

Bachelor of Science in Radiologic Sciences

Division or Department: School of Allied Health (SAH)

Assessment Year: 2021

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Northwestern State University Mission Statement: Northwestern State University is a responsive, student-oriented institution committed to acquiring, creating, and disseminating knowledge through innovative teaching, research, and service. With its certificate, undergraduate, and graduate programs, Northwestern State University prepares its increasingly diverse student population to contribute to an inclusive global community with a steadfast dedication to improving our region, state, and nation.

College of Nursing and School of Allied Health Mission Statement: Northwestern State University College of Nursing and School of Allied Health serves an increasingly diverse student population while advancing the mission of the University by offering excellent and innovative undergraduate, graduate, certificate, and continuing education programs that are designed to assist individuals in achieving their goal to become responsible and contributing members of an interprofessional global community that improves the health of our region, state, and nation.

Bachelor of Science in Radiologic Sciences Purpose and Objectives:

BSRS Program Purpose. To provide students with the education and skills to function as an integral part of the health care community and the opportunity for advancement in the allied health professions.

- To provide opportunities that will enhance the development of roles in the radiologic sciences professions.
- To provide a foundation for radiologic science professionals to become lifelong learners and to strive for continued professional growth.

BSRS Program Objectives. Graduates of the BSRS program should be able to:

- Perform quality radiographic procedures.
- Develop assessment skills of a radiographer.
- Evaluate a clinical situation and perform accordingly using critical thinking skills.
- Critically evaluate and assess challenges within the healthcare administrative setting.
- Demonstrate an understanding of professional advocacy
- Integrate adherence to professional behaviors.
- Develop oral communication skills.
- Develop written communication skills.

Methodology

- 1. Data from assessment tools are collected and sent to the program director.
- 2. Data is collected during the spring, summer, and fall semesters of a calendar year.
- 2. The program director enters the data into the tables for each SLO.
- 3. The results are shared with the BSRS Assessment Committee. The committee discusses data analysis, interpretation, actions, trends, results, and future plans.
- 4. The BSRS Assessment committee findings are discussed in the School of Allied Health faculty meetings. Additional insights and actions are added to the assessment plan as necessary.

Goal 1: Stu	Goal 1: Students will be clinically competent radiologic technologists									
Student L Outco	_earning ome		ΤοοΙ	Measure			Resu	lts		
1.1 Stud	dents will	A. F	RADS 4611 (Fall	100% of students will		2021	2020	2019	2018	2017
perfo	orm	S	Semester) Clinical	achieve a score of 85	Ν	43	28	33	41	24
qual	lity	P	Preceptor	or higher on the quality	Met	43	28	33	41	24
radio	ographic	E	Evaluation of	of work and	Mean	96.4	3.96	4.77	4.56	5
proc	cedures.	res. Student Q16: Quality of work and performance	performance question.	Range	87-	3.5-	4.3-	3.5-	5	
					100	4.3	5	5		
			performance		%	100	100	100	100	100
				100% of students will		2021	2020	2019	2018	2017
		B. F	RADS 3820 (Fall	achieve a score of //	Ν	43	44	31	33	43
		3	Semester)	or nigner.	Met	30	29	13	15	14
		Comprehensive Lab		Mean	81	87	82.5	83.03	80.6	
Final Exam		Range	62-	69-	71-	70-	37-			
						98	98	99	95	92
					%	70	66	42	45	32

Stu	dent Learning Outcome	ΤοοΙ	Measure			Res	ults		
1.2	Students will	A. ALHE 3840 (Fall	100% of students will		2021	2020	2019	2018	2017
	develop the	Semester) Student	achieve a mean score	Ν	44	45	32	32	43
	assessment	average of	of 80 or higher on all	Met	44	38	32	30	30
	skills of a	Assessment Tests	Assessment Tests.	Mean	93	87	97	95	88
	radiographer.	in ALHE 3840		Range	80-	63-	80-	60-	45-
					100	99	100	100	83
				%	100	84	100	94	69
		B. RADS 3820 (Fall	100% of students will		2021	2020	2019	2018	2017
		Semester) Trauma	achieve a score of //	Ν	43	44	31	43	43
			or nigher.	Met	38	42	29	38	38

	Mean	89.5	92.1	89.5	93	93
	Range	66-	78-	63-	75-	75-
		100	100	100	100	100
	%	88	95	94	88	88

SLO: 1.1 Students will perform quality radiographic procedures. Throughout clinical and didactic courses, students will learn about the importance of performing quality radiographic procedures. Each student is required to pass RADS 4611 to progress to the next semester. In 2021, the evaluation ratings were adjusted to align with a standard academic grading scale (0-100%) instead of the five-point Likert scale used previously. The items included in the evaluation did not change. The benchmark for the objective was adjusted to correspond to the revised scale. The target is to have 100% of students score 85% or higher on the Clinical Preceptor evaluation for the first measure and score a 77% or higher on the comprehensive lab final exam in RADS 3820.

Findings: Target was met for Measure A and unmet for, Measure B.

