Discipline	Course Number	Title
Radiography	217	RAD 217 12/15/2015- 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: Properly use radiographic equipment to obtain diagnostic images of the skull and facial bones.

- Assessment Plan

    o   Assessment Tool: Simulation exams.

    o   Assessment Date: Fall 2009

    o   Course section(s)/other population: radom selection from each section from past three years

    o   Number students to be assessed: approximately 30

    o   How the assessment will be scored:

    o   Standard of success to be used for this assessment:

    o   Who will score and analyze the data:

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)
2015		

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 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.

Only one section of this course is offered 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.

Simulation exercises are what program faculty use to assess a student's psychomotor skills for all aspects of doing radiographic procedures. An analysis based on a the mid-semester simulation covering the skull and facial bones was done to determine whether or not students were able to properly use radiographic equipment to obtain diagnostic images of the skull and facial bones. This analysis is of the five primary views of the skull and facial bones—the PA Caldwell, Townes, Lateral, Waters, and SMV--and is scored from a rubric.

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

Ninety-six percent of students scored 95% or better on the selected exams compiled by the rubric. The benchmark was that 85% of students would score 95% or better.

Students did achieve this learning outcome by these standards of success.

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

Based on the results, students are able to properly use radiographic equipment to obtain diagnostic images of the skull and facial bones as verified by the program faculty.

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.

Because all students achieved the outcome and this is the standard used for our program's accreditation, no changes are planned.

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?

   I feel that this course is providing a structured clinical experience in the application of knowledge and skill in positioning of the skull and facial bones as well as instruction in the use of radiographic equipment. It did not bring anything suprising to light.

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 departmental meetings and with clinical instructors during Advisory Committee 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?

III. Attached Files

RAD 217 Mid-Semester Simulation
RAD 217 Assessment Rubric
RAD 217 Course Assessment Data

Faculty/Preparer:	Jim Skufis	**Date:** 12/15/2015
Department Chair:	Connie Foster	**Date:** 12/16/2015
Dean:	Valerie Greaves	**Date:** 01/23/2016
Assessment Committee Chair:	Michelle Garey	**Date:** 02/11/2016

Discipline	Course Number	Title
Radiography	217	RAD 217 11/25/2014-Clinical Education
Division	Department	Faculty Preparer
Math, Science and Health	Allied Health	Jim Skufis
Date of Last Filed Assessment Report		

I. Assessment Results per Student Learning Outcome

Outcome 1: Properly use radiographic equipment to obtain diagnostic images of the skull and facial bones.

- Assessment Plan
  - Assessment Tool: Simulation exams.
  - Assessment Date: Fall 2009
  - Course section(s)/other population: radom selection from each section from past three years
  - Number students to be assessed: approximately 30
  - How the assessment will be scored:
  - Standard of success to be used for this assessment:
  - Who will score and analyze the data:

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)
2013		

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

# of students enrolled	# of students assessed
23	22

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.

   One student suspended her training due to pregnancy and was not present for the simulation exercises.

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.

   All students enrolled were included with the exception noted above.

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

   Item analysis from the course simulations of the five primary views of the skull and facial bones—the PA Caldwell, Townes, Lateral, Waters, and SMV. Each task involved in the positioning and equipment manipulation was scored. See attached rubric.

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

Twenty-two student simulations were assessed. The standard of success for this assessment was that 85% of the assessed student simulations needed a score of 95% or better. For this assessment, 19 of the 22 student simulations (86%) assessed with the rubric scored above the threshold of 95%. The standard for success has therefore been met.

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

Based on this assessment's results, students enrolled in this class were successfully able to transfer the knowledge they acquired in the classroom concerning positioning of the skull and facial bones to the clinical setting.

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.

Where students missed points was on a few specific aspects of certain views--this will be shared with the instructor of the skull positioning course. There are no plans to change this assessment.

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 course is meeting our students' needs to accurately position these very challenging exams in the clinical setting. The results are not surprising since students in this course are nearly done with their training.

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

Results from this assessment will be shared with the program faculty and clinical instructors during regularly scheduled advisory committee meetings.

Intended Change(s)

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

3. Is there anything that you would like to mention that was not already captured?

Nope.

