

STUDENT LEARNING OUTCOMES	MEASUREMENT TOOL	BENCHMARK	TIMEFRAME/RESPONSIBLE PARTY	Results
<p>1. Students will demonstrate the ability to position patients to produce diagnostic images</p>	<p>a. Self-evaluation, Procedure Objectives &amp; Technical Skills section, #9 (Performs procedures accurately and thoroughly in accordance with department protocol)</p> <p>b. Instructor evaluation of student clinical performance (late April-early May of 5<sup>th</sup> semester). Procedures Objectives &amp; Technical Skills section, question # 9 [Completes the needed projection and position of the patient with accuracy to best demonstrate the anatomy of interest (angles tube correctly, detents, positions correctly, aligns tube and Bucky, etc.) Semester 5– acceptable image produced 95%+ of the time.]</p>	<p>a. Students will score “Satisfactory” or above <i>(range: Needs Improvement, Satisfactory, Excels)</i></p> <p>b. Students will score “Consistently, but not always/A little above Average” or above <i>(Range: * please see end of document)</i></p>	<p>a. 1st Year-spring semester Clinical Coordinator</p> <p>b. 2<sup>nd</sup> Year-spring semester Clinical Coordinator</p>	<p>a. Of 18 students, 18 scored satisfactory or above.</p> <p>b. 9 of 9 students scored “Consistently, but not always/A little above Average” or above. (5 scored Always and 4 scored Consistently)</p>

**Analysis:**

**SLO 1:**

a. (first year students)- Continuing to delay the start of clinical until the second 8 weeks has been beneficial in allowing the students to understand some positioning and patient care skills prior to entering the clinical setting. Additionally, the RAD 113 lab provides more lab training with an ARRT registered instructor. RAD 113 is offered the same semester as RAD 111, and the courses mirror each other. RAD 113 has been able to reinforce RAD 111 and RAD 110 skills. The RAD 113 instructor, RAD 111 instructor, and the Clinical Coordinator stay in constant communication so this has help to identify students who are struggling and provide intervention early. Additionally, the students had a dedicated radiography tutor who would work with them in the lab. We will continue to assess.

b. second year students- Comparing this data to the data from their self-evaluation last assessment cycle, there was some growth since 2 students did not turn in their assignment last spring. Although this group did not utilize the RAD tutor as much in their second year as they did in the first, it can be determined that skills learned from the RAD tutor have carried into subsequent semesters. Also the use of clinical preceptors and dedicated adjunct faculty help strengthen student skills. We will continue to assess.

<p>2. Students will provide appropriate patient care by responding to patient needs.</p>	<p>a. Self-evaluation, Patient Care &amp; Safety section, #6 (Assures patient safety at all times)</p> <p>b. Instructor evaluation of student clinical performance (late April-early May of 5<sup>th</sup> semester). Critical Thinking skills section, question # 1. [Promptly evaluates patient’s physical or cognitive limitations which influence how procedures are performed using sound reasoning and judgement and responds appropriately by making needed modifications to communication and/or positioning to safely perform the procedure. Semester 5 – Student can interpret the patient’s condition, and can respond without guidance from the technologist.]</p>	<p>a. Students will score “Satisfactory” or above</p> <p>b. Students will score “Consistently, but not always/A little above Average” or above</p>	<p>a. 1st Year-spring semester Clinical Coordinator</p> <p>b. 2<sup>nd</sup> Year-spring semester Clinical Coordinator</p>	<p>a. Of 18 students, 18 scored satisfactory or above.</p> <p>b. 9 of 9 students scored “Consistently, but not always/A little above Average” or above. (4 scored Always and 5 scored Consistently)</p>
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**Analysis**  
**SLO 2:**  
 a. First year- all students met the benchmark. Some students entered the program with prior healthcare experience. This provide them a knowledge base for decision-making. Hands on lab for RAD 110 introduces these skills and continued education in clinical from adjunct faculty and preceptors reinforces them. Will continue to assess.  
 b. second year students- Comparing the self-evaluation from the assessment cycle last year, students continued to met the benchmark as they progressed through the program. Will continue to assess.

