

## SCHOOL OF RADIOLOGIC TECHNOLOGY

#### June 26, 2022- June 24, 2023 ASSESSMENT OF STUDENT LEARNING OUTCOMES (GOALS #1 – 4)

## Goal #1: At the end of the program, student should be able to practice as a competent entry-level radiographer.

OUTCOME	MEASUREMENT TOOL	BENCHMARK	DATA	ACTION PLAN
		Based on Class Average		
1. Students will be able to accurately set technical factors for examinations	RAD 112 Radiation Physics Chapters 7 & 23 Test – <i>entire test relates to</i> <i>accurately utilizing technical factors.</i>	≥ 93% 0 – 100% scale	<b>99.6</b> (2019 - 90.6) (2020 - 96.4) (2021 - 91) (2022 - 97.6)	Benchmark met. Score was increased over last year. Will continue to evaluate with this measurement tool.
	Clinical Performance Evaluation Form – Statement # 3 – student accurately set kVp & mAs factors according to established protocols.	≥ 3.00 0 - 4.00 scale	<b>3.46</b> (2019 - 3.64) (2020 - 3.57) (2021 - 3.41) (2022 - 3.37)	Benchmark met. Previous years showed downward trend and action plan of phantom utilization was put in place. Will continue to monitor.
2. Students will be able to provide quality patient care	Clinical Performance Evaluation – Statement # 4 – Patient Care: perceives patient needs, friendly, makes wise decisions, incorporates legal & ethical behaviors into clinical practice.	$\geq$ 3 0 - 4.00 scale	<b>3.62</b> (2019 - 3.70) (2020 - 3.70) (2021 - 3.53) (2022 - 3.58)	Benchmark met. Continued trend upward over the past 3 years. Will continue to utilize tool until scores are consistently above 3.75.
	Clinical Performance Evaluation – Statement #2 – student correctly positioned patients according to established protocols	≥ 3.00 0 - 4.00 scale	<b>3.6</b> (2019 - 3.78) (2020 - 3.67) (2021 - 3.57) (2022 - 3.54)	Benchmark met. Score increased slightly over last year breaking the downward trend. Will continue to utilize this too and monitor trend.

OUTCOME	MEASUREMENT TOOL	BENCHMARK	DATA	ACTION PLAN
1. Students will be able to distinguish between a "difficult exam" and utilizing true critical thinking/problem solving skills	RAD220 – Critical Thinking in the Radiologic Sciences – Portfolio Project Rubric- Demonstrates knowledge of critical thinking/problem solving skills: Student demonstrated 100% understanding that the clinical case studies are examples of using critical thinking/problem solving skills. Not just a "difficult exam". Support of understanding was shown by correlation to the studied text in each case.	Based on Class Average ≥ 93% 0 – 100% scale	<b>93.1</b> (2019 – 97.5) (2020 – 96.1) (2021 – 94) (2022 – 96)	Benchmark met. 2 of the past 3 years have been just above the benchmark. Will continue to monitor.
	RAD220 – Critical Thinking Lab Evaluation– Statement #8 – Critical Thinking and Problem Solving: Accurately adapted from "normal" textbook routine.	≥8 0 - 10.0 scale	<b>9.11</b> (2019 – 9) (2020 – 8.57) (2021 – 9.2) (2022 – 9.0)	Benchmark met. Score increased over last year. Would expect this to clime higher with the use of the phantom in labs.
2. Students will be able to demonstrate critical thinking/problem solving skills in the clinical setting.	Clinical Performance Evaluation – Statement # 6 – Critical Thinking/Problem Solving: Adapts to a variety of circumstances; readily accepts change; determines correct technical factors based on patient condition (routine v. trauma); critiques images for diagnostic quality; systematic & logical.	≥ 3 0 - 4.00 scale	<b>3.37</b> (2019 – 3.45) (2020 – 3.48) (2021 – 3.16) (2022 – 3.06)	Benchmark met. Tool made a sizable jump over the last 2-year downward trend. Will continue to utilize phantom in lab to help students correlate didactic to clinical work.
	Clinical Management Evaluation – Statement # 8 – student adapts to variety of circumstances. Able to adjust positioning techniques for true critical thinking situation.	≥ 3.75 0 - 4.00 scale	<b>3.88</b> (2019 - 3.85) (2020 - 3.88) (2021 - 3.85) (2022 - 3.75)	Benchmark met. Will continue to utilize this measurement tool as it provides important data in student performance.

## Goal #2: At the end of the program, student should be able to integrate critical thinking and problem-solving abilities.

