

Amarillo College-Radiography Program

Outcomes Assessment Plan 2021

August 2019-August 2020

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 -1/24/2022-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=26 started program, 24 completed, 96% completed
	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. N=24 tested, 20 pass 1 st attempt, 83% 1 st time pass rate
2. Program will assess graduate satisfaction.	1. Item #30 from Radiography Graduate Survey.	1. Average of 4.0 (5.0 Likert).	1. Within 12 months of graduation	1. Program Director	1. Avg= 4.7, N=7 returned
3. Program will assess employer satisfaction.	1. Item #21 from Employer Survey.	1. Average of 3.0 (4.0 Likert).	1. Within 12 months of graduation	1. Program Director	1. Avg=3.9, N=11 returned
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. N=24 employed, 100% employment rate

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

SLO 1, Tool #1: The cohort completing in spring of 2020 had a completion rate of 96% (per JRCERT Standard 6.1 calculations). We continue to be pleased with our overall completion rate. Five-year comparison: 2016: 88%, 2017: 81%, 2018: 85%, 2019: 88%, 2020: 96%, average: 87.5%; SLO 1, Tool #2: The ARRT first time pass rate for the cohort completing in spring of 2020 is 83%. To help raise that rate consistently higher, we are continuing to utilize the Corectec Radiography review to help students prepare for the ARRT exam. We also are completing four 100-question ARRT prep exam in RADR 2309 and 2305 during the students fourth semester. Five-year comparison: 2016: 89%, 2017: 50%, 2018: 86%, 2019: 95%, 2020: 83%, average: 81.6%

SLO 2: Would like to have more responses returned for a broader analysis, expect more returns with the cohort completing SP 2021 due to distribution method. Five-year comparison: 2016: 4.3, 2017: 4.7, 2018: 4.86, 2019: 4.14, 2020: 4.7

SLO 3: As a department we are very pleased with an average of 3.9 out of possible 4.0 for employer satisfaction. Five-year comparison: 2016: 3.75, 2017: 4.0, 2018: 3.91, 2019: 3.9, 2020: 3.9

SLO 4: As a department, we are very pleased with our five-year average employment rate of 96.6 (from 2016-2020). We continually strive to have competent graduates that will have a positive impact on the workforce. Five-year comparison: 2016: 100%, 2017: 95%, 2018: 91%, 2019: 93%, 2020: 100%

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. Students will score no less than 4.0 (5.0 Likert)	1. 3 rd & 5 th semester	1. Clinical Coordinator	1. 3 rd sem. N=40 36 scored 5, 4 scored 4; 5 th sem. N=24 100% got 5s
	2. Radiation Safety assignment RADR 2313	2. Average score of $\geq 80\%$	2. 1 st semester (FA 19)	2. Didactic instructor	2. 100% scored ≥ 80 ; N=26
2. Students will recognize appropriate positioning skills and produce diagnostic images.	1. Item #15 from clinical evaluation	1. Students will score no less than 4.0 (5.0 Likert)	1. 5 th semester (SP 20)	1. Clinical Coordinator	1. N=24 23 got 5, 1 scored 4
	2. RADR 2235, Procedures Exam, questions (#3 (humerus), 11 (abd.), 30 (pelvis), & 35 (calcaneus))	2. $\geq 80\%$ will answer questions correctly	2. 5 th semester (SP 20)	2. Didactic instructor	2. 83% of questions answered correctly; N=24 took exam

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

SLO 1, Tool #1: The majority of students in both semesters 3 & 5 continue to score well on the clinical evaluation form. SLO 1, Tool #2: RADR 2313-Radiation Safety Assignment: This assignment was modified for FA 2020, will report new findings and evaluate the assignment moving forward.

SLO 2, Tool #1: SP 2020-all 24 students scored 4.0 or higher; SLO 2, Tool #2. RADR 2235 Questions: Over all benchmark met. However, did have a slight % decrease from previous year, will look at ensuring exam preparations continue to increase for student success. Three-year comparison: SP 2018: 88%, SP 2019: 88% SP 2020: 83%

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. Students will score no less than 4.0 (5.0 Likert)	1. 1 st , 2 nd , 4 th , 5 th semesters	1. Clinical Coordinator	1. 1 st sem. N=88 73 scored 5, 14 scored 4, 1 scored 3; 2 nd sem. N=42 35 scored 5, 6 scored 4, 1 scored 3; 4 th sem. N=140 127 scored 5, 11 scored 4, 2 scored 3; 5 th sem. N=48 45 scored 5, 3 scored 4
	2. Successful completion of Oral portion of the Patient Interview/Screening & X-ray Beam Assignment RADR 1313 (updated 11/12/2020)	2. Students will score ≥ 80%	2. 2 nd semester (SP 20)	2. Didactic instructor	2. 100% of students scored ≥ 80% (n=24)
2. Student will demonstrate written communication skills.	1. Successful completion of Written portion of Case Study RADR 2305	1. Students will score ≥ 85%	1. 4 th semester (FA 19)	1. Didactic Instructor	1. 92% of students scored ≥ 85 % (N=24)
	2. Successful completion written portion of the Patient Interview/Screen & X-ray Beam Assignment RADR 1313 (updated 11/12/2020)	2. Students will score ≥ 80%	2. 2 nd semester (SP 20)	2. Didactic Instructor	2. 100% of students scored ≥ 80% (n=24)

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

SLO 1, Tool #1: Had four students score less than 4.0 for all semesters. Starting FA 2022, to help raise communication scores, J. Smith will add a communication activity during the first five weeks of RADR 1167 (Practicum I), that will focus on student communications with patients. We are also considering moving to a graduated scale between semesters 1 & 5 for benchmarks. SLO 1, Tool #2: Surpassed benchmark. Due to this tool being new in FA 2019, comparison data will not be available until after next cycle.

