



North Central State College
MASTER SYLLABUS
2019-2020

- A. Academic Division: Health Sciences
- B. Discipline: Radiological Science
- C. Course Number and Title: RADS1240 Radiologic Procedures/Seminar 2
- D. Course Coordinator: Dorie Ford R.T. (R) (M), BSPA, M. Ed.
Assistant Dean: Melinda Roepke, MSN, RN

Instructor Information:

- Name: [Click here to enter text.](#)
- Office Location: [Click here to enter text.](#)
- Office Hours: [Click here to enter text.](#)
- Phone Number: [Click here to enter text.](#)
- E-Mail Address [Click here to enter text.](#)

- E. Credit Hours: 3
Lecture: 1
Seminar: 1
Laboratory: 3
- F. Prerequisites: RADS1120, HLTH1150
Co-requisites: RADS1220 (m)
- G. Syllabus Effective Date: Fall, 2019
- H. Textbook(s) Title:

Merrill's Atlas of Radiographic Positioning and Radiologic Procedures 3- volume Set
(Purchased in RADS 1140)

- Author: Long, Rollins, & Smith
- Copyright Year: 2019
- Edition: 14th
- ISBN: 97803235566674

Quick and Easy Medical Terminology
(Purchased in RADS 1140)

- Author: Leonard
- Copyright Year: 2017
- Edition: 8th
- ISBN: 9780323359207

Radiographic Pathology for Technologists

- Author: Mace-Kowalczyk
- Copyright Year: 2017
- Edition: 7th
- ISBN: 9780323416322

I. Workbook(s) and/or Lab Manual:

Merrill's Pocket Guide to Radiography
(Purchased in RADS 1140)

- Author: Frank
- Copyright Year: 2015
- Edition: 13th
- ISBN #: 9780323311960

Merrill's Atlas of Radiographic Positioning and Procedures Workbook
(Purchased in RADS 1140)

- Author: Long, Rollins, Smith & Curtis
- Copyright Year: 2019
- Edition: 14th
- ISBN: 9780323597043

J. Course Description: Radiographic procedures of the pelvic girdle, shoulder girdle, bony thorax and spine will be presented. Laboratory exercises in an energized lab provide the student with practical application of the classroom material. Radiation protection is emphasized. There will be a continuation of instruction on mobile radiographic procedures. Special imaging procedures of the joints (Arthrography) and of the spine (Myelography) will be introduced. The students will be given an overview of the basic concepts and terminology related to the study of radiographic pathology. Radiographic pathology of the skeletal system will be presented. Students will correlate knowledge of skeletal pathology and radiographic positioning with the evaluation of medical images. Medical terminology is correlated with the content of the course. A one- hour seminar will cover various clinical topics

K. College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	
Communication – Speech	
Intercultural Knowledge and Competence	
Critical Thinking	
Information Literacy	
Quantitative Literacy	

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

Outcomes	Assessments – How it is met & When it is met
1. Position the body for radiographic procedures of the spine, bony thorax, pelvic and shoulder girdle on a person or phantom in a laboratory setting.	Lab exercises and lab simulations weeks 3-6, 7-9, and 10
2. Manipulate the radiographic equipment correctly for radiographic procedures of the chest, abdomen, upper and lower limb.	Lab exercises and lab simulations weeks 3-6, 7-9, and 10
3. Demonstrate correct radiation protection practices.	Lab exercises and lab simulations weeks 3-6, 7-9, and 10

