

Washtenaw Community College Comprehensive Report

RAD 120 Clinical Education

Effective Term: Fall 2023

Course Cover

College: Health Sciences

Division: Health Sciences

Department: Allied Health

Discipline: Radiography

Course Number: 120

Org Number: 15600

Full Course Title: Clinical Education

Transcript Title: Clinical Education

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:

Consultation with all departments affected by this course is required.

Course description

Pre-requisite, co-requisite, or enrollment restrictions

Outcomes/Assessment

Objectives/Evaluation

Rationale: Course update based on assessment report.

Proposed Start Semester: Winter 2023

Course Description: In this course, students apply knowledge and skills in positioning the spinal column, lower extremities and related anatomy in a structured clinical experience. This course continues the discussion of professional behaviors including ethics, empathy, cultural competence, patient safety, and radiation safety. Equipment manipulation and operation, in addition to image processing and archiving are emphasized in this course.

Course Credit Hours

Variable hours: No

Credits: 2

Lecture Hours: Instructor: 0 Student: 0

Lab: Instructor: 0 Student: 0

Clinical: Instructor: 240 Student: 240

Total Contact Hours: Instructor: 240 Student: 240

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

No Level Required

Requisites

Prerequisite

RAD 110 minimum grade "C-"

Corequisite

RAD 123

General Education

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Operate radiographic equipment to obtain diagnostic images of the spinal column, pelvis, hip and distal femur.

Assessment 1

Assessment Tool: Outcome-related area(s) on the clinical performance evaluation

Assessment Date: Winter 2024

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: 5-point Likert scale measuring various aspects of clinical competency where (1) is Unsatisfactory, (2) is Needs Improvement, (3) Satisfactory, (4) Above Average and (5) Exceeds Expectation.

Standard of success to be used for this assessment: 90% of students will score a 3 or higher.

Who will score and analyze the data: Radiography program faculty

Assessment 2

Assessment Tool: Outcome-related simulation exam

Assessment Date: Winter 2024

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Skills-based checklist

Standard of success to be used for this assessment: 85% of students will score 80% or higher on the final simulation.

Who will score and analyze the data: Radiography program faculty

2. Demonstrate effective writing skills.

Assessment 1

Assessment Tool: Outcome-related case study

Assessment Date: Winter 2024

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 90% of students will earn 80% or higher.

Who will score and analyze the data: Radiography program faculty

3. Demonstrate effective oral communication skills in the clinical setting.

Assessment 1

Assessment Tool: Outcome-related area(s) on the clinical performance evaluation

Assessment Date: Winter 2024

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: 5-point Likert scale measuring various aspects of clinical competency where (1) is Unsatisfactory, (2) is Needs Improvement, (3) Satisfactory, (4) Above Average and (5) Exceeds Expectation.

Standard of success to be used for this assessment: 90% of all students will score 80% or above.

Who will score and analyze the data: Radiography program faculty

Course Objectives

1. Provide clear instructions to a patient to achieve proper positioning for exams of the spinal column and lower extremities.
2. Maneuver tube into detent and other locking positions for taking images of the spinal column and lower extremities.
3. Manipulate the equipment to consistently direct the central ray to the appropriate centering point of the anatomic part.
4. Align the central ray with the image receptor for all projections.
5. Place the x-ray tube at the appropriate source image receptor distance (SID) according to procedure.
6. Demonstrate proper collimation and shielding for maximum radiation protection.
7. Communicate effectively with staff, physicians and other medical personnel at the clinical site to promote a respectful environment.
8. Identify the role of the radiographer during fluoroscopic procedures.
9. Apply knowledge of fluoroscopic procedures to strengthen understanding of pathology and patient outcomes.

New Resources for Course

Course Textbooks/Resources

Textbooks

Bontrager, Kenneth & Lampignano, John. *Bontrager's Textbook of Radiographic Positioning and Related Anatomy*, 9th ed. Elsevier, 2017, ISBN: 9780323399661.

