be addressed on an individual basis.

****Students must use baccalaureate level writing skills including complete sentences, correct grammar, and proper punctuation. All assignments will be graded for accuracy, completeness, quality, spelling, grammar, and integrity.***

*All assignments will be submitted in a drop box within D2L. All assignments will be completed in Times New Roman or Arial, 12-point font.

See the course calendar for the specific due date.

Student Expectations

Electronic Device Use

No electronic devices of any kind are permitted during class lecture. This includes cell phones and any other type of electronic device unless you have a documented need. Students are required to turn off cell phones during class lectures. Should a student's cell phone use disrupt the class the student will be asked to leave the classroom for the day. The student will receive a 10-point deduction in the Participation area.

Course Behavior:

Attendance is mandatory. Excessive unexcused absences will result in a referral to the Dean of the College of Health Sciences and Human Services, and may result in your being dropped from the Program. Excessive unexcused absences are defined as: three (3) absences from lecture without prior approval from instructor or medical reasons (doctor's note will be required). ***Missed exams may only be made-up if prior arrangements are made; quizzes cannot be made-up.** If a student is more than 10 mins late to class they will be considered tardy. Three (3) tardies will count as an absence.

All students will treat others with respect in this course.

Pronouns

Names and pronouns are deeply personal. Assumptions about them can cause harm. In this class, we will respectfully use whatever names and pronouns peers, authors, and community members ask us to use. If we make a mistake, we will respectfully correct ourselves. Please let me know if you have a chosen name different from that on your academic record or particular pronouns you prefer. To learn more about personal pronouns and why they are important, please visit [Pronouns Matter](#).

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 personal health and well-being. You should recognize that stress is an expected part of the college experience, and if often can 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 taking care of yourself throughout the term before the demands of exams and projects reach their peak. Please feel free to reach out to me about any difficulty you may be having that may affect your performance in this course as soon as it occurs and before it becomes 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 – call 940-397-4618 to schedule an appointment
- [TAO](#) – a multilevel online therapy tool
- [Self-help apps](#) – MSU has a list available
- Mental Health [Resources](#)
- More [online resources](#)

Methodology/Teaching Strategies:

Independent reading assignments, quizzes, classroom discussions, group presentations, internet searches, individual writing assignments, and presentations are used in this course.

Activities and Assignments:

Participation – 15%

Students must participate in class activities, projects, and discussions. Evidence of class participation includes: coming to class, being on time to class, participating in class discussions, and submitting the assignments in a timely manner. ***All module assignments are due at the beginning of class on day of Module Exams.** Each unexcused absence (see attendance) will be a 10-point deduction in the Participation area.

Module Exams – 40%

- Module 1: Chapter 1 Introduction to Pathology
Chapter 2 Skeletal System
- Module 2: Chapter 3 Respiratory System
Chapter 5 Abdomen and Gastrointestinal System
- Module 3: Chapter 6 Hepatobiliary System
Chapter 7 Urinary System
- Module 4: Chapter 8 Nervous System
Chapter 12 Traumatic Disease

***All exams will be completed on paper with use of Scantrons or D2L by the due date assigned.**

Pathology Project – 15%

The purpose of this activity is to reinforce the Student's understanding of a pathologic condition and the medical imaging procedures used for diagnosing such pathology.

Detailed instruction for this project can be found on D2L.

***Review the grading rubric for this assignment on D2L.**

Comprehensive Final Exam – 30%

The final examination is a "closed book", comprehensive examination of a 100-question multiple-choice, short answer, and fill-in-the-blank format. All final examinations will be

administered during the designated date(s) and time(s) listed in the calendar and/or syllabus. There will be NO alteration of any type to this schedule.

**** Please note this course requires a minimum passing grade of 75.**

Evaluation Method:

Percentage Distribution	Value
Participation	15%
Pathology Project	15%
Module Exams	40%
Final Exam	30%

Grading Scale:

Grade	Range
A	89.45-100
B	79.45-89.44
C	74.45-79.44
D	69.45-74.44
F	69.44 or below

***The last opportunity to drop this course with a grade of “W” is 4:00pm April 30, 2025.**

Please refer to the Undergraduate Bulletin for details about receiving a grade of “Incomplete” in a course. In an emergency or extenuating circumstance, a student may request a grade of “Incomplete” in a course before grades are submitted.

If the instructor 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.”