Analysis: SLO: 1.1 Students will perform quality radiographic procedures.						
Measure A: RADS 4611 (Clinic 5): Clinical	Measure B: RADS 3820 (Positioning II):					
Preceptor Evaluation of Student Q16: Quality of	Comprehensive Lab Final Exam					
work and performance						
2021: Met – 100% of students achieved 85% or	2021: Unmet – only 70% of students achieved 77% or					
higher.	higher.					
2020: Mat 100% of students appiaved 2 E or higher	2020: Unmet—only 66% of students achieved 85% or					
2020. Met—100 % of students achieved 3.5 of higher	higher					
2010: Mot 100% of students achieved 3.5 or higher	2019: Unmet—only 42% of students achieved 85% or					
	higher.					
2018: Mat 100% of students achieved 2.5 or higher	2018: Unmet—only 45% of students achieved 85% or					
	higher.					
2017: Mat 100% of students achieved 2.5 or higher	2017: Unmet—only 32% of students achieved 85% or					
	higher.					

Measure A: RADS 4611: Clinical Preceptor Evaluation of Student Q16: Quality of work and performance:

In 2021, the target was met, indicating that all students demonstrated a suitable quality of work and performance. 100% of students scored 85% on the Clinical Preceptor evaluation of student performance. This measure is obtained from clinical student evaluations and quantifies the students' quality of work and performance in the clinical setting. This measure has been met for the past 5 years.

Based on the analysis of the 2020 results, the faculty made the following changes in 2021 to drive the cycle of improvement; frequent interaction between faculty members and students to reinforce to the student the importance of producing quality work. In addition to the typical student/faculty interaction, the faculty created a discussion board post in Moodle. This post asked about clinical procedures and created a dialog about performing quality procedures. This discussion board provided another mechanism for students to discuss their work and performance with both faculty and peers. Positive dialogue and constructive criticism can then be offered to help the student perform better in the clinical setting. Faculty will review submitted evaluations, and any student scoring below 85% on an evaluation will be called in for a counseling session regarding the quality of work and performance.

As a result of these changes, in 2021, the target was met, 100% of students scored 85% or higher on the Clinical Preceptor evaluation referring to student work and performance, indicating that all students were demonstrating a suitable quality of work and performance. These changes had a direct impact on the student's ability to produce quality work and performance.

Measure B: RADS 3820 (Positioning II): Comprehensive Lab Final Exam: In 2021, the target was unmet. The target is to have 100% of the students score 77% or higher on the comprehensive lab final exam. In 2021, only 70% of the students scored 77% or higher, specifying that 30% of the students did not successfully display quality radiographic procedures during the comprehensive lab final exam. This measure focuses on the students' ability to perform quality radiographic procedures through a simulated positioning lab exam in the students' second level of radiographic procedures course.

Based on the analysis of the 2020 results, the faculty made the following changes in 2021 to drive the cycle of improvement. The faculty adjusted the benchmark to align with the seven-point grading scale currently utilized within the course. Students must score a 77% or higher on each exam to pass. The faculty integrated the ASRT professional video series on positioning and image critique and RadTech BootCamp as a learning resource. Students must purchase RadTech BootCamp, review the material posted, and take the quizzes and exams for a course grade. In addition, content is added to RadTech BootCamp, this tool will continue to be helpful. Also, additional "open lab" sessions were added for practice sessions. Due to class size, labs were reconfigured into two sections to have fewer students in each section, increasing students' opportunities to practice during lab time.

As a result of these changes, in 2021, the target was still unmet; 100% of students did not score 77% or higher on the comprehensive lab final exam. Only 70% of the students scored 77% or higher, which is an improvement over the previous years; in 2020, only 66% of students met the goal. While there is still room for improvement, these changes had a direct impact on the student's ability to perform quality radiographic procedures.

Decisions: In 2021, the target was met for measure A but was unmet for measure B.

Measure A: Based on the analysis of the 2021 assessment cycle results, the faculty will continue the following activities in 2022 to drive the cycle of improvement;

- 1. Frequent interaction between faculty members and students will continue to be utilized. This interaction will reinforce to the student the importance of producing quality work.
- 2. Create a discussion board post in Moodle. This post will ask about clinical procedures and create dialog regarding performing quality procedures. Faculty members will post prompts to encourage discussion. This discussion board will provide students with another mechanism to discuss their work and performance with both faculty and peers. Positive dialog and constructive criticism can then be offered to help the student perform better in the clinical setting.
- **3.** Faculty will review evaluation scores and counsel any student scoring below 85% on work and performance quality.

Measure B: Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement;

1. The integration of the ASRT professional video series on positioning and image critique within the positioning course.

2. Students will complete assignments in RadTech Bootcamp.

3. Additional "open lab" practice opportunities

4. Faculty will create image critique videos, and the videos will be posted in Moodle for the students to review.

5. Due to the class size, the lab will be reconfigured into two sections to have fewer students in each section. This should increase students' opportunities to practice during lab time.

These changes will improve the students' ability to perform quality radiographic procedures, thereby pushing the cycle of improvement forward.

SLO: 1.2 Students will develop the assessment skills of a radiographer. Throughout the clinical and didactic courses, students will learn the assessment skills needed for a radiographer. Each student is required to pass the classes to progress to the next semester. The target is to have 100% of the students score 80% or higher on the multiple assessment tests for measure A and score 77% or higher on the trauma lab scenario test in RADS 3820.

Findings: Target was met for Measure A and unmet for, Measure B.

Analysis: SLO: 1.2 Students will develop the assessment skills of a radiographer.					
Measure A: ALHE 3840 (Advanced Patient Care):	Measure B: RADS 3820 (Positioning 2): Trauma lab				
Overall Assessment Tests	scenario				
2021: Met – 100% of students achieved 80% or	2021: Unmet – only 88% of students achieved 77% or				
higher.	higher.				
2020: Unmet—only 84% of students achieved 80% or	2020: Unmet—only 95% of students achieved 85% or				
higher	higher				
2019: Met—100% of students achieved 80% or	2019: Unmet—only 94% of students achieved 85% or				
higher.	higher.				
2018: Unmet—only 94% of students achieved 85% or	2018: Unmet—only 91% of students achieved 85% or				
higher.	higher.				
2017: Unmet—only 69% of students achieved 85% or	2017: Unmet—only 88% of students achieved 85% or				
higher.	higher.				

