## Course Assessment Report Washtenaw Community College

Discipline	Course Number	Title
Radiography	1240	RAD 240 11/22/2016- Clinical Education
Division	Department	Faculty Preparer
Health Sciences	Allied Health	Jim Skufis
Date of Last Filed Assessment Report		

## I. Assessment Results per Student Learning Outcome

Outcome 1: Peform radiographic positioning of the chest, abdomen, upper and lower extremities, spinal column, boney thorax and contrast studies.

- Assessment Plan
  - Assessment Tool: RAD 240 Final Clinical Performance Evaluations
  - Assessment Date: Spring/Summer 2015
  - Course section(s)/other population: All students completing their clinical education received a RAD 240 Final Clinical Performance Evaluation and were selected for assessment.
  - Number students to be assessed: All
  - How the assessment will be scored: Departmentally-developed rubric based on JRCERT accreditation.
  - Standard of success to be used for this assessment: Eighty-five percent of students must score a "4" on a 1 to 4 scale with ?4? being the highest score and ?1? being the lowest.
  - Who will score and analyze the data: course instructor
- 1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
		2016

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
23	23

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

All students enrolled in RAD 240 were assessed.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

There is only one section of RAD 240 and all students were assessed.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

Twenty-three RAD 240 Final Performance Evaluation student evaluations were analyzed. An item analysis of the General Radiography, Portable Radiography, and Fluoroscopic Radiography sections of the RAD 240 Final Performance Evaluation was done to assess student learning outcomes 1 from the Master Syllabus. All sections are scored on a 1 to 4 scale with "4" being the highest score and "1" being the lowest. In the General Radiography, Portable Radiography, and Fluoroscopic Radiography portions of the RAD 240 Final Performance Evaluation, 85% of students needed to score a "4" on a 1 to 4 scale. The 85% benchmark was set to be consistent with JRCERT program assessment standards since JRCERT is the radiography program's accrediting agency.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: <u>Yes</u>

The percentage of students achieving a score of "4" in the three sections of General Radiography, Portable Radiography, and Fluoroscopic Radiography Was 91% for all three areas. Based on these results, the standard of success was met and students have achieved the learning outcome of being able to perform radiographic positioning of the chest, abdomen, upper and lower extremities, spinal column, boney thorax and contrast studies.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Mastery of manipulation of equipment, patient positioning, radiation protection, patient communication, judgement, and organization or several pieces of equipment in a variety of clinical environments are all indicated in the assessment

results. These learning outcomes indicate that students are job-ready upon graduation from our program.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

The assessment results do not indicate any weaknesses in students' achievement of the learning outcomes. It is possible that the assessment tool my introduce some level of bias since this assessment is done using information from the RAD 240 Final Performance Evaluation, a student's final evaluation of the program in their final semester, and evaluators may be scoring the final evaluation more generously in order to help students find employment after graduation. Therefore, the individuals completing these evaluations (the program's Clinical Instructors) have been given special instructions during clinical instructor meetings to be as accurate as possible on this evaluation because of its use by the program for assessment purposes and for hiring of the student after graduation.

Outcome 2: Demonstrate operating knowledge of radiographic equipment.

- Assessment Plan
  - Assessment Tool: RAD 240 Final Clinical Performance Evaluations
  - Assessment Date: Spring/Summer 2015
  - Course section(s)/other population: All students completing their clinical education received a RAD 240 Final Clinical Performance Evaluation and were selected for assessment.
  - Number students to be assessed: All
  - How the assessment will be scored: Departmentally-developed rubric based on JRCERT accreditation.
  - Standard of success to be used for this assessment: Eighty-five percent of students must score a "4" on a 1 to 4 scale with ?4? being the highest score and ?1? being the lowest.
  - Who will score and analyze the data: course instructor
- 1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
		2016

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
23	23

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

All students enrolled in RAD 240 were assessed.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

There is only one section of RAD 240 and all students were assessed.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

