

## Amarillo College-Radiography Program

Outcomes Assessment Plan 2025

August 2023-August 2024

### Program Mission:

To provide a comprehensive educational environment that will prepare the radiography graduate to effectively engage in the daily challenges and responsibilities required of a competent and professional entry-level radiographer.

Goal 1: Monitor Program Effectiveness (updated -8/22/2025-mgh)					
Student Learning Outcome (SLO)	Measurement Tool	Benchmark	Timeframes	Group/Person Responsible	Results
1. Students will complete the program and take the ARRT certification exam.	1. Satisfaction of all program requirements.	1. No less than 75% of students will complete the program in all required courses.	1. During the program/ Within 12 months	1. Program Director	1. N=25 started program (2 exceptions (non-academic), per JRCERT Standard 6.1), 18 completed on time, 87% completion rate (SP 24) 2. 100% first time ARRT pass rate N=22 tested, N=22 passed 1 <sup>st</sup> attempt (SP 24)
	2. Completion of the ARRT certification exam.	2. No less than 75% of graduates will successfully complete the ARRT exam on first attempt.	2. Within 6 months of graduation	2. Program Director	
2. Program will assess graduate satisfaction.	1. Item #19 from Radiography Graduate Survey.	1. Average of 4.0 (5.0 Likert).	1. Within 12 months of graduation	1. Program Director	1. Avg: 4.71; N=7 returned, N=7 answered question #19
3. Program will assess employer satisfaction.	1. Item #20 from Employer Survey.	1. Average of 3.0 (4.0 Likert).	1. Within 12 months of graduation	1. Program Director	1. Avg: 3.88; N=16 returned, N=16 answered question #20
4. Program will assess employment rate.	1. Radiography Graduate Survey.	1. Within 12 months of graduation, 75% of graduates seeking employment in the field will find employment.	1. Within 12 months of graduation	1. Program Director	1. 100% employed in Radiologic Sciences. N=22 completed, N=22 employed

Analysis/Revisions/Recommendations (Goal 1: Monitor Program Effectiveness):

**SLO 1, Tool #1:** We are pleased with the 87% completion rate in 2024. -5-year comparison: 2020: 96%, 2021: 87%, 2022: 95.7%, 2023: 90%, 2024=87% 5-year average: 91.2%.

**SLO 1, Tool #2:** We are thrilled to report SP 2024 pass rate 100%. We continued to utilize Corectec Radiography review in the SP 2024 and increase prep questions to align with the 230 total questions the graduates will see on the ARRT exam. 5-year comparison: 2020: 83%, 2021: 90%, 2022: 87%, 2023: 95%, 2024=100% 5-year average: 90.8%.

**SLO 2:** Benchmark surpassed. Average 4.71 surpassed the benchmark & increased from SP 2022 & 2023. The SP 2024 graduate survey moved to an online format for the first time. Five-year comparison: 2020: 4.7, 2021:3.7, 2022: 4.0, 2023:4.41, 2024=4.71 (5.0 Likert)

**SLO 3:** Benchmark surpassed. Employers continue to be pleased with AC graduates work performance, 2024 responses average 3.88 (4.0 Likert). -5-year comparison: 2020: 3.9, 2021: 3.8, 2022: 3.75, 2023: 4.0, 2024: 3.88

**SLO 4:** Benchmark surpassed. The AC Radiography program continues to have an outstanding employment rate for graduates. 5-year comparison: 2020: 100%, 2021: 90%, 2022: 100%, 2023: 95%, 2024=100%, 5-year average=97.2%.

Goal 2: Graduate will be clinically competent.					
Student Learning Outcome (SLO)	Measurement Tool	Benchmark	Timeframes	Group/Person Responsible	Results
1. Student will provide appropriate radiation safety for patients and self.	1. Item 10 from clinical evaluation	1. 95% of students will score $\geq 4.0$ (5.0 Likert)	1. 3 <sup>rd</sup> (SU 24) & 5 <sup>th</sup> (SP 24) semesters	1. Clinical Coordinator	1. 3 <sup>rd</sup> semester, 100% scored $\geq 4.0$ , N=43 5 <sup>th</sup> semester, 100% scored $\geq 4.0$ , N=134
	2. Radiation Safety assignment RADR 2313	2. Average score of $\geq 80\%$	2. 1 <sup>st</sup> semester (FA 23)	2. Didactic instructor	2. Class average 80.98%, N=24 completed assignment
2. Students will recognize appropriate positioning skills and produce diagnostic images.	1. Item #15 from clinical evaluation	1. 95% of students will score $\geq 4.0$ (5.0 Likert)	1. 5 <sup>th</sup> semester (SP 24)	1. Clinical Coordinator	1. 98.4% scored $\geq 4.0$ , N=65
	2. RADR 2235, Procedures Exam, questions (#3 (humerus), 11 (abd.), 30 (pelvis), & 35 (calcaneus))	2. $\geq 80\%$ of questions will be answered correctly	2. 5 <sup>th</sup> semester (SP 24)	2. Didactic instructor	2. 93% of questions answered correctly, N=22 students for a total of 88 questions.