OUTCOME	MEASUREMENT TOOL	BENCHMARK	DATA	ACTION PLAN
		<b>Based on Class Average</b>		
1. Students will be able to effectively communicate through oral methods	Clinical Performance Evaluation – Statement # 7 – Utilizes AIDET and exhibits positive verbal and non-verbal interaction and communication between patients, their families & healthcare team.	≥ 3.00 0 - 4.00 scale	<b>3.53</b> (2019 – 3.58) (2020 – 3.58) (2021 – 3.32) (2022 – 3.51)	Benchmark met. Slight increase over previous year with continued upward trend. Will continue to utilize this tool.
	RAD220 Critical Thinking in the Radiologic Sciences – Oral Presentation of "Critical Thinking Portfolio" Students present to the class a scenario in which critical thinking skills were utilized – students present information in a clear and informative manner.	≥ 42 pts 0 - 50 pt scale	<b>47.3</b> (2019 – 49) (2020 – 46.2) (2021 – 45.2) (2022 – 50)	Benchmark met. Score dropped after a positive jump in 2022. Will continue to monitor and utilize measurement tool.
2. Students will be able to effectively communicate through written methods	Image Evaluation Portfolio – <i>Category VIII</i> – proper use of spelling, grammar, and terminology to the level of course.	$\geq$ 8.1 pts 0 – 10.0 scale	<b>8.6</b> (2022 – 10)	Benchmark met. Score dropped from last year. Will continue to monitor to see if a trend is established.
	RAD203 – Radiographic Pathology – Radiographic Pathology Portfolio – <i>Spelling</i> and Other Grammatical Errors Section	≥ 93% 0 – 100% scale	<b>96.6</b> (2019 – 94) (2020 – 97.8) (2021 – 98.5) (2022 – 84)	Benchmark met. After not meeting the benchmark last year an action plan to emphasize the project rubric was put in place. Will continue to monitor for continued upward trend.

# Goal #3: At the end of the program, students should be able to communicate effectively.

OUTCOME	MEASUREMENT TOOL	BENCHMARK	DATA	ACTION PLAN
		Based on Class Average		
1. Students will develop a Personal Philosophy of Professionalism	RAD 216 Professional Development – Professional Resume	≥ 42 0 - 50 scale	<b>50</b> (2019 – 50) (2020 – 49.6) (2021 – 50) (2022 – 48.75)	Benchmark met. Scores are consistently high in this measurement tool. Will keep measurement tool for the next 2 cycles.
	RAD 216 Professional Development – ISRT Poster Presentation Overall Score – Criterion #10 – Overall impression, exhibit is professional, attractive, clear, and concise.	≥4 0 - 5 scale	<b>3.6</b> (2021 – 3.93) (2022 – 4)	Benchmark not met. Plan of action is to make poster board presentation in pathology a requirement.
2. Students will model professionalism in the clinical arena	Clinical Performance Evaluation – Statement #1: Rank student's performance related to Professionalism (i.e., FOCUS values, honesty, integrity, self-confidence, reliability, dependability, non-judgmental behavior, accountability)	$\geq 3.00$ 0 - 4.00 scale	<b>3.84</b> (2019 - 3.76) (2020 - 4.0) (2021 - 3.8) (2022 - 3.77)	Benchmark met. Will continue to use measurement tool.
	Clinical Management Evaluation – Statement #3 - Clinical Quality Procedures meet high standards of accuracy, thoroughness, professionalism and demonstrates logical sequence in performing exams.	$\geq$ 3.75 0 - 4.00 scale	<b>3.88</b> (2019 – 3.83) (2020 – 3.88) (2021 – 3.85) (2022 – 3.91)	Benchmark met. Will continue to use measurement tool.

# Goal #4: At the end of the program, students should be able to demonstrate and evaluate professionalism.

OUTCOME	MEASUREMENT TOOL	BENCHMARK	DATA	ACTION PLAN
1. Students entering the program will complete the program	Student records	≥ 80%	90% 9 of 10	Benchmark met. JRCERT program effectiveness data, no change will be made. 5- year graduation rate 84% (36 of 43)
2. Graduates will pass the ARRT Board Examination on the first attempt	ARRT Board pass rate	100%	50% 2 of 4	Benchmark not met. JRCERT program effectiveness data, no change will be made. 5- year average pass rate of 91.4% (33 of 36)
3. Graduates will be satisfied with the educational program	Exit Evaluation –Question #8 – Would you recommend the program to other persons interested in pursuing an education in radiology?	100% of those completing the survey respond "Yes"	100% 5 of 5	Benchmark met. All students that completed the survey responded "Yes". Will continue to utilize this measurement tool to assess student satisfaction.
	Graduate Survey (sent 12 months after graduation) – Statement # 3 – Do you believe your education prepared you to assume the role of an entry-level radiographer?	100% of those completing the survey respond "Yes"	100% 2 of 2 (2 of 4 graduates completed the survey)	Benchmark met. All graduates that responded indicated "Yes". Measurement tool provides valuable data about student satisfaction.
4. Employers will hire UPH- DM graduates	Employer Survey – Question # 4 – If you had any current openings, would you consider hiring another graduate from our program?	100% of those completing the survey respond "Yes"	100% 1 of 1	Benchmark met. Permission given to survey 1 employer.
5. Of those seeking employment, graduates will be employed within 12 months of graduation	Graduate Survey – Question # 1 – Are you currently employed in radiography? If no, please explain (i.e., lack of job opportunities, attending educational program, etc.)	100% of those seeking employment respond "Yes"	100% 1 of 1 (1 of 2 that completed survey were actively seeking employment)	Only 2 of the 4 graduates responded. This is JRCERT required data, no change will be made to Measurement Tool. The program has a 5-Year Employment Rate of 100% (34 out of 34)

# Goal #5: At the end of the program, students should be able to meet the needs of the community (Program Effectiveness)