Twenty-three RAD 240 Final Performance Evaluation student evaluations were analyzed. An item analysis of the General Radiography, Portable Radiography, and Fluoroscopic Radiography sections of the RAD 240 Final Performance Evaluation was done to assess student learning outcomes 2 from the Master Syllabus. All sections are scored on a 1 to 4 scale with "4" being the highest score and "1" being the lowest. In the General Radiography, Portable Radiography, and Fluoroscopic Radiography portions of the RAD 240 Final Performance Evaluation, 85% of students needed to score a "4" on a 1 to 4 scale. The 85% benchmark was set to be consistent with JRCERT program assessment standards since JRCERT is the radiography program's accrediting agency.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes

The percentage of students achieving a score of "4" in the three sections of General Radiography, Portable Radiography, and Fluoroscopic Radiography Was 91% for all three areas. Based on these results, the standard of success was met and students have achieved the learning outcome of demonstrating an operating knowledge of radiographic equipment.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Mastery of manipulation of equipment, patient positioning, radiation protection, patient communication, judgement, and organization or several pieces of equipment in a variety of clinical environments are all indicated in the assessment results. These learning outcomes indicate that students are job-ready upon graduation from our program.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

The assessment results do not indicate any weaknesses in students' achievement of the learning outcomes. It is possible that the assessment tool my introduce some level of bias since this assessment is done using information from the RAD 240 Final Performance Evaluation, a student's final evaluation of the program in their final semester, and evaluators may be scoring the final evaluation more generously in order to help students find employment after graduation. Therefore, the individuals completing these evaluations (the program's Clinical Instructors) have been given special instructions during clinical instructor meetings to be as accurate as possible on this evaluation because of its use by the program for assessment purposes and for hiring of the student after graduation.

Outcome 3: Provide the appropriate patient care during the radiograpic procedure.

- Assessment Plan
  - Assessment Tool: RAD 240 Final Clinical Performance Evaluations
  - Assessment Date: Spring/Summer 2015
  - Course section(s)/other population: All students completing their clinical education received a RAD 240 Final Clinical Performance Evaluation and were selected for assessment.
  - Number students to be assessed: All
  - How the assessment will be scored: Departmentally-developed rubric based on ARRT scoring criteria
  - Standard of success to be used for this assessment: Ninety-five percent of students must receive an ?Effective Performance? rating from their evaluator.
  - Who will score and analyze the data: course instructor
- 1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
		2016

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
23	23

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

All students enrolled in RAD 240 were assessed.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

There is only one section of RAD 240 and all students were assessed.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

Twenty-three RAD 240 Final Performance Evaluation student evaluations were analyzed. The Patient Safety question of the RAD 240 Final Performance Evaluation was selected to assess student learning outcomes 3 from the Master Syllabus. This question is scored by the students clinical instructor as the student demonstrating "Effective Performance," "Adequate Performance, but need improvement," or "Inadequate Performance." For this outcome to be achieved, 95% of students must receive an "Effective Performance" rating. A 95% percent threshold was used as the standard of success because this is the minimum score students must achieve if they are to pass their ARRT mandatory and elective competencies.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes

For Question #2 of the RAD 240 Final Performance Evaluation concerning Patient Safety, the percentage students achieving an "Effective Performance" rating was 100%. Based on these results, the standard of success was met and students have achieved the learning outcome of providing the appropriate patient care during the radiographic procedure.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Being aware of patient safety and welfare in the clinical environments is indicated in the assessment results. These learning outcomes indicate that students are jobready upon graduation from our program.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

The assessment results do not indicate any weaknesses in students' achievement of the learning outcomes. It is possible that the assessment tool my introduce some level of bias since this assessment is done using information from the RAD 240 Final Performance Evaluation, a student's final evaluation of the program in their final semester, and evaluators may be scoring the final evaluation more generously in order to help students find employment after graduation. Therefore, the individuals completing these evaluations (the program's Clinical Instructors) have been given special instructions during clinical instructor meetings to be as accurate as possible on this evaluation because of its use by the program for assessment purposes and for hiring of the student after graduation.