Disability Support Services:

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 Support Services (DSS) provides information and assistance, arranges accommodations, and serves as a liaison for students, instructors, and staff. The DSS has assistance devices such as books on tape, recorders, and adaptive software which can be loaned to qualified individuals. A student/employee who seeks accommodations on the basis of disability must register with the Office of Disability Support Services in the Clark Student Center Room 168 or call 940-397-4140 for more information. Documentation of disability from a competent professional is required.

Individuals with grievances related to discrimination or lack of accommodation on the basis of a disability are encouraged to resolve the problem directly with the area involved. If the matter remains unresolved, advice and/or assistance will be provided by the Office of Disability Services for resolution. The grievance procedure may be found in the Student Handbook and Activities Calendar.

The ADA Coordinator may be contacted at (940) 397.4140, or 3410 Taft Blvd., Clark Student Center Room 168.

Conduct/Honesty/Honor System:

This course adheres to the MSU Code of 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/her work will be completed in full observance of the MSU Code of Student Conduct. A student should consult the Student Handbook for answers to any questions about the code.

Students are encouraged to take full advantage of many resources available including Internet sites, handouts, other textbooks & journals, faculty, and peers. This interactive collegial learning environment is conducive to life-long learning.

Specific components of this course are designed to represent the efforts of each student individually and are NOT to be shared. These components include the written assignment submitted for a grade. Submitting someone else's work as your own or improperly cited work constitutes plagiarism. Please see the Midwestern State University Catalog for further discussion of plagiarism. Plagiarism will constitute in an F for the course and the student will be referred to administration for further action. When students submit their efforts for grading, they are attesting they abided by this rule.

Quizzes and exams are not to be copied in any form or shared in any form. Students caught engaging in such activity will receive an F for the course and be referred to University administration for dismissal.

Cheating includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or completing other assignments; or (3) 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 on 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. Students are encouraged to review the tutorials and suggested websites for more information about plagiarism.

Use of Artificial Writing Generators

Since writing, analytical, and critical thinking skills are part of the learning outcomes of this course, all writing assignments should be prepared by the student. Developing strong competencies in this area will prepare you for a competitive workplace. Therefore, AI-generated submissions are not permitted and will be treated as plagiarism.

*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 students work product in order to verify originality and authenticity, and for educational purposes.

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](#).

Participation in Radiologic Sciences laboratory classes often require students to wear scrubs which may make concealed carry of a firearm difficult if not impossible. In addition, students are often required to palpate other students while simulating medical examinations or procedures. This required physical contact may also make concealment of a firearm difficult. While concealed carry is not prohibited in any Radiologic Sciences laboratory, students are reminded that intentional display of a firearm may result in criminal and/or civil penalties and unintentional display of a firearm is a violation of university policies and may result in disciplinary actions up to and including expulsion from the program and university. Students should factor the above in their decision as to whether or not to conceal carry in Radiologic Sciences laboratories.

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.”](#)

Administrative Process:

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

1. Interim 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

Tentative Spring Course Schedule
**Activities and dates are subject to change*

Date	Activity
Jan 21	Course Introduction/Module 1
Jan 23	Module 1
Jan 28	Module 1
Jan 30	Module 1
Feb 4	Module 1; Case Studies
Feb 6	Module 1
Feb 11	Module 1 Exam; Activities & Case Study Due Pathology Group Assignments
Feb 13	Module 2
Feb 18	Module 2
Feb 20	Module 2
Feb 25	Module 2
Feb 27	Module 2; Case Studies
Mar 4	Module 2
Mar 6	Module 2 Exam; Activities & Case Study Due
Mar 9-15	SPRING BREAK
Mar 18	Module 3
Mar 20	Module 3
Mar 25	Module 3
Mar 27	Module 3
April 1	Module 3; Case Studies
April 3	Module 3
April 8	Module 3 Exam; Activities & Case Study Due
April 10	Module 4
April 15	Module 4
April 17	HOLIDAY BREAK
April 22	Module 4
April 24	Module 4; Case Studies
April 29	Pathology Presentations
May 1	Module 4; Peer Eval Form Due 11:59 pm
May 6	Module 4 Exam; Activities & Case Study Due
May 8	Catch-up Day
May 13	Final Exam 8:00 – 10:00am

Reading Assignments for RADS 3133

Chapter	Content	Pages
Module 1		
Chapter 1	Introduction to Pathology	1 – 17
Chapter 2	Skeletal System	18 – 52

Objectives:

Chapter 1

1. Define common terminology associated with the study of disease.
2. Differentiate between signs and symptoms.
3. Distinguish between disease diagnosis and prognosis.
4. Describe the different types of disease classifications.
5. Cite characteristics that distinguish benign from malignant neoplasms.
6. Describe the system used to stage malignant tumors.
7. Identify the difference in origin of carcinoma and sarcoma.