Analysis/Revisions/Recommendations (Goal 2: Graduate will be clinically competent):

**SLO 1, Tool 1:** Surpassed benchmark, the program is delighted with the results.

**SLO 1, Tool 2:** Surpassed benchmark. There has been a slight downward movement in FA 2023. Instructor will better ensure students are utilizing all prep material that is made available on Blackboard prior to the assignment. 3-year comparison: FA 2021: 83.2; FA 2022: 85.6; FA 2023: 80.98

**SLO 2, Tool 1:** Surpassed benchmark.

**SLO 2, Tool 2:** Benchmark surpassed. We are delighted with the SP 2023 and SP 2024 results. 5-year comparison: SP 2020: 83%, SP 2021: 91.9%, SP 2022: 84.7%; SP 2023: 93.4%; SP 2024: 93%

Goal 3: Graduate will display communication skills.					
Student Learning Outcome (SLO)	Measurement Tool	Benchmark	Timeframes	Group/Person Responsible	Results
1. Student will demonstrate verbal skills when relating to patients.	1. Item 7 & 16 from Clinical Evaluation.	1. 95% of students will score $\geq 4.0$ (5.0 Likert)	1. 1 <sup>st</sup> (FA 23), 2 <sup>nd</sup> (SP 24), 4 <sup>th</sup> (FA 23), 5 <sup>th</sup> (SP 24) semesters	1. Clinical Coordinator	1. 1 <sup>st</sup> semester, 92.5% scored $\geq 4.0$ , N=108; 2 <sup>nd</sup> semester, 98.4% scored $\geq 4.0$ , N=132; 4 <sup>th</sup> semester, 99.2% scored $\geq 4.0$ , N=130; 5 <sup>th</sup> semester, 99.2% scored $\geq 4.0$ , N=130; Overall 97.3% scored $\geq 4.0$ , N=500
	2. Successful completion of Oral portion of the Patient Interview/Screening & X-ray Beam Assignment RADR 1313	2. Students will score $\geq 80\%$	2. 2 <sup>nd</sup> semester (SP 24)	2. Didactic instructor	2. 100% scored $\geq 80\%$ , N=22
2. Student will demonstrate written communication skills.	1. Successful completion of Written portion of Case Study RADR 2305	1. Students will average $\geq 85\%$	1. 4 <sup>th</sup> semester (FA 23)	1. Didactic Instructor	1. N=11 scored $\geq 85\%$ , 45.8% surpassed benchmark (2 <sup>nd</sup> semester for this assignment format)
	2. Successful completion written portion of the Patient Interview/Screen & X-ray Beam Assignment RADR 1313	2. Students will score $\geq 80\%$	2. 2 <sup>nd</sup> semester (SP 24)	2. Didactic Instructor	2. 77% scored $\geq 80\%$ , Average score 83.7, only 5 scored $< 80\%$

Analysis/Revisions/Recommendations (Goal 3: Graduate will display communication skills):

**SLO 1, Tool 1:** Benchmark surpassed except for first semester. We continue to be pleased with overall results. Clinical Coordinator will continue to implement role play as well as other teaching strategies to increase student success in this area.

**SLO 1, Tool 2:** Benchmark surpassed. Comparison data: (% scored  $\geq 80\%$ ) SP 2022: 95%, SP 2023: 100%, SP 2024: 100%

**SLO 2, Tool 1:** We did not meet the benchmark. However, FA 2022 to FA 2023 there was an increase from 42% to 45.8% surpassing the benchmark. Although we still want to see increase, the increase was encouraging. Comparison data: Surpassed benchmark: FA 2022: 42%; FA 2023: 45.8%

**SLO 2, Tool 2:** Bench mark not meet. Although only 17 of 22 students scored  $\geq 80\%$ , three of the five who score below 80% were within a few points of 80. The instructor will continue to help students with course engagement and preparation. Comparison data: (scored  $\geq 80\%$ ) SP 2022: 90%, SP 2023: 96%, SP 2024: 77%

Goal 4: Graduate will display critical thinking/problem-solving skills.					
Student Learning Outcome (SLO)	Measurement Tool	Benchmark	Timeframes	Group/Person Responsible	Results
1. Students will be able to evaluate radiographic images for acceptability.	1. Image Acceptability/Critique Assignment RADR 1202 & RADR 1250	1. The students will score an $\geq 85\%$ in 1202 and average score of $\geq 90\%$ in 1250	1. 3 <sup>rd</sup> semester & 5 <sup>th</sup> semester (SU 24 & SP 24)	1a. Didactic instructor	1. 1202 (SU 24): Chest avg.: 75.2%; Abdomen avg.: 86%; Upper extremity avg.: 83.5%; Lower extremity avg.: 85.5% 1250 (SP 2024): C-spine avg: 87.6; L-spine avg.:82.4; Skull avg.:87.4; GI avg.:81.1
	2. Item #9 on Clinical Evaluation in Practicum V	2. 95% of students will score $\geq 4.0$ (5.0 Likert)	2. 5 <sup>th</sup> semester (SP 24)	2. Clinical Coordinator	2. 98.4% scored $\geq 4.0$ , N=65
2. Students will demonstrate adaptive behavior for critical or stressful scenarios.	1. Item 11 on Clinical Evaluation in Practicum V	1. 95% of students will score $\geq 4.0$ (5.0 Likert)	1. 5 <sup>th</sup> semester (SP 24)	1. Clinical Coordinator	1. 98.4% scored $\geq 4.0$ , N=65
	2. Successful completion of Oral portion of Case Study RADR 2305	2. The student will score $\geq 85\%$	2. 4th semester (FA 23)	2. Didactic Instructor	2. 87.5% (N=21) scoring $\geq 85\%$ , N=24 total.