# **II.** Course Summary and Action Plans Based on Assessment Results

1. Describe your overall impression of how this course is meeting the needs of students. Did the assessment process bring to light anything about student achievement of learning outcomes that surprised you?

This assessment process did not bring anything new to light, and I feel that this course is our students' clinical education needs in radiography.

2. Describe when and how this information, including the action plan, was or will be shared with Departmental Faculty.

This information will be shared with program faculty during regular departmental meetings and with the program's advisory committee during our twice-annual meetings.

3.

Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
No changes intended.			

- 4. Is there anything that you would like to mention that was not already captured?
  - 5.

# **III. Attached Files**

## RAD 240 Course Assessment Data RAD 240 Final Performance Evaluation

Faculty/Preparer:	Jim Skufis	Date:	01/05/2017
Department Chair:	Connie Foster	Date:	01/05/2017
Dean:	Valerie Greaves	Date:	01/06/2017
Assessment Committee Chair:	Ruth Walsh	Date:	02/02/2017

#### **Background Information**

1. Course assessed:

Course Discipline Code and Number: RAD 240 Course Title: Clinical Education Division/Department Codes: 15600

- 2. Semester assessment was conducted (check one):
  - 🗌 Fall 20\_
  - Winter 20
  - Spring/Summer 20\_\_\_\_
- 3. Assessment tool(s) used: check all that apply.
  - 🗌 Portfolio
  - Standardized test
  - Other external certification/licensure exam (specify):
  - Survey
  - Prompt
  - Departmental exam
  - Capstone experience (specify):
  - Other (specify): RAD 240 Final Clinical Performance Evaluations.
- 4. Have these tools been used before?
  - Yes Yes

If yes, have the tools been altered since its last administration? If so, briefly describe changes made.

The assessment tool has not been altered since its last administration; however, the individuals completing these evaluations (the program's Clinical Instructors) have been given special instructions during clinical instructor meetings to be as accurate as possible on this evaluation because of its use by the program for assessment purposes and for hiring of the student after graduation.

5. Indicate the number of students assessed/total number of students enrolled in the course.

Twenty-two students enrolled in RAD 240 Clinical Education were assessed.

6. Describe how students were selected for the assessment.

All students completing their clinical education received a RAD 240 Final Clinical Performance Evaluation and were selected for assessment.

### Results

1. Briefly describe the changes that were implemented in the course as a result of the previous assessment.

No changes were indicated in the prior assessment since student scores on the RAD 240 Final Clinical Performance Evaluations met the established benchmarks; therefore no changes have been made in the course.

2. State each outcome from the master syllabus that was assessed.

1. Perform radiographic positioning of the chest, abdomen, upper and lower extremities, spinal column, boney thorax, and contrast studies.

- 2. Demonstrate operating knowledge of radiographic equipment.
- 3. Provide the appropriate patient care during the radiographic procedure.

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3. Briefly describe assessment results based on data collected during the course assessment, demonstrating the extent to which students are achieving each of the learning outcomes listed above. Please attach a summary of the data collected.

Twenty-two RAD 240 Final Performance Evaluation student evaluations were analyzed. An item analysis of the General Radiography, Portable Radiography, and Fluoroscopic Radiography sections of the RAD 240 Final Performance Evaluation was done to assess student learning outcomes 1 and 2 from the Master Syllabus as well as question #2 of the RAD 240 Final Performance Evaluation concerning Patient Safety to assess learning outcome 3 from the Master Syllabus. The RAD 240 Final Performance Evaluation tool is attached. In the General Radiography section, 20 students scored a "4." In the Portable Radiography section, 19 students scored a "4." In the Fluoroscopic Radiography section, 19 students scored a "4." All sections are scored on a 1 to 4 scale with "4" being the highest score and "1" being the lowest. For question #2 of the RAD 240 Final Performance Evaluation concerning Patient Safety, all 22 students received an "Effective Performance" rating from their evaluators.

4. For each outcome assessed, indicate the standard of success used, and the percentage of students who achieved that level of success.