SLO 2, Tool #1: Although two students did not meet the benchmark, we are pleased with overall results. Will potentially look at modifying this assignment to ensure adequate assessment. SLO 2, Tool #2: SP 2020 was the first cycle for this updated portion of the assignment. It went from a written paper, to essay type questions. Will continue to monitor. Due to this tool being new SP 2020, comparison data will not be available until after next cycle.

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 rd semester & 5 th semester (SU 20)	1a. Didactic instructor	1. Results: SP 2020 (5 th semester) RADR 1250 Overall average: 90.4 #1: 12 scored $\geq 90\%$; #2: 12 scored $\geq 90\%$; #3: 9 scored $\geq 90\%$; #4: 10 scored $\geq 90\%$ Results SU 2020 (3 rd semester) RADR 1202 Overall average: 88.4% #1: 13 scored less than 85%; #2: 7 scored less than 85%; #3: 6 scored less than 85%; #4: 10 scored less than 85%
	2. Item #9 on Clinical Evaluation in Practicum V	2. Students will score no less than 4.0 (5.0 Likert)	2. 5 th semester	2. Clinical Coordinator	2. 100% scored no less than 4.0 (5.0 Likert) N=24, 21 scored 5, 3 score 4
2. Students will demonstrate adaptive behavior for critical or stressful scenarios.	1. Item 11 on Clinical Evaluation in Practicum V	1. Students will score no less than 4.0 (5.0 Likert)	1. 5 th semester	1. Clinical Coordinator	1. N=24, 20 scored 5, 4 scored 4; 100% scored ≥ 4
	2. Successful completion of Oral portion of Case Study RADR 2305	2. The student will score $\geq 85\%$	2. 4th semester (FA 19)	2. Didactic Instructor	2. 95% of students scored $\geq 85\%$ (N=24)

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

SLO 1, Tool #1. The measurement tools in RADR 1202 & 1250 is still a relatively new assignment format. We want to continue to measure for another couple of cycles before deciding on any changes. SLO 1, Tool #2. The department is pleased with these results. Five-year comparison: SP 2016: 90%; 2017: 100%; 2018: 100%; SP 2019: 98.4%; SP 2020: 100% scored no less than 4 (5.0 Likert)

SLO 2, Tool #1: All students surpassed the benchmark. Three-year comparison: SP 2018: 98.5%, SP 2019: 100%, SP 2020: 100% scored ≥ 4 . SLO 2, Tool #2: Pleased with overall results for this assessment tool. Three-year comparison: FA 2017: 100%; FA 2018: 100%; FA 2019: 95% scored $\geq 85\%$

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. Students will score no less than 4.0 (5.0 Likert)	1. 5 th semester	1. Clinical Coordinator	1. N=24 100% scored 5
	2. RADR 1203, Pre-selected questions on Exam 4	2. Students will score $\geq 80\%$	2. 1 st semester (FA 19)	2. Didactic Instructor	2. 89.9% of questions were answered correctly (N=26)
2. Students will be able to differentiate between various modalities and professional organizations. (updated 11/13/2020-per Assessment Committee)	1. RADR 1201 Pre-selected questions on Exam #1	1. Students will score $\geq 80\%$	1. 1 st semester (FA 19)	1. Didactic Instructor	1. As a whole 74% passed the questions (N=20)
	2. RADR 2309-Will complete modality paper	2. Students will score $\geq 85\%$	2. 4 th semester (FA 19)	2. Didactic Instructor	2. 96 % of students scored $\geq 85\%$ (N=24)

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

SLO 1, Tool #1: Three-year comparison: SP 2018: 100%; SP 2019: 100%; SP 2020: 100% scored ≥ 4.0 . SLO 1, Tool #2. (FA 2019: first time to utilize this measurement tool) Overall pleased with results, however, one question did fall below benchmark. Will evaluate and determine be way to increase that pass rate for that question. Due to this tool being new FA 2019, comparison data will not be available until after next cycle.

SLO 2, Tool #1: (FA 2019: first time to utilize this measurement tool) Overall did not surpass the benchmark; when breaking down, 3 questions surpassed and 2 did not. To better asses, one of the question formats was changed for FA 2020. SLO 2, Tool #2: One student did not score $\geq 85\%$, however, this tool continues to adequately assess student learning with regards to the differences between CT and MRI and ARRT and ASRT. Three-year comparison: FA 2017: 100%, FA 2018: 100%; FA 2019: 96% scored $\geq 85\%$