III. Attached Files

RAD 217 Course Assessment Rubric
RAD217 Course Assess Stats 2014

Faculty/Preparer:	Jim Skufis	**Date:** 11/25/2014	
Department Chair:	Connie Foster	**Date:** 11/26/2014	
Dean:	Kristin Brandemuehl	**Date:** 12/01/2014	
Assessment Committee Chair:	Michelle Garey	**Date:** 01/05/2015	

COURSE ASSESSMENT REPORT

I. Background Information

1. Course assessed:
   Course Discipline Code and Number: RAD 217
   Course Title: Clinical Education
   Division/Department Codes: 15600

2. Semester assessment was conducted (check one):
   X   Fall 2007
   ☐ 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):
   X   Other (specify): Simulation exams

4. Have these tools been used before?
   ☐ Yes
   X   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-one enrolled in the class

6. Describe how students were selected for the assessment.
   Assessed students were selected randomly.

II. 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 (verbatim) from the master syllabus for the course that was assessed.
   "Adjust radiographic equipment as needed to perform exams of the skull and facial bones."

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 student simulations were chosen at random and the five major (Caldwell, Townes, Lateral, Waters, and SMV) skull/facial bone component of the simulations were scored separately. Ninety points were possible. The high score was 90 points (100%) and 2 students achieved this. The low score was 80 (89%). The average score was 87.51 (97%) and the median score was 85 (94%). Using a 95% or better as the standard of success for the five major skull/facial bone exams, 19 of the 20 students (95% of the sample population) achieved the learning outcome.

4. For each outcome assessed, indicate the standard of success used, and the percentage of students who achieved that level of success. ***Please attach the rubric/scoring guide used for the assessment.***
   Using a 95% or better as the standard of success for the five major skull/facial bone exams, 19 of the 20 students (95% of the sample population) achieved the learning outcome.   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.

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Approved by the Assessment Committee 10/10/06

COURSE ASSESSMENT REPORT

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 cannot be used to determine actual image quality because students simulate on fellow students and no images are taken because of radiation safety concerns.

III. 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.

Retrospective analysis of the five major (Caldwell, Townes, Lateral, Waters, and SMV) skull/facial bone component of the simulation exam indicate that the items missed most often dealt with correct exit point of the CR and proper angulation of the skull relative to correct positioning lines. Only one of the twenty students sampled did not achieve the learning outcome of this assessment--none of the twenty students failed the entire simulation exercise. Radiologic exams of the skull and facial bones are quickly being replaced by Computed Tomography and MRI; therefore, actual student experience at doing these exams on real patients is extremely limited. Never the less, these exams are still required competencies for the ARRT registry. Although the outcome expectation for this assessment has been met, it is felt that more quided practice for skull and facial bone positioning would be of benefit to students since they will be unlikely to get the practice on real patients.

2. Identify 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.

   a. ☐ Outcomes/Assessments on the Master Syllabus
      Change/rationale:

   b. ☐ Objectives/Evaluation on the Master Syllabus
      Change/rationale:

   c. ☐ Course pre-requisites on the Master Syllabus
      Change/rationale:

   d. ☐ 1st Day Handouts
      Change/rationale:

   e. ☐ Course assignments
      Change/rationale:

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

   g. X Instructional methods
      Change/rationale: Although the outcome expectation for this assessment has been met, it is felt that more quided practice for skull and facial bone positioning would be of benefit to students since they will be unlikely to get the practice on real patients.

   h. ☐ Individual lessons & activities
      Change/rationale:

3. What is the timeline for implementing these actions? This will be implemented at the next offering of RAD 217 in the Fall semester of 2008.

COURSE ASSESSMENT REPORT

IV. 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 learning outcome of performing radiographic exams of the skull and facial bones in a realistic manner (i.e., students must simulate the five major skull/facial bone exams and demonstrate the same proficiency to earn the ARRT competency), 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.

3. Which outcomes from the master syllabus have been addressed in this report?

   All __X__   Selected _____

   If "All", provide the report date for the next full review: __Fall 2010_____.

   If "Selected", provide the report date for remaining outcomes: _____.

Submitted by:

Name: ___James N. Skufis_____ Date: __11/28/07__
     Print/Signature

Department Chair: _____ Date: __11/28/17__
     Print/Signature

Dean: _____ Date: __11/28/07__
     Print/Signature

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