In the General Radiography, Portable Radiography, and Fluoroscopic Radiography portions of the RAD 240 Final Performance Evaluation, 85% of students needed to score a "4" on a 1 to 4 scale; the percentage of assessed students achieving these scores in the three sections was 91%, 86%, and 86%, respectively. The 85% benchmark was set to be consistent with JRCERT program assessment standards since JRCERT is the radiography program's accrediting agency.

For Question #2 of the RAD 240 Final Performance Evaluation concerning Patient Safety, 95% of students needed to receive an "Effective Performance" rating from their evaluator; the percentage of assessed students achieving this rating was 100%.

A 95% percent was used as the standard of success because this is the minimum score students must achieve if they are to pass their ARRT mandatory and elective competencies.

5. Describe the areas of strength and weakness in students' achievement of the learning outcomes shown in assessment results.

Strengths: Mastery of manipulation of equipment, patient positioning, radiation protection, patient communication, judgement, and organization or several pieces of equipment in a variety of clinical environments are all indicated in the assessment results. These learning outcomes indicate that students are job-ready upon graduation from our program.

Weaknesses: The assessment results do not indicate any weaknesses in students' achievement of the learning outcomes. It is possible that the assessment tool may introduce some level of bias since this assessment is done using information from the RAD 240 Final Performance Evaluation, a student's final evaluation of the program in their final semester, and evaluators may be scoring the final evaluation more generously in order to help students find employment after graduation. Therefore, the individuals completing these evaluations (the program's Clinical Instructors) have been given special instructions during clinical instructor meetings to be as accurate as possible on this evaluation because of its use by the program for assessment purposes and for hiring of the student after graduation.

#### Changes influenced by assessment results

1. If weaknesses were found (see above) or students did not meet expectations, describe the action that will be taken to address these weaknesses, along with a timeline for these actions.

Other evaluation tools have been developed to assess the graduating radiography student, especially those which gauge professional skills and conduct. Although students did meet expectations and steps have been taken to insure that the evaluation is not biased, a more objective evaluation tool might be warrented.

2. Identify any other intended changes that will be instituted based on results of this assessment activity (check all that apply). Please describe changes and give rationale for change.

Master syllabus Change/rationale:

Curriculum Change/rationale:

Course syllabus Change/rationale:

Course assignments Change/rationale:

Course materials (check all that apply)
Textbook
Handouts
Other:

Change/rationale:

Instructional methods Change/rationale:

Other:

Change/rationale: Although the assessment results do not indicate any weaknesses in students' achievement of the learning outcomes and steps have been taken to insure that the evaluation is not biased, investigation of a more objective evaluation tool may be warranted.

### **Future plans**

1. Describe the extent to which the assessment tools used were effective in measuring student achievement of learning outcomes for this course.

Because the assessment tool does measure the final learning outcomes in three major areas of radiography practice (General Radiography, Portables, and Fluoroscopy), it is effective in measuring student learning outcomes.

2. If the assessment tools were not effective, describe the changes that will be made for future assessments.

Although this tool was effective, there is some question as to its complete objectivity due to when the RAD 240 Final Performance Evaluation is done, so another assessment tool may need to be investigated.

Submitted by:

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Department Chair	lonue	Factor	
Dean: Marie	On	Mr.	

Date:  $\frac{7/1c/12}{Date: \frac{7/16}{1812}}$ Date:

## **Background Information**

1. Course assessed:

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- Course Discipline Code and Number: RAD 240 Course Title: Clinical Education Division/Department Codes: 15600
- 2. Semester assessment was conducted (check one):
  - Fall 20
  - Winter 20
  - Spring/Summer 2001
- Assessment tool(s) used: check all that apply. 3.
  - Portfolio
    - Standardized test
    - Other external certification/licensure exam (specify):

Survey

Prompt

- Departmental exam
- Capstone experience (specify):
- Other (specify): RAD 240 Final Clinical Performance Evaluations.
- Have these tools been used before? 4.
  - Yes No No

If yes, have the tools been altered since its last administration? If so, briefly describe changes made.

- 5. Indicate the number of students assessed/total number of students enrolled in the course. Twenty students were assessed out of the thirty-four enrolled in the class.
- 6. Describe how students were selected for the assessment. Assessed students were selected randomly.

