Washtenaw Community College Comprehensive Report

RAD 123 Radiographic Positioning II
Effective Term: Spring/Summer 2019

Course Cover

Division: Health Sciences
Department: Allied Health
Discipline: Radiography
Course Number: 123
Org Number: 15600
Full Course Title: Radiographic Positioning II
Transcript Title: Radiographic Positioning II
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Time Schedule , Web Page
Reason for Submission: Course Change
Change Information:
Outcomes/Assessment
Objectives/Evaluation
Rationale: A far better assessment tool has been developed for the first three outcomes stated in the Master syllabus, and the fourth outcome is better evaluated in a clinical course. Therefore, the Master syllabus is being updated to reflect these changes.
Proposed Start Semester: Winter 2019
Course Description: In this course, students explore the theories and practices that are utilized in the clinical setting to produce diagnostic radiographs of the lower extremity, vertebral column and bony thorax. Radiograph terminology, patient preparation, patient positioning, proper manipulation of radiographic equipment, radiation safety practices, image evaluation, professional standards and medical ethics will be discussed and practiced in the laboratory setting.

Course Credit Hours

Variable hours: Yes
Credits: 0 – 2
Lecture Hours: Instructor: 15 **Student:** 15
Lab: Instructor: 45 **Student:** 45
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 0 to 60 **Student:** 0 to 60
Repeatable for Credit: NO
Grading Methods: Letter Grades
Audit
Are lectures, labs, or clinicals offered as separate sections?: YES (separate sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Requisites

Prerequisite
RAD 112 minimum grade "C-"

and

Prerequisite

RAD 120 minimum grade "C-"; may enroll concurrently

General Education

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Perform radiographic procedures of the lower extremity, vertebral column and bony thorax in accordance with current standards.

   Assessment 1

   Assessment Tool: Practical lab exercises
   Assessment Date: Winter 2021
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Each radiographic exam of different areas (foot, ankle, knee, etc.) was scored using a departmentally developed rubric. Each lab exercise was scored on the students' ability to perform the procedure.
   Standard of success to be used for this assessment: 100% of students will score an overall average of 90% or higher on all outcome-related exercises
   Who will score and analyze the data: RAD faculty

2. Critically analyze radiographs of the lower extremity, vertebral column and bony thorax for patient positioning, exposure technique and image processing errors.

   Assessment 1

   Assessment Tool: Practical lab exercises
   Assessment Date: Winter 2021
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Each radiographic exam of different areas (foot, ankle, knee, etc.) was scored using a departmentally developed rubric. Each lab exercise was scored on the students' analyze the radiograph for quality.
   Standard of success to be used for this assessment: 100% of students will score an overall average of 90% or higher on all outcome-related exercises
   Who will score and analyze the data: RAD faculty

3. Apply the principles of ALARA when obtaining diagnostic radiographs of the lower extremity, vertebral column and bony thorax.

   Assessment 1

   Assessment Tool: Practical lab exercises
   Assessment Date: Winter 2021
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Each radiographic exam of different areas (foot, ankle, knee, etc.) was scored using a departmentally developed rubric. Each lab exercise was scored on the students' ability to apply the ALARA principles of radiation protection.
   Standard of success to be used for this assessment: 100% of students will score an overall average of 90% or higher on all outcome-related exercises

Who will score and analyze the data: RAD faculty

Course Objectives

1. Produce optimum radiographs of the lower extremity, vertebral column, and bony thorax on a the patient mannequin using a fixed x-ray unit.
2. Produce optimum radiographs of the bony thorax on a patient mannequin using a mobile x-ray unit.
3. Correctly use ancillary devices while using fixed and mobile X-ray units.
4. Critique radiographs for patient positioning.
5. Critique radiographs for exposure technique.
6. Critique radiographs for image processing errors.
7. Identify normal anatomy of the lower extremity, vertebral column, and bony thorax.
8. Identify anatomical variants of the lower extremity, vertebral column, and bony thorax.
9. Practice radiation safety in accordance with currently accepted guidelines.
10. Communicate the protocols for obtaining optimal radiographs of the lower extremity, vertebral column, and bony thorax.

New Resources for Course

Course Textbooks/Resources

Textbooks

Bontrager, Kenneth. *Textbook of Radiolgraphic Positioning & Related Anatomy*, 9th ed. Elsevier, 2018

Bontrager, Kenneth. *Radiographic Positioning & Related Anatomy Workbook & Laboratory Manual*, 9th ed. Elsevier, 2018

Martensen, Kathy. *Radiographic Image Analysis*, 3rd ed. Elsevier, 2011

Manuals

Periodicals

Software

Equipment/Facilities

Level III classroom

Testing Center

Other: Radiography lab (OE 121)

Reviewer	Action	Date
Faculty Preparer:		
Jim Skufis	*Faculty Preparer*	*Nov 15, 2018*
Department Chair/Area Director:		
Kristina Sprague	*Recommend Approval*	*Nov 16, 2018*
Dean:		
Valerie Greaves	*Recommend Approval*	*Dec 06, 2018*
Curriculum Committee Chair:		
Lisa Veasey	*Recommend Approval*	*Jan 14, 2019*
Assessment Committee Chair:		
Shawn Deron	*Recommend Approval*	*Jan 14, 2019*
Vice President for Instruction:		
Kimberly Hurns	*Approve*	*Jan 23, 2019*