Outcomes	Assessments – How it is met & When it is met
4. Use appropriate and effective oral, written and nonverbal communications.	Medical Terminology test week 3, graded in-class assignment for definition of a radiologist report week 12, lab exercises and lab simulations weeks 3-6, 7-9, and 10, skeletal system anatomy jigsaw, Age-appropriate communication seminar rubric
5. Identify anatomic structures demonstrated on radiographic images.	Class exams weeks 5, 7, 11, and 14. Final exam week 16. Image evaluation group activities weeks 3-4 and 9. Pathology image matrix week 13-14, online modules weeks 3, 5, and 9.
6. Evaluate medical images for positioning, centering, appropriate anatomy and technical accuracy.	Class exams weeks 5, 7, 11, and 14. Final exam week 16. Image evaluation group activities weeks 3-4 and 9. Pathology image matrix week 13-14, online modules weeks 3, 5, and 9.
7. Determine the cause-and-effect relationship between positioning the body and achieving the required outcome on the completed image.	Class exams weeks 5, 7, 11, and 14. Final exam week 16. Image evaluation group activities weeks 3-4 and 9. Pathology image matrix week 13-14, online modules weeks 3, 5, and 9. Seminar discussions weekly
8. Adapt radiographic procedures for special conditions.	Lab exercises weeks 12 and 13, sterile procedure lab week 6 and 11
9. Define basic terms related to radiographic pathology.	Class discussion week 11, exam week 15, final exam week 16
10. Recognize the signs, symptoms, manifestations, complications and radiographic appearance of diseases of the skeletal system.	Skeletal system image matrix group activity weeks 13-14, exam week 15, final exam week 16.

M. Topical Timeline (Subject to Change):

Week 1	Introduction to the Course Seminar Topic: age-appropriate communication (weeks 1-3)
Week 2	Pelvis girdle radiography
Week 3	Shoulder girdle radiography
Week 4	Shoulder girdle radiography continued Seminar topic: Chest and abdomen procedures problem-solving (weeks 4-7)
Week 5	Bony thorax radiography
Week 6	Arthrography
Week 7	Vertebral column anatomy
Week 8	Cervical spine radiography Seminar topic: Upper Limb Problem-Solving (weeks 8-11)
Week 9	Thoracic and lumbar radiography
Week 10	Sacrum/coccyx/S I joint radiography Scoliosis imaging
Week 11	Myelography
Week 12	Mobile radiography-part 2 Seminar Topic: Mobile and surgical procedures (weeks 12-15)
Week 13	Skeletal survey procedure
Week 14	Introduction to radiographic pathology
Week 15	Pathology of the skeletal system
Week 16	Final Exam

N. Course Assignments:

Lecture/PowerPoint presentations
Lecture note outlines
Student worksheets/homework
Small group activities
Class discussions
Lab simulations and exercises
Role playing
Supervised practice in the college lab
Independent practice in the college lab
Computer assisted instruction (Evolve modules, radiography essentials)
Written assignments
Canvas utilization for instruction and communication
Assigned readings
Review of medical images

O. Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93-100	A	4.00	Superior
90-92	A-	3.67	Superior
87-89	B+	3.33	Above Average
83-86	B	3.00	Above Average
80-82	B-	2.67	Above Average
77-79	C+	2.33	Average
73-76	C	2.00	Average
70-72	C-	1.67	Below Average
67-69	D+	1.33	Below Average
63-66	D	1.00	Below Average
60-62	D-	0.67	Poor
00-59	F	0.00	Failure

P. Grading and Testing Guidelines:

Exams 65% of grade
Lab 15% of grade
Homework 15% of grade
Participation 5% of grade

The Radiological Department believes that a grade below C- indicates lack of mastery of essential skills. Therefore, any student who receives less than C- in any Radiological Science sequence course cannot continue in Radiologic Technology.

Q. Examination Policy:

Students will receive a detailed course calendar. Class exams and lab simulations will be scheduled on the course calendar.

Policy for a missed test or oral or written presentation:

A student will receive a zero for a missed test or an oral or written assignment if the student has not contacted the instructor prior to the event. Contact may be made through a phone call to the office (may leave message) or through an e-mail to dford@ncstatecollege.edu. **A follow up message will occur later that same day from the instructor to the student's ncstate e-mail address informing the student about make up testing, lab and/or homework. The instructor will not call the student to arrange make up.**

In addition, student absences on test days are tracked. For each test in the course that a student misses the following deductions are taken assuming the student has notified the instructor prior to the test.