Measure A: ALHE 3840 (Advanced Patient Care): Overall Patient Assessment Tests: In 2021, the target was met, indicating that all students achieved an 80% or higher on the assessment tests.

Based on the analysis of the 2020 results, the faculty made the following changes in 2021 to drive the cycle of improvement: The discussion forums were revised to focus on patient assessment. Additionally, the open resource material used in the course was updated with the most current information, including links to multiple online resources, video demonstrations, and material specific to the radiologic sciences profession.

As a result of these changes, in 2021, the target was met; 100% of students scored 80% or higher on the overall patient assessment tests in ALHE 3840. These changes directly impacted the student's ability to develop the patient assessment skills of a radiographer.

Measure B: RADS 3820 (Positioning II): Trauma Lab Scenario: In 2021, the target was unmet. The target is to have 100% of the students score 77% or higher on the trauma lab scenario exam. Only 88% of students

scored 77% or higher on the trauma lab. This measure focuses on the students' ability to perform quality radiographic procedures through a simulated positioning lab exam in the students' second level of radiographic procedures course.

Based on the analysis of the 2020 results, the faculty made the following changes in 2021 to drive the cycle of improvement. The benchmark was adjusted to align with the seven-point grading scale currently utilized in the course. Students must score 77% or higher to pass. Supplemental videos were added to the course to demonstrate proper trauma assessment. Students are required to view the videos before the trauma lab exam. The faculty recorded the trauma practice labs so students could evaluate their assessment skills. The faculty reviewed and critiqued the videos with the students. Due to the class size, the lab was reconfigured into two sections to have fewer students in each section, increasing student opportunities to practice. The faculty also added an additional "open lab" for practice sessions.

Even with these changes, in 2021, the target was unmet; 88% of students scored 77% or higher on the trauma lab scenario exam. These changes had a direct impact on the student's ability to develop the patient assessment skills of a radiographer. Moving forward in 2022, faculty are moving trauma content earlier in the program in RADS 3310 and RADS 3820. The trauma projections will be threaded throughout the program in order for students to be exposed to the content more often. This repeated content exposure will take place before measure B is implemented.

Decisions:

In 2021, the target was met for measure A and unmet for measure B.

Measure A: Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement:

- 1. The open resource material in the course will be updated with the most current information. It will include links to multiple online resources, including video demonstrations and material specific to the radiologic science profession.
- 2. Discussion forums revised to focus on patient assessment.

Measure B: Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement:

1. The ASRT professional video series on positioning and image critique was purchased.

- 2. Due to the class size, the lab will be reconfigured into two sections to have fewer students in each section. This should increase students' opportunities to practice during lab time.
- **3.** The faculty will record the trauma practice labs so students can evaluate their assessment skills. The faculty will review and critique the videos with the students.
- **4.** Added additional "open lab" for practice sessions.
- 5. Trauma content will be moved earlier in the program in RADS 3310 and RADS 3820 for repeated exposure.

These changes will improve the students' ability to develop the assessment skills of a radiographer.

Goal 2: Students wil	Goal 2: Students will demonstrate critical thinking skills.								
Student Learning Outcome		ΤοοΙ	Measure			Res	ults		
2.1 Students will	Α	. RADS 3820 (Fall	100% of students		2021	2020	2019	2018	2017
evaluate a		Semester) Trauma	will achieve a	Ν	43	44	31	33	43
clinical situation		Lab Exam	score of 77 or	Met	38	42	29	30	38
and perform			higher.	Mean	89.5	92.1	89.5	97	93
accordingly				Range	67-	78-00	70-00	77-	75-
using critical					100	70-00	10-33	100	100
thinking skills.	_			%	88	95	94	91	88
	B	RADS 3911	1000/ of students			-	-		
		(Spring) Clinical Drecenter	100% of students		2021	2020	2019	2018	2017
		Freceptor Evoluation of	III RADS S911 WIII	Ν	42				
		Student 017: Adapt	autileve all	Met	41	New	/ Measu	re for	
		Routine to Patient	85% or higher on	Mean	93.7		2021		
		Condition	the adapt routine	Range	78-				
		Condition	to patient		100				
			condition	%	98				
			question.						
Student Learning Outcome		ΤοοΙ	Measure			Res	ults		
2.2 Students will	Α	. ALHE 4610 (Spring	100% of students		2021	2020	2019	2018	2017
critically		Semester) QC	will achieve a	Ν	42	29	35	41	24
evaluate and		Project	score of 80 or	Met	37	28	34	33	23
assess			higher.	Mean	89.54	85.69	90.25	88.7	93.4
challenges				Range	60-	55-	73-	0-100	51-
within the					100	100	100	0-100	100
healthcare				%	88	97	97	80	96
administrative					-				
setting.			1000/ of students		2021	2020	2019	2018	2017
	B	ALTE 4030	100% OF STUDENTS	Ν	29	33	41	25	32
		(spring semester)	will achieve a	Met	29	33	41	25	31

Management Case	score of 80 or	Mean	97	96.39	92.9	88	95
Study Project	higher.	Range	93-	80-	85-	85-	42-
		_	100	100	100	100	100
		%	100	100	100	100	97

SLO: 2.1 Students will evaluate a clinical situation and perform accordingly using critical thinking skills. Throughout the clinical and didactic courses, students will learn to evaluate a clinical situation and perform accordingly using critical thinking skills. Each student is required to pass the course in order to progress to the next semester. The target is to have 100% of students score a 77% or higher on the trauma lab simulation exam and an 85% or higher on the Clinical Preceptor evaluation of students' ability to adapt to the patient's condition.