<b>GOAL 2: Students will learn to think critically and how to apply problem solving strategies.</b>				
<b>STUDENT LEARNING OUTCOMES</b>	<b>MEASUREMENT TOOL</b>	<b>BENCHMARK</b>	<b>TIMEFRAME/RESPONSIBLE PARTY</b>	<b>Results</b>
1. Students will demonstrate the ability to modify standard positioning techniques.	<p>a. Self-evaluation, Critical Thinking Skills section, #1 (Promptly evaluates patient’s physical or cognitive limitations which influence how procedures are performed.)</p> <p>b. Instructor evaluation of student clinical performance (late April-early May of 5<sup>th</sup> semester). Critical Thinking skills section, question # 2 [Student is able to formulate equipment modifications based on patient condition and/or ability to safely perform the procedure. Semester 5 – student recognizes the need to modify from routine; student can devise and execute a plan to obtain diagnostic images with little to no coaching]</p>	<p>a. Students will score “Satisfactory” or above</p> <p>b. Students will score “Consistently, but not always/A little above Average” or above</p>	<p>a. 1st Year-spring semester Clinical Coordinator</p> <p>b. 2<sup>nd</sup> Year-spring semester Clinical Coordinator</p>	<p>a. Of 18 students, 16 scored satisfactory or above. 2 students scored Needs Improvement.</p> <p>b. 8 of 9 students scored “Consistently, but not always/A little above Average” or above. (4 scored Always and 4 scored Consistently and 1 scored Most of the time.)</p>

**Analysis:**

**SLO 1**

a. first year- Comparing last year’s self-evaluations to this years, the results are similar. Will continue to gather data and assess.

b. second year-benchmark not met. In the RAD resources survey, students indicated they did not use all resources to the best of their ability. RAD 211 is offered in the second fall semester and includes modifying standard positioning techniques. This will continue to be focused on. Will continue to gather data and assess.

<p>2. Students will recognize imaging errors.</p>	<p>a. Self-evaluation, Procedure Objectives &amp; Technical Skills section, #12 (Can accurately critique images for quality)</p> <p>b. Instructor evaluation of student clinical performance (late April-early May of 5<sup>th</sup> semester). Procedure Objectives &amp; Technical Skills section, # 20 (Evaluate the completed image for acceptable quality to include:  a. Anatomical demonstration  b. Alignment  c. Radiographic brightness and contrast  d. Image identification  e. Visibility and correct placement of lead markers  f. Visibility of radiation protection such as collimation and shielding).</p>	<p>a. Students will score "Satisfactory" or above</p> <p>b. Students will score "Consistently, but not always/A little above Average" or above</p>	<p>a. 1st Year-spring semester Clinical Coordinator</p> <p>b. 2<sup>nd</sup> Year-spring semester Clinical Coordinator</p>	<p>a. Of 18 students, 14 scored satisfactory or above. 4 scored Needs Improvement.</p> <p>b. 8 of 9 students scored "Consistently, but not always/A little above Average" or above. (6 scored Always and 2 scored Consistently and 1 scored Most of the time. )</p>
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**Analysis:**

**SLO 1**

- a. first year- comparing evaluations, this area has improved. RAD 111 incorporated more image analysis. Will continue to monitor.
- b. second year- this is down from last year. Will need more data in order to assess. Will continue to monitor.

<b>GOAL 3: Students will model professionalism.</b>				
<b>STUDENT LEARNING OUTCOMES</b>	<b>MEASUREMENT TOOL</b>	<b>BENCHMARK</b>	<b>TIMEFRAME/ RESPONSIBLE PARTY</b>	<b>Results</b>
1. Students will demonstrate professional behaviors.	a. Self-evaluation, Initiative section, #3 (Performs or assists technologist with exams without being asked/told.)  b. Instructor evaluation of student clinical performance (late April-early May of 5 <sup>th</sup> semester), Initiative section, question # 2 [Watches for exams, initiates exams without being told (self-starter)]	a. Students will score "Satisfactory" or above  b. Students will score "Consistently, but not always/A little above Average" or above	a. 1st Year-spring semester Clinical Coordinator  b. 2 <sup>nd</sup> Year-spring semester Clinical Coordinator	a. Of 18 students, 18 scored satisfactory or above.  b. 9 of 9 students scored "Consistently, but not always/A little above Average" or above. (8 scored Always and 1 scored Consistently.)
<p><b>Analysis:</b>  <b>SLO 1</b>                      a. first year- benchmark met- this can be attributed to the fact the program and all program faculty stress and demonstrate professionalism.                      b. second year- once again, the program stresses and demonstrates professionalism. Given the importance of this goal for student success it will continued to be monitored.</p>				