Analysis/Revisions/Recommendations (Goal 4: Graduate will display critical thinking/problem-solving skills):

**SLO 1, Tool 1:** Benchmark not met. The abdomen eval results showed improvement from SU 2023 to SU 2024, with the upper and lower extremities holding relatively steady. In RADR 1250 there was an increase in c-spine and l-spine evaluations from SP 2023 to SP 2024. Although benchmark was not met we were pleased with the increases. Instructor will continue to help ensure students are utilizing active learning techniques to help raise other scores and move closer to surpassing the benchmark. Program plans to work with Radiography Outcomes Assessment Committee to ensure measurement tool and benchmark are aligned to properly assess the students.

**SLO 1, Tool 2:** Benchmark surpassed, we continue to be pleased with these results.

**SLO 2, Tool 1:** Benchmark surpassed

**SLO 2, Tool 2:** Benchmark surpassed, there was an increase from FA 2022 to FA 2023. We are glad for the increase. Comparison data: (scored  $\geq 85\%$ ) FA 2021: 91.6%; FA 2022: 78.9% scored  $\geq 85\%$ ; FA 2023: 87.5%

Goal 5: Graduate will exhibit professional development.					
Student Learning Outcome (SLO)	Measurement Tool	Benchmark	Timeframes	Group/Person Responsible	Results
1. Students will be able to demonstrate conduct as outlined in the ARRT "Code of Ethics".	1. Item 14 on Clinical Evaluation in Practicum V	1. 95% of students will score $\geq 4.0$ (5.0 Likert)	1. 5 <sup>th</sup> semester (SP 24)	1. Clinical Coordinator	1. 100% scored 5, N=65
	2. RADR 1203, Pre-selected questions on Exam 4	2. $\geq 80\%$ of questions will be answered correctly	2. 1 <sup>st</sup> semester (FA 23)	2. Didactic Instructor	2. 82.5% of questions answered correctly, N=120 question attempts, N=99 correct answers; N=24 students.
2. Students will be able to differentiate between various modalities and professional organizations.	1. RADR 1201 five pre-selected questions on Exam #1	1. Students will score $\geq 80\%$	1. 1 <sup>st</sup> semester (FA 23)	1. Didactic Instructor	1. 79.3 % of questions answered correctly, N=145 question attempts, N=115 correct answers.
	2. RADR 2309-Modality/Professional Organizations Assignment	2. Students will average $\geq 85\%$	2. 4 <sup>th</sup> semester (FA 23)	2. Didactic Instructor	2. class average: 87%; 17 scored $\geq 85\%$ , N=24 students completed assignment

Analysis/Revisions/Recommendations (Goal 5: Graduate will exhibit professional development):

**SLO 1, Tool 1:** We continue to be delighted with 100% of students scoring 5.0 on this tool. Comparison data: SP 2021: 100%, SP 2022: 100%, SP 2023: 100%, SP 2024: 100%

**SLO 1, Tool 2:** Benchmark surpassed. Although benchmark was surpassed for FA 2023, there was a decrease in the questions answered correctly, we will continue to help ensure the benchmark is surpassed. Comparison data: 2021: 91.7%, 2022: 94.6%, 2023: 82.5% answered correctly

**SLO 2, Tool 1:** Benchmark not surpassed. Instructor will need to ensure students are utilizing all posted preparation. When evaluating student progress in Blackboard, students are not adequately utilizing the posted material. Program plans to work with Radiography Outcomes Assessment Committee to ensure measurement tool and benchmark are aligned to properly assess the students. Comparison data: FA 2021: 74%, FA 2022: 86.67%, FA 2023: 79.3%.

**SLO 2, Tool 2:** Benchmark surpassed, there was an increase in the class average from 80.83% in FA 2022 (first time to this format of assignment) to 86.97% in FA 2023. We will continue to monitor for upward trends in the data.

#### Overall Analysis:

The Amarillo College Radiography program is elated to have a 100% first time ARRT pass rate for the SP 2024 graduates. With that being said, was strive to continually increase student retention and knowledge. We also understand we still have some work to do with regards to helping students increase results on certain measurement tools. We will collectively continue to help students succeed as entry level Radiologic Technologist.