Findings: Target was unmet for Measure A and for Measure B.

Analysis: SLO: 2.1: Students will evaluate a clinical situation and perform accordingly using critical thinking skills.					
Measure A: RADS 3820 (Positioning 2): Trauma lab scenario	Measure B: RADS 3911 (Clinic III): Clinical preceptor evaluation of student Q17: Adapt routine to patient condition				
2021: Unmet – only 88% of students achieved 77% or higher.	2021: Unmet – only 98% of students achieved 85% or higher.				
2020: Unmet—only 95% of students achieved 85% or higher	2020: Data not available				
2019: Unmet—only 94% of students achieved 85% or higher.	2019: Data not available				
2018: Unmet—only 91% of students achieved 85% or higher.	2018: Data not available				
2017: Unmet—only 88% of students achieved 85% or higher.	2017: Data not available				

Measure A: RADS 3820 (Positioning II): Trauma lab scenario: In 2021, the target was unmet. The target is to have 100% of the students score 77% or higher on the trauma lab scenario exam. Only 88% of students met the benchmark. This measure focuses on the students' ability to perform quality radiographic procedures through a simulated positioning lab exam in the students' second level of radiographic procedures course.

Based on the analysis of the 2020 results, the faculty made the following changes in 2021 to drive the cycle of improvement. The benchmark was adjusted to align with the seven-point grading scale currently utilized in the course. Students must score 77% or higher to pass. Supplemental videos were added to the course to demonstrate proper trauma assessment. Students are required to view the videos before the trauma lab exam. In addition, the faculty provided additional "open lab" for practice sessions and recorded the trauma practice labs so students could evaluate their assessment skills. The faculty reviewed and critiqued the videos with the students.

As a result of these changes, in 2021, the target was not met; only 88% of students scored 77% or higher on the trauma lab scenario exam. These changes had a direct impact on the student's ability to evaluate a clinical situation and perform accordingly using critical thinking skills.

Measure B: RADS 3911 (Clinic III): Clinical Preceptor Evaluation of Student Q17: Adapt Routine to Patient Condition: In 2021, the target was not met; only 98% of students scored 85% or higher on the Clinical Preceptor evaluation measuring the student's ability to adapt the routine to the patient's condition.

Based on the analysis of the 2020 assessment results, the faculty made the following changes in 2021 to drive the cycle of improvement. In previous years, one tool used to measure this SLO was an assignment within RADS 4510 (Professional Imaging Practices). Due to changes within that course, the faculty changed the tool to the clinical preceptor evaluation in RADS 3911 as it was more reflective of the student's ability to demonstrate critical thinking skills within the clinical situation.

As a result of these changes, in 2021, the target was unmet; only 98% of students scored 85% or higher on the clinical preceptor's evaluation of the student's ability to adapt imaging routines to the patient's condition. These changes had a direct impact on the student's ability to evaluate a clinical situation and perform accordingly using critical thinking skills. In reviewing the data, there was one student who did not score high enough on measure B. This particular student was struggling with personal issues that affected both his clinical performance and academic grades. His personal issues were unrelated to schoolwork but had a negative effect.

Decisions:

In 2021, the target was unmet for measure A and measure B.

Measure A: Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement:

- 1. The faculty will record the trauma practice labs so students can evaluate their assessment skills. The faculty will review and critique the videos with the students.
- 2. Added additional "open lab" for practice sessions.

Measure B: Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement:

1. Faculty will review evaluation scores and counsel any student scoring below 85% on the adapt routine to patient condition question.

These changes will improve the students' ability to evaluate a clinical situation and perform accordingly using critical thinking skills, thereby continuing to push the cycle of improvement forward.

SLO: 2.2 Students will critically evaluate and assess challenges within the healthcare administrative setting. Throughout the clinical and didactic courses, students will learn to evaluate a clinical situation and perform accordingly using critical thinking skills. Each student is required to pass the course in order to progress to the next semester. The target is to have 100% of students score an 80% or higher on the quality control project and an 80% or higher on the case study project. The SLO was revised to reflect a more accurate description of what is measured. The tools and benchmarks were not changed, only the wording of the SLO.

Findings: Target was unmet for Measure A and met for Measure B.

Analysis: SLO: 2.2 Students will critically evaluate and assess challenges within the healthcare administrative setting.					
Measure A: ALHE 4610 (Healthcare Quality): QC Project	Measure B: ALHE 4630 (Healthcare Organization Management: (Case Study Project)				
2021: Unmet – only 88% of students achieved 80% or higher	2021: Met – 100% of students achieved 80% or higher				
2020: Unmet—only 97% of students achieved 80% or higher	2020: Met—100% of students achieved 80% or higher				
2019: Unmet—only 97% of students achieved 80% or higher	2019: Met—100% of students achieved 80% or higher				
2018: Unmet—only 80% of students achieved 80% or higher	2018: Met—100% of students achieved 80% or higher				
2017: Unmet—only 96% of students achieved 80% or higher	2017: Unmet—only 97% of students achieved 80% or higher				

Measure A: ALHE 4610 (Healthcare Quality): QC Project: In 2021, the target was unmet. The target is to have 100% of the students score 80% or higher on the quality control project. Only 88% of the students scored 80% or higher.