<p>2. Students are able to receive constructive criticism and respond in a professional manner.</p>	<p>a. Self-evaluation, Professionalism section, #1 (Consistently displays respectful and cooperative attitude toward patients, staff, instructors and fellow students)</p> <p>b. Instructor evaluation of student clinical performance (late April-early May of 5<sup>th</sup> semester), Professionalism section, question # 20 (Makes needed corrections in skill or behavior as a result of constructive criticism).</p>	<p>a. Students will score "Satisfactory" or above</p> <p>b. Students will score "Consistently, but not always/A little above Average" or above</p>	<p>a. 1st Year-spring semester Clinical Coordinator</p> <p>b. 2<sup>nd</sup> Year-spring semester Clinical Coordinator</p>	<p>a. Of 18 students, 18 scored satisfactory or above.</p> <p>b. 9 of 9 students scored "Consistently, but not always/A little above Average" or above. (8 scored Always and 1 scored Consistently.)</p>
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**Analysis:**

**SLO 2**

- a. first year- stressed as part of professionalism. Will continue to gather information and monitor.
- b. second year- students become increasingly comfortable with critique as they progress through the program. Will continue to monitor

<b>GOAL 4: Students will communicate proficiently.</b>				
<b>STUDENT LEARNING OUTCOMES</b>	<b>MEASUREMENT TOOL</b>	<b>BENCHMARK</b>	<b>TIMEFRAME/RESPONSIBLE PARTY</b>	<b>Results</b>
1. Students will use appropriate oral communication with patients.	<p>a. Self-evaluation, <b>Communication</b> section, #3 (Properly instructs and explains procedure to patient during exams, using clear, simple, age appropriate language that is understandable on the patient's level)</p> <p>b. Instructor evaluation of student clinical performance (late April-early May of 5<sup>th</sup> semester), communication skills section, question # 7. (Properly instructs and explains procedure to patient during exams, using clear, simple, age appropriate language that is understandable on the patient's level).</p>	<p>a. Students will score "Satisfactory" or above</p> <p>b. Students will score "Consistently, but not always/A little above Average" or above</p>	<p>a. 1st Year-spring semester Clinical Coordinator</p> <p>b. 2<sup>nd</sup> Year-spring semester Clinical Coordinator</p>	<p>a. Of 18 students, 18 scored satisfactory or above.</p> <p>b. 9 of 9 students scored "Consistently, but not always/A little above Average" or above. (8 scored Always and 1 scored Consistently.)</p>
<p><b>Analysis:</b>  <b>SLO 1</b>                      a. first year- benchmark met. Analysis will continue.                      b. second year- benchmark met. Analysis will continue.</p>				

<p>2. Students will accurately collect and document accurate patient history per site protocol.</p>	<p>a. Self-evaluation, Patient Care &amp; Safety section, #9 (Obtains appropriate patient history)</p> <p>b. Student performance evaluation, (late April-early May of 2<sup>nd</sup> semester) communication skills section, question # 8. (Communicates with professional staff, students, and physicians in written or verbal form using correct terminology, pronunciation, and spelling to describe anatomy, procedures, or directional concepts.).</p>	<p>a. Students will score "Satisfactory" or above</p> <p>b. Students will score "Consistently, but not always/A little above Average" or above</p>	<p>a. 1st Year-spring semester Clinical Coordinator</p> <p>b. 2<sup>nd</sup> Year-spring semester Clinical Coordinator</p>	<p>a. Of 18 students, 17 scored satisfactory or above. 1 scored Needs Improvement.</p> <p>b. 9 of 9 students scored "Consistently, but not always/A little above Average" or above. (8 scored Always and 1 scored Consistently.)</p>
<p><b>Analysis:</b>  <b>SLO 2</b>                  a. first year- reviewing data from the prior year, this is once again an area for improvement. This area appears to improve as students' progress through the program. Analysis will continue.                  b. second year- benchmark met. Analysis will continue.</p>				