### Results

- 1. Briefly describe the changes that were implemented in the course as a result of the previous assessment. No prior assessments have been done for this course.
- 2. State each outcome from the master syllabus that was assessed. Perform radiographic positioning of the chest, abdomen, upper and lower extremities, spinal column, boney thorax, and contrast studies. Demonstrate operating knowledge of radiographic equipment. Provide the appropriate patient care during the radiographic procedure.
- 3. Briefly describe assessment results based on data collected during the course assessment, demonstrating the extent to which students are achieving each of the learning outcomes listed above. Please attach a summary of the data collected.

Twenty RAD 240 Final Performance Evaluation student evaluations were chosen at random. An item analysis of the General Radiography, Portable Radiography, and Fluoroscopic Radiography sections of the RAD 240 Final Performance Evaluation as well as question #2 of the RAD 240 Final Performance Evaluation concerning Patient Safety was done. The RAD 240 Final Performance Evaluation tool is attached. In the General Radiography section, 18 students scored a "4." In the Portable Radiography section, 19 students scored a "4." In the Fluoroscopic Radiography section, 17 students scored a "4." All sections are scored on a 1 to 4 scale with "4" being the highest score and "1" being the lowest. For question #2 of the RAD 240 Final Performance

Evaluation concerning Patient Safety, all 20 students received an "Effective Performance" rating from their evaluator.

4. For each outcome assessed, indicate the standard of success used, and the percentage of students who achieved that level of success.

In the General Radiography, Portable Radiography, and Fluoroscopic Radiography portions of the RAD 240 Final Performance Evaluation, 85% of students needed to score a "4" on a 1 to 4 scale; the percentage of assessed students achieving these scores in the three sections was 90%, 95%, and 85%, respectively.

For Question #2 of the RAD 240 Final Performance Evaluation concerning Patient Safety, 95% of students needed to receive an "Effective Performance" rating from their evaluator, the percentage of assessed students achieving this rating was 100%.

A 95% percent was used as the standard of success because this is the minimum score students must achieve if they are to pass their ARRT mandatory and elective competencies.

5. Describe the areas of strength and weakness in students' achievement of the learning outcomes shown in assessment results.

Strengths: Manipulation of equipment, patient positioning, radiation protection, patient communication, judgement and organization.

Weaknesses: This assessment is done on information from a student's final evaluation of the program, and evaluators may be scoring the final evaluation more generously in order to help students find employment after graduation.

#### Changes influenced by assessment results

 If weaknesses were found (see above) or students did not meet expectations, describe the action that will be taken to address these weaknesses, along with a timeline for these actions.
 Other evaluation tools have been developed to assess the graduating radiography student, especially those which gauge professional skills and conduct. Although students did meet expectations, a more objective evaluation tool might be warrented.

2. Identify any other intended changes that will be instituted based on results of this assessment activity (check all that apply). Please describe changes and give rationale for change.

	Master	syllabus
Ch	ange/rat	tionale:

Curriculum Change/rationale:

Course syllabus Change/rationale:

Course assignments Change/rationale:

Course materials (check all that apply)

Textbook
Handouts

Other:

Change/rationale:

Instructional methods Change/rationale:

Other:

Change/rationale: Although the outcome expectation for this assessment has been met, it is felt that a more objective evaluation tool might be warranted.

### **Future plans**

- Describe the extent to which the assessment tools used were effective in measuring student achievement of learning outcomes for this course.
   Because the assessment tool does measure the final learning outcomes in three major areas of radiography practice (General Radiography, Portables, and Fluoroscopy), it is effective in measuring student learning outcomes.
- 2. If the assessment tools were not effective, describe the changes that will be made for future assessments. Although this tool was effective, there is some question as to its complete objectivity due to when the RAD 240 Final Performance Evaluation is done, so another assessment tool may need to be investigated.

Submitted by: Name: Department Chair; Dean:

Date: 9/3/2 Date: 09/02/09 9 Date:

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