Based on the analysis of the 2020 assessment cycle results, the faculty made the following changes in 2021 to drive the cycle of improvement. The faculty reassessed the guidelines for this assignment and clarified expectations in a video explaining the assignment in detail. Examples were also provided within the course.

As a result of these changes, in 2021, the target was still unmet; 100% of students did not score 80% or higher on the quality control project.

Measure B: ALHE 4630 (Healthcare Organization and Management): Case Study Project: In 2021, the target was met. The target is to have 100% of students achieve an 80% or higher on the case study project. This measure asks students to generate a plan and respond to a simulated healthcare management scenario in an imaging department.

Based on the analysis of the 2020 assessment cycle results, the faculty made the following changes in 2021 to drive the cycle of improvement. The faculty made frequent announcements and reminders in the class about the due dates of assignments and created a discussion forum for questions related to assignments. The

guidelines for the project were reviewed and revised. A video was created to explain the assignment in detail. In addition, the number of case studies offered to students increased.

As a result of these changes, in 2021, the target was met; 100% of students scored 80% or higher on the case study project.

Decisions: In 2021, the target was unmet for measure A and was met for measure B.

Measure A: Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement:

- 1. The course was revised to meet Quality Matters guidelines.
- 2. Components of the QC project will be threaded through the course to provide multiple opportunities for students to incorporate feedback prior to the final submission.

Measure B: Based on the analysis of the 2021 assessment cycle results, the faculty will continue to provide additional support in 2022 to drive the cycle of improvement:

- 1. Provide a discussion board forum to allow students to post questions related to the assignment.
- 2. Integrate a video to explain the assignment in detail.

These changes will improve the students' ability to critically evaluate and assess challenges within the healthcare administrative setting.

Goal 3: Students will demonstrate an understanding of professionalism.									
Student Learning Outcome	ΤοοΙ	Measure			Re	esults			
3.1 Students will	A. RADS 4511	25% of students		2021	2020	2019	2018	2017	
demonstrate an	(Summer	will demonstrate	Ν	43					
understanding of	Semester)	involvement in	Met	23					
professional	Students will	professional	Mean	N/A	Ne	w Meas	sure for 20)21	
advocacy	reflect	associations	Range	N/A					
auvocacy.	professional	(LSRT or ASRT)	%	53					
	participating in professional	membership, attending						1	
	the practice	neelings, or		2021	2020	2019	2018	2017	7
	sotting	competitive	Ν	46		33			
	setting.	events	Met	42	No	33	New	New	v
		events.	Mean	96	data	99	Measure	Measu	ure
			Range	50-	due to	95-	for 2019	for 20	19
		100% of students	0/	100	COVID	100			
		will achieve a	%	91		100			
	B. ALHE 3840 (Fall	score of 80 or							
	Semester)	higher.							
	Service-Learning								
	Project								
Student Learning Outcome	ΤοοΙ	Measure	Results						
3.2 Students will	A. RADS 4611	100% of students		2021	2020	2019	2018	2017	
integrate	(Fall): Clinical	will achieve an	Ν	43	28	33	41	24	
adherence to	Preceptor	average score of	Met	43	25	29	40	24	
professional	Evaluation of	90 or higher on	Mean	98.4	4.22	4.83	4.71	4.79	
behaviors.	Student Q2:	Clinical Preceptor	Range	90-	3.91-	3.6-5	3-5	4-5	
	Professional	Evaluations.		100	5				
	Behavior		%	100	89	88	98	100	

				-		-	-	
		100% of students		2021	2020	2019	2018	2017
	B. RADS 3911	will achieve an	Ν	42	29	30	41	32
	<i>(Spring)</i> : Clinical Preceptor Evaluation of Student Q2:	average score of 90 or higher on Clinical Preceptor Evaluations.	Met	41	24	30	40	32
			Mean	97.9	4.48	4.68	4.88	5
			Range	85-	3.99-	4-5	3-5	5
			_	100	5			
	Professional		%	98	83	100	97	100
	Behavior		-	•	•	1	1	

SLO: 3.1 Students will demonstrate an understanding of professional advocacy. Throughout the clinical and didactic courses, students will learn to demonstrate service to the profession and the community. Each student is required to pass the course in order to progress to the next semester. Based on accreditation guidelines and curriculum standards, the SLO was revised to include professional advocacy as a component of professionalism. Due to these changes, the tool used for SLO 3.1 was adjusted to measure student engagement within professional associations. The target is to have 25% of students demonstrate involvement in professional associations and score an 80% or higher on the reflection of the service-learning project.

Findings: Target was met for Measure A, and due to Covid 19, Measure B was not completed.