The 1 st missed test/event	No deduction from score
The 2 nd missed test/event	Minus 5% from earned score
The 3 rd missed test/event	Minus 8% from earned score
Additional missed test/event	Zero

Depending on the type of test missed and the time constraints students will make-up tests either in the Health Science Building or in the Make-Up Proctoring Service offered by the college in Kee Hall.

Lab Grading Policy

There is a close correlation between lab performance and clinical performance. When a student successfully completes a lab simulation it demonstrates that the student is ready to perform the procedure on a patient at the clinical site.

When a lab simulation is scheduled in the lab, students are expected to come to lab prepared to perform the lab simulation. A student must receive **80% (24/30)** or higher to pass a lab simulation. When a student fails a lab simulation these assumptions can be made:

1. The student did not prepare for the lab simulation in advance by reviewing and practicing
- OR -
2. The student has weaknesses that must be identified and corrected so that these weaknesses do not degrade clinical performance.

Students who do not pass a lab simulation will be required to perform a repeat simulation. On a repeat simulation 10% will automatically be deducted from the final score. Students must pass the repeat simulation with **80% (24/30) after the 10% deduction**. If the student fails the repeat simulation, the student will receive a **zero** for that simulation but will be required to simulate until the student has demonstrated satisfactory skills on the exam. Additional make up labs will be scheduled by the instructor to accommodate repeat simulations.

R. **Class Attendance and Homework Make-Up Policy:**

Most classes include homework assignments. If a student misses a class, it is the student's responsibility to find out from the instructor what the homework assignment was and to obtain homework papers if applicable. Students are given full credit for homework only if it is completed and in class on time. If a student would like partial credit for homework it is the student's responsibility to present the finished homework to the instructor in the **next** class. The instructor will not chase down or ask for missed homework. A zero is assigned for all missing homework.

Lab Attendance and Practice Expectations

Students are required to attend their assigned lab each week. If a student misses an assigned lab, he/she is required to attend another lab the same week or two labs the following week to stay current with practicing and simulating the material. Arrangements with the instructor must be made in advance.

It is the responsibility of the student to master the skills that are necessary to successfully complete the assigned simulations. This usually means that the student will need to come in to the radiology lab outside of their scheduled lab times to gain additional practice. Students may spend additional time practicing in the labs on weekdays until 6:45 PM and weekends from 12:00 – 4:00 PM

S. Classroom Expectations:

Look at the course calendar and read assigned material before class to have a general understanding of the information presented.

Read lab assignments prior to lab. Know the material before coming to lab to avoid having to read the material during lab when hands-on practicing should occur.

Complete homework on time.

Come to class with the required material: textbooks, class notes, workbooks, notebooks, homework, assignments, etc.

Participate in class discussions, ask and answer questions.

Demonstrate professional behavior and use language appropriate for classroom learning experience.

Stay on task when given in-class activities and group assignments. If a group finished early the members should read and review material presented in class, update class notes or any other educational activity. Ask the instructor if there are any questions.

Treat other class members with respect at all times.

Cell phone use is not permitted during class unless the instructor asks you to use your cell phone for learning activities. Any student's cell phone that rings, vibrates loudly, or is used for texting during class will result in a \$1.00 fine from that student. Monies collected from cell phone fines will be donated to the Robert L. Garber Scholarship for radiology students.

Policy on Social Media

All course material (lectures, slides, documents, worksheets, tests, lab activities, and all other material from this course and on Evolve) is presented with a non-written copyright which prohibits students from using the material without the instructor's permission. Students are not permitted to post course material or take pictures of lab procedures and post the information on ANY webpage or social media device. The use of the faculty name or course name is prohibited.

T. College Procedures/Policies:

Important information regarding College Procedures and Policies can be found on the [syllabus supplement](https://sharept.ncstatecollege.edu/committees/1/curriculum/SiteAssets/SitePages/Home/SYLLABUS%20SUPPLEMENT.pdf) located at <https://sharept.ncstatecollege.edu/committees/1/curriculum/SiteAssets/SitePages/Home/SYLLABUS%20SUPPLEMENT.pdf>

The information can also be found Choose an item.