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# AHXR 160.01: Radiographic Methods II

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MISSOULA COLLEGE, UNIVERSITY OF MONTANA

**RADIOLOGIC TECHNOLOGY PROGRAM**

**Spring 2024**
**Credits:** 3 (AHXR 160) + 1 (AHXR 161)

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*Office Hours Wednesday-Friday or by appointment*

# AHXR 160 & 161 Radiographic Methods & Lab

## COURSE DESCRIPTION

***In AHXR 160,*** through in-class lectures and on-line modules, students will learn basic radiological positioning. The course provides an introduction to the anatomical landmarks used to position patients, while giving attention to specific patient considerations, such as: culture, communication, and transport/transfer.

***In AHXR 161,*** students will apply positioning principles in the lab setting, gaining familiarity with the equipment used to perform diagnostic imaging studies and practicing the methods and positions required to obtain images.

***Please see the end of this document for a weekly class schedule.***

**PREREQUISITES:** Students must have completed all general Program prerequisites.

**REQUIRED TEXT:** **Merrill's Atlas of Radiographic Positioning and Procedures.**

**OPTIONAL SUPPLEMENT:** **Bontrager's Pocket Guide to Radiography**

**ON-LINE RESOURCES:** http://evolve.elsevier.com/enroll Course ID: **99388_gbarnes65_1001**

## STUDENT ASSESSMENT AND GRADING

***Final grades for AHXR 140*** are based on the on-line module quizzes and tests, the classroom tests, a comprehensive final exam, and class participation/attendance.

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| • On-line module quizzes | 20% | **Grading Scale:** |
| • On-line module tests | 20% | 100 – 90 = A |
| • Class participation | 20% | 89 – 80 = B |
| • Classroom tests | 20% | 79 – 70 = C |
| • Comprehensive final exam | 20% | 69 – 60 = D |

***Final grades for AHXR 161*** will be based on lab attendance and lab quizzes.

**Note: Students must pass these courses with a "B" (80%) to remain in the Radiology Technology Program.**

## Required immunizations, hospital scrubs & markers

Prior to beginning the clinical experience, students are required to document several immunizations & obtain a set of hospital scrubs and x-ray markers. Details provided in class.

## Academic Conduct

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or disciplinary sanction by the University.

All students need to be familiar with the Student Conduct Code. The Code is available for review online at http://www.umt.edu/SA/VPSA/index.cfm/page/1321.

**STUDENTS WITH DISABILITIES:** Eligible students with disabilities will receive appropriate accommodations in this course when requested in a timely way. Please be prepared to provide a letter from your DSS Coordinator.

**ATTENDANCE POLICY:** All students are expected to come to class each, on time. Cell phones must be turned off. Constructive participation is expected. Disruptive behavior will not be tolerated.

**Syllabi are subject to change*

## STUDENT PERFORMANCE OUTCOMES

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

1. Describe standard positioning terms
2. Demonstrate proper use of positioning aids
3. Discuss general procedural considerations for radiologic examinations
4. Identify the location of structures using directional and orientation terms
5. Indicate where various planes lie in relation to the body
6. Identify and locate the bones of the human skeleton
7. Identify bony processes and depressions found on the human skeleton
8. Differentiate the primary and secondary curves of the spine
9. Describe sesamoid bones and locate examples on radiographs
10. Summarize the functions of the skeletal system
11. Label different types of articulations
12. Compare the types, locations and movements permitted by the different types of articulations
13. Demonstrate the use of topographical landmarks to locate internal structures
14. Identify major anatomical structures found within sectional images.
15. Adapt general procedural considerations to specific clinical settings
16. Cite the structures demonstrated on routine radiographic/fluoroscopic procedures.
17. Adapt radiographic, fluoroscopic and basic CT procedures based on special considerations
18. Simulate radiographic, fluoroscopic, and basic CT procedures on a person or phantom in a laboratory setting
19. Evaluate images for positioning, centering, appropriate anatomy and overall image quality
20. Discuss equipment and supplies necessary to complete radiographic, fluoroscopic and basic CT procedures
21. Recite the patient preparation necessary for various contrast and special studies
22. List and explain the routine and special views for all radiographic and fluoroscopic procedures
23. Explain the purpose for using negative and positive contrast media agents.
24. Distinguish between the types and purpose for various upper and lower gastrointestinal studies
25. Identify methods that may be utilized for modifying directions when communication barriers during patient education
26. Explain radiographic procedures to patients and family members
27. Develop an awareness of cultural factors that necessitate adapting standard exam protocols
28. Apply general radiation safety and protection practices associated with radiologic examinations and basic CT
29. Demonstrate correct principles of body mechanics applicable to patient care
30. Demonstrate techniques for specific types of patient transfer
31. Demonstrate select procedures for examining patients with various health conditions