<b>Program Effectiveness Measures</b>				
<b>OUTCOME</b>	<b>MEASUREMENT TOOL</b>	<b>BENCHMARK</b>	<b>TIMEFRAME/ RESPONSIBLE PARTY</b>	<b>analysis</b>
1. Students will achieve a passing score on the ARRT certification exam.	a. Scoring results from the ARRT	a. graduates will obtain a scaled score or 75 or higher on the ARRT certification examination.	a. within 6 months' post-graduation Program Director	100% The overall average scaled score is a 89, which is a 1 point lower than last year. The slight decrease could be attributed to the fact the students completed the 2 <sup>nd</sup> 8 weeks online due to the COVID-19 pandemic. Comparing 2019 results to 2020 results, the score for the head, spine, and pelvis procedures remained the same, and there was a slight decrease for thorax and abdomen and extremities. Patient care increased for 2020, and physics decreased.
2. Enrolled students will complete the program within 150% of the stated program length. (Program length is 5 semesters).	a. Datatel student records	a. students will complete within 150% of stated program length. Program start date is November 1 <sup>st</sup> of their first semester.	a. 150% of the stated program length. (Program length is 5 semesters). Program Director	PCR 9/14= 64% 18 students admitted to the program, but technically. 9 students did not complete the program. 1 student dropped prior to our program start date because he said "this is not for him," 4 dropped prior to the drop date because they were failing RAD 111, 3 students were dismissed from the program for exceeding their violation points. 1 student did not progress because she earned a C- in RAD 113.

3. Students who are seeking employment will be employed within 12 months of graduation	a. Graduate survey	a. graduates will have at least PRN employment or will continue their education.	a. 12 months' post-graduation Program Director	2 students are attending radiation therapy, the rest are working PRN
4. Graduates will be satisfied with the quality of their radiography education.	a. Graduate survey	a graduates will be satisfied with the quality of their education.	a. 6 months' post-graduation Program Director	Not available yet for the class of 2020. For the class of 2019, 4 surveys returned and all 4 indicated satisfied.
5. Employers will be satisfied with the performance of the program's graduates.	a. employer survey	a. employers will be satisfied with the performance of the program's graduates.	a. 12 months after graduation Program Director	Not available yet for the class of 2020. Surveys for 6 students were returned and indicated satisfied.

Instructor Evaluation of Student Clinical Performance- ***\*Unless otherwise noted, students of all levels are held to the same standards.***

**5 - Always/Excellent/Performed at least 9 of 10 times attempted** – This skill/behavior is performed correctly 90-100% of the time with little to no room for improvement. This is an excelling student. You would give this student a letter grade of A. This student functions as a role model other students should follow. Remediation is not required (Full point value earned)

**4 - Consistent, but not always/Above average** – This skill/behavior is demonstrated correctly 80-89% of the time, with a little room for improvement for the level at which the student is. A letter grade of B. With a little more effort, the student could be excelling. This student is performing well for their level, but has room for improvement. Remediation is not required, but recommended in this area. (3/4- point value earned)

**3 - Most of the time/Average** – This skill/behavior is demonstrated correctly 50-79% of the time, with room for improvement for the level at which the student is. A letter grade of C. With more effort, the student could be more consistent. This is an average level of performance. This student is meeting expectations, but needs to review and/or work on this area. Remediation is not required, but strongly recommended. (1/2-point value earned)

**2 - Not consistent/Below average** – This skill/behavior is demonstrated correctly less than 50% of the time. Behaviors are not consistent, with a lot of room for improvement for the level at which the student is. This is below average. Student is in serious danger of failing clinical without major improvements. Remediation is required. The student has been counseled and the clinical coordinator has been notified about the students' performance. (Full point value deducted)