Analysis: SLO: 3.1 Students will demonstrate an understanding of professional advocacy.					
Measure A: RADS 4511: Student involvement in professional associations (LSRT or ASRT)	Measure B: ALHE 3840 (Advanced Patient Care): Service- Learning Project				
2021: Met – 53% of students demonstrated involvement in professional associations	2021: Unmet – Only 91% of students earned 80% or higher				
2020: Data not available	2020: No data due to Covid 19				
2019: Data not available	2019: Met—100% of students achieved 85% or higher				
2018: Data not available	2018: Data not available				
2017: Data not available	2017: Data not available				

Measure A: RADS 4511 (Clinic IV): Student Demonstrated Involvement in Professional Associations. In 2021, the target was met; 53% of students demonstrated involvement in professional associations within the radiologic technology industry. The Louisiana Society of Radiologic Technologists (LSRT) and the American Society of Radiologic Technologists (ASRT) offer student memberships and provide tailored resources and opportunities to engage students in professional advocacy. In addition to student membership to these professional associations, students are invited to attend special workshops and competitions including a summer conference. Attending the LSRT annual conference is not mandatory; however, the faculty explain the importance of professional associations and efforts to advocate for the profession. The LSRT and ASRT provide education and updates related to potential government policies impacting radiology.

Based on the analysis of the 2020 assessment cycle results, the faculty made the following changes in 2021 to drive the cycle of improvement. Due to the impact of the COVID pandemic and restrictions in place to mitigate its spread combined with the emphasis on professional advocacy within the curriculum, the tool was changed from a research assignment of a charitable organization to measuring student involvement in professional associations. Changes included educating students on the benefits of professional associations and sharing opportunities for involvement.

As a result of these changes, in 2021, the target was met. 53% of students demonstrated involvement in professional associations by engaging with the LSRT and/or the ASRT by membership, conference attendance, or participating in a competitive event during the annual conference. scored 80% or higher on the charitable organization assignment. These changes had a direct impact on the student's ability to demonstrate an understanding of professional advocacy.

Measure B: ALHE 3840 (Advanced Patient Care): Service-Learning Project: In 2021, the target was unmet. The target is to have 100% of students achieve an 80% or higher on the service-learning project. This measure asks students to demonstrate service to the profession and community.

Due to the impact of the COVID pandemic and restrictions in place to mitigate its spread, the project was not assigned in 2020. Based on the analysis of the 2019 results, the faculty made the following changes in 2020 to drive the cycle of improvement. The faculty revised the guidelines for the assignment and added a video with the expectations of the assignment.

As a result of these changes, in 2021, the target was still unmet; 100% of students did not score 80% or higher on the service-learning project.

Decisions: In 2021, the target was met for measure A, and unmet for measure B.

Measure A: Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement:

- 1. Faculty will continue to encourage student participation in LSRT/ASRT membership and competitive events.
- 2. Faculty and student leaders will share opportunities to participate in professional events during class meetings.
- 3. Faculty will facilitate review and prep sessions for student competitions.

Measure B: Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement:

- 1. Faculty will recommend and approve service-learning project focus.
- 2. Faculty will provide weekly announcements reminding students of upcoming due dates and assignment criteria.
- 3. Faculty will provide a video within the course detailing project requirements and clarifying assignment components.

These changes will improve the students' ability to demonstrate understanding of professional advocacy thereby continuing to push the cycle of improvement forward.

SLO: 3.2 Students will integrate adherence to professional behaviors. Throughout clinical and didactic courses, students will learn about the importance of professional behaviors. Each student is required to pass RADS 3911 (Clinic 3) and RADS 4611 (Clinic 5) to progress to the next semester. In 2021, the evaluation ratings were adjusted to align with a standard academic grading scale (0-100%) instead of the five-point Likert scale used previously. The items included in the evaluation did not change. The benchmark for the objective was adjusted to correspond to the revised scale. The target is to have 100% of students score 85% or higher on the Clinical Preceptor evaluation of professional behavior for each measure.

Findings: Target was unmet for Measure A and Measure B.

Analysis: SLO: 3. 2 Students will integrate adherence to professional behaviors.				
Measure A: RADS 4611 (Clinic 5): Clinical Preceptor Evaluation of Student Q2: Professional Behavior	Measure B: RADS 3911 (Clinic 3): Clinical Preceptor Evaluation of Student Q2: Professional Behavior			
2021: Met – 100% of students achieved 90% or higher	2021: Unmet – only 98% of students achieved 90% or higher			
2020: Unmet—only 89% of students achieved 4.0 or higher	2020: Unmet—only 83% of students achieved 4.0 or higher			
2019: Unmet—only 88% of students achieved 4.0 or higher	2019: Met—100% of students achieved 4.0 or higher			
2018: Unmet—only 98% of students achieved 4.0 or higher	2018: Unmet—only 97% of students achieved 4.0 or higher			
2017: Met—100% of students achieved 4.0 or higher	2017: Met—100% of students achieved 4.0 or higher			

Measure A: Students will integrate adherence to professional behaviors (RADS 4611). In 2021, the target was met. The target is to have 100% of the students score 90% or higher on the quality control project.

Based on the analysis of the 2020 assessment cycle results, the faculty made the following changes in 2021 to drive the cycle of improvement. Frequent interaction between faculty members and students was utilized, reinforcing the importance of producing quality work and the importance of adherence to the American Society of Radiologic Technologists (ASRT) and the American Registry of Radiologic Technologists (ARRT) Codes of Conduct in class and clinical settings. In addition, the faculty reviewed evaluation scores and counseled any student scoring below 90% on the quality of work and performance.

As a result of these changes, in 2021, the target was met; 100% of students scored 90% or higher on the Clinical Preceptor Evaluation of professional behavior. These changes had a direct impact on the student's ability to adhere to professional behaviors, thereby continuing to push the cycle of improvement forward.

Measure B: Students will integrate adherence to professional behaviors (RADS 3911). In 2021, the target was unmet; 98% of students scored 90% or higher on the Clinical Preceptor evaluation of student professional behavior.