Chapter 2

1. Describe the anatomical components of the skeletal system on a macroscopic level and basic microscopical level.
2. Identify and explain the criteria for assessing technical adequacy of skeletal radiographs.
3. Characterize a given condition as congenital, inflammatory, or neoplastic.
4. Specify the etiology, signs and symptoms, and prognosis of the skeletal pathologies cited in this chapter.
5. Explain the role of various imaging modalities in the diagnosis and treatment of skeletal pathologies.

Chapter	Content	Pages
Module 2		
Chapter 3	Respiratory System	53 – 88
Chapter 5	Abdomen and Gastrointestinal System	128 – 209

Objectives:

Chapter 3

1. Describe the anatomic components of the respiratory system.
2. Describe the various types of tubes, vascular access lines, and catheters used in relation to the respiratory system.
3. Characterize a given condition as congenital, hereditary, inflammatory, fungal, or neoplastic.
4. Identify the pathogenesis of the chest pathologies cited and the typical treatments for them.
5. Describe, in general, the radiographic appearance of each of the given pathologies.

Chapter 5

1. Describe the anatomic components of the abdomen and the gastrointestinal system and how they are visualized radiographically.
2. Compare and contrast the various imaging modalities used in the evaluation of the abdomen and gastrointestinal system.
3. Identify tubes and catheters related to the gastrointestinal system by type and radiographic appearance, as well as explain their uses.
4. Characterize a given condition as congenital, inflammatory, neurogenic, or neoplastic.
5. Identify the pathogenesis of the cited gastrointestinal diseases and discuss typical treatments for them.
6. Describe, in general, the radiographic appearance of each of the given pathologies.
7. Understand which imaging modalities foster the diagnosis of the cited abdominal and gastrointestinal pathologies.

Chapter	Content	Pages
Module 3		
Chapter 6	Hepatobiliary System	210–250
Chapter 7	Urinary System	251 – 303

Objectives:

Chapter 6

1. Describe the anatomic components of the hepatobiliary system and state how they are visualized radiographically.
2. Discuss the role of other modalities in the imaging of the hepatobiliary system, particularly sonography, magnetic resonance imaging, and computed tomography.
3. Characterize a given condition as inflammatory or neoplastic.
4. Identify the pathogenesis of the diseases cited and the typical treatments for each.
5. Describe, in general, the radiographic appearance of each of the given pathologies.

Chapter 7

1. Describe the anatomic components of the urinary system and their functions.
2. Discuss the role of other modalities in imaging the urinary system, particularly sonography and computed tomography.
3. Discuss common congenital anomalies of the urinary system.
4. Characterize a given condition as inflammatory or neoplastic.
5. Identify the pathogenesis of the diseases cited and the typical treatments for each.
6. Describe, in general, the radiographic appearance of each of the given pathologies.

Chapter	Content	Pages
Module 4		
Chapter 8	Nervous System	304 – 348
Chapter 12	Traumatic Disease	427 – 480

Objectives:

Chapter 8

1. Describe the anatomic components of the nervous system and their general function.
2. Discuss the roles of the various imaging modalities in evaluation of the nervous system, particularly magnetic resonance imaging and computed tomography.
3. Discuss common congenital anomalies of the nervous system.
4. Characterize a given condition as inflammatory, degenerative, vascular, or neoplastic.
5. Identify the pathogenesis of the diseases cited and the typical treatments for each.
6. Discuss the imaging modalities most commonly used for each type of nervous system pathology discussed in this chapter.
7. Describe, in general, the radiographic appearance of each of the given pathologies.

Chapter 12

1. Differentiate among level I, II, and III trauma centers and the role each plays in the emergency medical system.
2. Define common terminology associated with traumatic disease.
3. Discuss the roles of various imaging modalities in the evaluation and treatment of traumatic injuries.
4. Describe, in general, the radiographic appearance of each of the given pathologies.
5. Classify skeletal fractures according to the various classifications discussed in this chapter and describe the healing process associated with skeletal trauma.
6. Describe the general methods used for the treatment of skeletal fractures.