

## Washtenaw Community College Comprehensive Report

### RAD 112 Radiographic Positioning I Effective Term: Fall 2021

#### Course Cover

**College:** Health Sciences

**Division:** Health Sciences

**Department:** Allied Health

**Discipline:** Radiography

**Course Number:** 112

**Org Number:** 15600

**Full Course Title:** Radiographic Positioning I

**Transcript Title:** Radiography Positioning I

**Is Consultation with other department(s) required:** No

**Publish in the Following:** College Catalog , Time Schedule , Web Page

**Reason for Submission:** Three Year Review / Assessment Report

**Change Information:**

**Course description**

**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:** Fall 2021

**Course Description:** In this course, students are introduced to the theories and practices that are utilized in the clinical setting to produce diagnostic radiographs of the chest, abdomen and upper extremities. Radiographic 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 101 minimum grade "C-"

and

**Prerequisite**

RAD 110 minimum grade "C-"; may enroll concurrently

**General Education****Request Course Transfer**

**Proposed For:**

**Student Learning Outcomes**

1. Perform radiographic procedures of the chest, abdomen and upper extremities in accordance with current standards.

**Assessment 1**

Assessment Tool: Outcome-related practical lab exercises

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 100% of students will score an overall average of 90% or higher on the outcome-related exercises.

Who will score and analyze the data: A Radiography Program faculty member

2. Critically analyze radiographs of the chest, abdomen and upper extremities for patient positioning, exposure technique and image processing errors.

**Assessment 1**

Assessment Tool: Outcome-related practical lab exercises

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 100% of students will score an overall average of 90% or higher on the outcome-related exercises.

Who will score and analyze the data: A Radiography Program faculty member

3. Apply the principles of As Low As Reasonably Achievable (ALARA) when obtaining diagnostic radiographs of the chest, abdomen and upper extremities.

**Assessment 1**

Assessment Tool: Outcome-related practical lab exercises

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 100% of students will score an overall average of 90% or higher on the outcome-related exercises.

Who will score and analyze the data: A Radiography Program faculty member

**Course Objectives**

1. Apply radiographic theories and current positioning techniques to obtain optimal radiographs of the chest, abdomen and upper extremities.

2. Critique radiographs for patient positioning, exposure technique and image processing errors.
3. Identify normal anatomy and anatomical variants of the chest, abdomen and upper extremities.
4. Practice radiation safety in accordance with currently accepted guidelines.
5. Properly prepare a patient for radiographs of the chest, abdomen, and upper extremities.
6. Determine the appropriate ancillary devices needed to produce diagnostic radiographs of the chest, abdomen, and upper extremities.
7. Identify and name the anatomical structures that comprise the chest, abdomen, and upper extremities.
8. Identify and name the structures which must be included in each projection/image from radiographic exams of the chest, abdomen, and upper extremities.
9. Identify the radiation safety protocols for radiographing pregnant patients.
10. Identify the radiation safety protocols for radiographing pediatric patients.

## New Resources for Course

### Course Textbooks/Resources

#### Textbooks

Martensen, Kathy. *Radiographic Image Analysis*, 5th ed. Elsevier, 2018

Bontrager, Kenneth. *Textbook of Radiographic Positioning & Related Anatomy*, 10th ed. Elsevier, 2020

Bontrager, Kenneth. *Radiographic Positioning & Related Anatomy Workbook & Laboratory Manual*, 10th ed. Elsevier, 2020

#### Manuals

#### Periodicals

#### Software

### Equipment/Facilities

Level III classroom

Testing Center

Other: Radiography Lab OE121

<b><u>Reviewer</u></b>	<b><u>Action</u></b>	<b><u>Date</u></b>
<b>Faculty Preparer:</b> <i>Jim Skufis</i>	<i>Faculty Preparer</i>	<i>Mar 17, 2021</i>
<b>Department Chair/Area Director:</b> <i>Kristina Sprague</i>	<i>Recommend Approval</i>	<i>Mar 18, 2021</i>
<b>Dean:</b> <i>Valerie Greaves</i>	<i>Recommend Approval</i>	<i>Apr 13, 2021</i>
<b>Curriculum Committee Chair:</b> <i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Apr 20, 2021</i>
<b>Assessment Committee Chair:</b> <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Apr 22, 2021</i>
<b>Vice President for Instruction:</b> <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Apr 26, 2021</i>