Based on the analysis of the 2020 results, the faculty made the following changes in 2021 to drive the cycle of improvement. Frequent interaction between faculty members and students to reinforce to the student the importance of producing quality work. Faculty reviewed submitted evaluations, and any student scoring below 90% on an evaluation will be called in for a counseling session regarding the quality of work and performance.

As a result of these changes, in 2021, the target was still unmet. 98% of students scored 90% or higher on question 2 of the Clinical Preceptor evaluation of student professional behavior. In reviewing the data, there was one student who did not score high enough on measure B. This particular student was struggling with personal issues that affected both his clinical performance and academic grades. His personal issues were unrelated to schoolwork but had a negative effect.

Decisions: In 2021, the target was met for measure A and unmet for measure B.

Measure A: RADS 4611 (Clinic 5): Clinical Preceptor Evaluation of Student Q2: Professional Behavior.

Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement:

- 1. Frequent interaction between faculty members and students will continue to be utilized. This interaction will reinforce to the student the importance of producing quality work.
- 2. Faculty will review evaluation scores and counsel any student scoring below 90% on the quality of work and performance.
- **3.** Accentuate the importance of adherence to the American Society of Radiologic Technologists (ASRT) and the American Registry of Radiologic Technologists (ARRT) Codes of Conduct in class and clinical settings.

Measure B: RADS 3911 (Clinic 3): Clinical Preceptor Evaluation of Student Q2: Professional Behavior. Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement:

- 1. Frequent interaction between faculty members and students will continue to be utilized. This interaction will reinforce to the student the importance of producing quality work.
- 2. Faculty will review evaluation scores and counsel any student scoring below 90% on the quality of work and performance.
- **3.** Accentuate the importance of adherence to the ASRT and the ARRT Codes of Conduct in class and clinical settings.

These changes will improve the students' ability to adhere to professional behaviors, thereby continuing to push the cycle of improvement forward.

Goal 4: Students will demonstrate the ability to communicate effectively.								
Student Learning Outcome	ΤοοΙ	Measure			Res	sults		
4.1 Students will	A. RADS 4611	100% of		2021	2020	2019	2018	2017
develop oral	(Fall): Clinical	students will	Ν	43	28	33	41	24
communication	communication Preceptor achieve an	Met	42	26	33	39	23	
skills.	Evaluation of	average score	Mean	98	4.09	4.85	4.64	4.62
Student Q4: of 90 or higher Communication on Clinical	Range	88-100	3.88- 4.24	4-5	2-5	3.2-5		
	with patients	Preceptor	%	98	93	100	95	96
	B. RADS 4611 (<i>Fall</i>): Clinical Preceptor Evaluation of Student Q5: Communication with	100% of students will achieve an average score of 90 or higher on Clinical Preceptor Evaluations.	N Met Mean Range %	2021 43 43 98 90-100 100	2020 28 27 4.22 3.91- 4.34 96	2019 33 33 4.79 4.4-5.0 100	2018 41 41 4.56 4-5 100	2017 24 24 4.66 4-5 100
Student Learning	Tool	Measure			Res	sults		
4 2 Students will		100% of		2021	2020	2010	2019	2017
4.2 Students will develop written	A. ALHE 4520	students will	N	2021	2020	2019	2010	2017
	Research	achieve a	Mot	27				
skills	Proposal	score of 80 or	Mean	90	N		ire for 20	21
	Assignment	higher.	Range	75-100				21
			%	87%				
			/0	0770	<u> </u>			

				2021	2020	2019	2018	2017
			Ν	42	29	41	42	24
	B. RADS 4530	100% of	Met	42	28	40	42	23
(<i>Spring)</i> : students will Patient achieve a	Mean	95	94.5	93.7	88	97		
	Range	85-100	70-100	80-100	85-100	80-100		
	Education	score of 85 or	%	100%	96	98	100	96
	Assignment	higher.						

SLO: 4.1 Students will develop oral communication skills. Students will learn to effectively communicate with patients and fellow radiologic technologists throughout the clinical and didactic courses. Each student must pass the course to progress to the next semester. In 2021, the evaluation ratings were adjusted to align with a standard academic grading scale (0-100%) instead of the Likert scale used previously (0-5). The items included in the evaluation did not change. The benchmark for the objective was revised to incorporate the revised scale. The target is to have 100% of students score a 90 or higher on question 4 (Measure A) and question 5 (Measure B) of the Clinical Preceptor's evaluation of student performance.

Findings: Target was unmet for Measure A and met for Measure B.

Analysis: SLO: 4.1 Students will develop oral communication skills.				
Measure A: RADS 4611 (Clinic 5): Clinical Preceptor Evaluation of Student Q4: Communication with patients	Measure B: RADS 4611 (Clinic 5): Clinical Preceptor Evaluation of Student Q5: Communication with technologists			
2021: Unmet – 98% of students achieved 90% or higher	2021: Met – 100% of students achieved 90% or higher			
2020: Unmet—Only 93% of students achieved 4.0 or higher	2020: Unmet—Only 96% of students achieved 4.0 or higher			
2019: Met—100% of students achieved 4.0 or higher	2019: Met—100% of students achieved 4.0 or higher			

2018: Unmet—only 95% of students achieved 4.0 or higher	2018: Met—100% of students achieved 4.0 or higher
2017: Unmet—only 96% of students achieved 4.0 or higher	2017: Met—100% of students achieved 4.0 or higher

Measure A: RADS 4611 (Clinic 5): Clinical Preceptor Evaluation of Student Q4: Communication with patients: In 2021, the target was unmet, only 98% of students scored 90% or higher on the Clinical Preceptor evaluation of students' oral communication skills with patients.