Manuals

Periodicals

Software

Equipment/Facilities

Off-Campus Sites

| <u>Reviewer</u> | <u>Action</u> | <u>Date</u> |
|---|---------------------------|---------------------|
| Faculty Preparer: <i>Erin Hammond</i> | <i>Faculty Preparer</i> | <i>Jul 19, 2022</i> |
| Department Chair/Area Director: <i>Kristina Sprague</i> | <i>Recommend Approval</i> | <i>Aug 23, 2022</i> |
| Dean: <i>Shari Lambert</i> | <i>Recommend Approval</i> | <i>Aug 31, 2022</i> |
| Curriculum Committee Chair: <i>Randy Van Wagnen</i> | <i>Recommend Approval</i> | <i>Feb 16, 2023</i> |
| Assessment Committee Chair: <i>Shawn Deron</i> | <i>Recommend Approval</i> | <i>Feb 16, 2023</i> |
| Vice President for Instruction: <i>Victor Vega</i> | <i>Approve</i> | <i>Feb 17, 2023</i> |

MASTER SYLLABUS

Course Discipline Code & No: RAD 120 Title: Clinical Education Effective Term Fall 2009
 Division Code: HAT Department Code: RAD Org #: 15600
 Don't publish: College Catalog Time Schedule Web Page

Reason for Submission. Check all that apply.
 New course approval Reactivation of inactive course
 Three-year syllabus review/Assessment report Inactivation (Submit this page only.)
 Course change

Change information: Note all changes that are being made. Form applies only to changes noted.

Consultation with all departments affected by this course is required. Total Contact Hours (total contact hours were: _____)
 Course discipline code & number (was _____)* Distribution of contact hours (contact hours were: lecture: _____ lab _____ clinical _____ other _____)
 *Must submit inactivation form for previous course. Pre-requisite, co-requisite, or enrollment restrictions
 Course title (was _____) Change in Grading Method
 Course description Outcomes/Assessment
 Course objectives (minor changes) Objectives/Evaluation
 Credit hours (credits were: _____) Other _____

Rationale for course or course change. Attach course assessment report for existing courses that are being changed.
 Changes will reflect changes in other classes within the radiography program and changes in the field of radiography.

Approvals Department and divisional signatures indicate that all departments affected by the course have been consulted.

Department Review by Chairperson New resources needed All relevant departments consulted

Print: James N Skufis Signature [Signature] Date: 7/8/09
 Faculty/Preparer
 Print: Connie Foster Signature [Signature] Date: 7/13/09
 Department Chair

Division Review by Dean
 Request for conditional approval
 Recommendation Yes No [Signature] Date: 7/13/09
 Dean's/Administrator's Signature

Curriculum Committee Review
 Recommendation Tabled Yes No [Signature] Date: 9/24/09
 Curriculum Committee Chair's Signature

Vice President for Instruction Approval
[Signature] Date: 9/29/09
 Vice President's Signature
 Approval Yes No Conditional

Do not write in shaded area.
 Log File 10/2/09 Copy Banner 12/4/09 C&A Database 11/8/09 C&A Log File 11/8/09 Basic skills Contact fee KC
7/13/09

Please return completed form to the Office of Curriculum & Assessment and email an electronic copy to sjohn@wccnet.edu for posting on the website.

MASTER SYLLABUS

| | | |
|--|--|---|
| <p>Course RAD 120</p> | <p>Course title Clinical Education</p> | |
| <p>Course description State the purpose and content of the course. Please limit to 500 characters.</p> | <p>This course provides structured clinical experience in the application of knowledge and skill in positioning the spinal column, lower extremities, and related anatomy. This course continues the discussion of professional ethics, courtesy and empathy in handling patients, radiation safety, film processing/imaging plate (IP) handling and image archiving, and radiographic equipment.</p> | |
| <p>Course outcomes List skills and knowledge students will have after taking the course.</p> <p>Assessment method Indicate how student achievement in each outcome will be assessed to determine student achievement for purposes of course improvement.</p> | <p>Outcomes (applicable in all sections)</p> <p>Properly use radiographic equipment to obtain diagnostic images of the spinal column.</p> | <p>Assessment Methods for determining course effectiveness</p> <p>Simulation exams.</p> |
| <p>Course Objectives Indicate the objectives that support the course outcomes given above.</p> <p>Course Evaluations Indicate how instructors will determine the degree to which each objective is met for each student.</p> | <p>Objectives (applicable in all sections)</p> <p>Manipulate the patient and/or body part into the correct position to obtain satisfactory images of the spinal column.</p> <p>Direct the central ray to the appropriate centering point.</p> <p>Maneuver tube into detent and other locking positions for taking images of the spinal column.</p> <p>Place X-Ray tube at appropriate SID according to procedure.</p> | <p>Evaluation Methods for determining level of student performance of objectives</p> <p>Utilizing the equipment at the clinical site, students will manipulate the patient and equipment to produce diagnostic images of the spinal column on simulated patients in the clinical setting.</p> <p>Utilizing the equipment at the clinical site, students will center the central ray correctly to produce diagnostic images of the spinal column on simulated patients in the clinical setting.</p> <p>Utilizing the equipment at the clinical site, students will put equipment into detent lock positions to produce diagnostic images of the spinal column on simulated patients in the clinical setting.</p> <p>Utilizing the equipment at the clinical site, students will put equipment at the correct SID to produce diagnostic images of the spinal column on simulated patients in the clinical setting.</p> |

List all new resources needed for course, including library materials.

None

MASTER SYLLABUS

Student Materials:

| List examples of types | | Estimated costs |
|------------------------|--|-----------------|
| Texts | Textbook of Radiographic Positioning and Related Anatomy , Kenneth L. Bontrager, Sixth Edition, The C.V. Mosby Company. | \$ 130.00 |
| Supplemental reading | Pocket Guide to Radiography , 4 th edition, Phillip W. Ballinger and Eugene Frank, Mosbey 2003. | 33.00 |
| Supplies | Scrub Uniforms | 31.00 |
| Uniforms | White Lab Coat | 26.00 |
| Equipment | WCC ID Badge and WCC Radiography Patch | <u>12.00</u> |
| Tools | | \$232.00 total |
| Software | | |

Equipment/Facilities: Check all that apply. (All classrooms have overhead projectors and permanent screens.)

Check level only if the specified equipment is needed for all sections of a course.

| | | | |
|---|--|---|---|
| <input type="checkbox"/> Level I classroom Permanent screen & overhead projector | <input type="checkbox"/> Level II classroom Level I equipment plus TV/VCR | <input type="checkbox"/> Level III classroom Level II equipment plus data projector, computer, faculty workstation | <input type="checkbox"/> Off-Campus Sites <input type="checkbox"/> Testing Center <input type="checkbox"/> Computer workstations/lab <input type="checkbox"/> ITV <input type="checkbox"/> TV/VCR <input type="checkbox"/> Data projector/computer <input type="checkbox"/> Other _____ |
|---|--|---|---|

Assessment plan:

| Learning outcomes to be assessed (list from Page 3) | Assessment tool | When assessment will take place | Course section(s)/other population | Number students to be assessed |
|---|------------------|--|--|--------------------------------|
| Properly use radiographic equipment to obtain diagnostic images of the spinal column. | Simulation exams | Winter 2010 and every three years thereafter | Random selection from each section from past three years | Approximately 20 |

Scoring and analysis of assessment:

- Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally developed rubric, external evaluation, other). Attach the rubric.

Item analysis from the course simulations of the three exams of the spine—the C-spine (AP, Lateral, Right Oblique, left Oblique, and Ondontoid), the T-spine (AP, Lateral, and Swimmers), and the L-spine (AP, Lateral, and L5-S1). Simulation and scoring rubric attached.

- Indicate the standard of success to be used for this assessment.

Eighty-five percent of students will score an average of 95% or better on rubric.

- Indicate who will score and analyze the data.

Radiography program faculty

- Explain the process for using assessment data to improve the course.

The results can be used in the program assessment report and will be reviewed by the department faculty in a departmental meeting to make changes in the upcoming semester if needed.