Based on the analysis of the 2020 results, the faculty made the following changes in 2021 to drive the cycle of improvement. Faculty reviewed submitted evaluations, and any student scoring below 90% on an evaluation was called in for a counseling session regarding oral communication skills with patients. Additionally, in both class and clinical settings, the faculty accentuated the importance of adherence to the American Society of Radiologic Technologists (ASRT) and the American Registry of Radiologic Technologists (ARRT) Codes of Conduct

As a result of these changes, in 2021, the target was unmet. Of the 43 students in RADS 4611, one student earned an 87.5 resulting in 98% of students scoring 90% or higher on question 4 of the Clinical Preceptor evaluations of students' oral communication skills with patients. These changes had a direct impact on the student's ability to communicate with patients in the clinical environment, thereby continuing to push the cycle of improvement forward.

Measure B: RADS 4611 (Clinic 5): Clinical Preceptor Evaluation of Student Q5: Communication with technologists: In 2021, the target was met; 100% of students scored 90% or higher on the Clinical Preceptor evaluation of student professional behavior.

Based on the analysis of the 2020 results, the faculty made the following changes in 2021 to drive the cycle of improvement. Faculty reviewed submitted evaluations, and any student scoring below 90% on an evaluation was called in for a counseling session regarding communication with radiologic technologists in the clinical setting.

As a result of these changes, in 2021, the target was met. 100% of students scored 90% or higher on question 5 of the Clinical Preceptor evaluation of students' oral communication skills with technologists. These changes had a direct impact on the student's ability to communicate with patients in the clinical environment, thereby continuing to push the cycle of improvement forward.

Decisions: In 2021, the target was met for measure A and was met for measure B.

Measure A: Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement:

- **1.** Faculty will review evaluation scores and counsel any student scoring below 90% on oral communication skills with patients.
- 2. Accentuate the importance of adherence to the American Society of Radiologic Technologists (ASRT) and the American Registry of Radiologic Technologists (ARRT) Codes of Conduct in class and clinical settings.

Measure B: Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement:

- **1.** Faculty will review evaluation scores and counsel any student scoring below 90% on communication skills with technologists.
- Accentuate the importance of adherence to the American Society of Radiologic Technologists (ASRT) and the American Registry of Radiologic Technologists (ARRT) Codes of Conduct in class and clinical settings.

These changes will improve the students' ability to orally communicate with patients and radiologic technologists in the clinical setting, thereby continuing to push the cycle of improvement forward.

SLO: 4.2 Students will develop written communication skills. Throughout the clinical and didactic courses, students will develop written communication skills. Each student is required to pass the course in order to progress to the next semester. Due to curriculum changes in RADS 4510 (Professional Imaging Practices), the senior paper assignment was eliminated from the course. The tool used to measure this objective was changed to the research proposal paper in ALHE 4520 (Research).

The target is to have 100% of students score 80% or higher on the research proposal paper and score 85% or higher on the brochure assignment in radiation protection.

Findings: Target was unmet for Measure A and met for Measure B.

Analysis: SLO: 4.2 Students will develop written communication skills.				
Measure A: ALHE 4520 (Research): Research Proposal Paper	Measure B: RADS 4530 (Radiation Protection): Brochure Assignment			
2021: Unmet – only 87% of students achieved 80% or higher	2021: Met – 100% of students achieved 85% or higher			
2020: No data available	2020: Unmet—only 97% of students achieved 85% or higher			
2019: No data available	2019: Unmet—only 98% of students achieved 85% or higher			
2018: No data available	2018: Met—100% of students achieved 85% or higher			
2017: No data available	2017: Unmet—only 96% of students achieved 85% or higher			

Measure A: Research proposal paper: In 2021, the target was unmet; 100% of students did not score 80% or higher on the research proposal paper. Only 87% of the students met the benchmark. The four students who did not meet the benchmark did not follow the assignment guidelines and include all required components or follow APA formatting guidelines.

Based on the analysis of the 2020 results, the faculty made the following changes in 2021 to drive the cycle of improvement. Due to curriculum changes in RADS 4510 (Professional Imaging Practices), the senior paper assignment was eliminated from the course. The faculty continued with the proactive approach and selected the research proposal assignment in ALHE 4520 as a tool to measure this objective. Within ALHE 4520, faculty integrated additional resources to facilitate peer-review, and electronic tools providing automated feedback for spelling, grammar, academic writing, and more. In addition, current APA format resources have been added to the course. Added resources include virtual workshops, anonymous peer-review activities, and Feedback Fruits (an assignment tool integrated within Teams to provide students opportunities to give and receive feedback, work collaboratively, and review written assignments with an automated feedback checker). Lastly, advising students to enroll in the special section of ENGL 2110, which incorporates APA format instead of MLA, will continue for allied health and nursing students. These additional requirements should have a positive impact on student writing skills. This practice should show results in the coming years.

As a result of these changes, in 2021, the target was unmet. 100% of students did not score 80% or higher on the research proposal paper. 87% of students met the benchmark. These changes had a direct impact on the student's ability to develop written communication skills, thereby continuing to push the cycle of improvement forward.

Measure B: RADS 4530 (Radiation Protection): Brochure Assignment: In 2021, the target was met; 100% of students scored an 85% or higher on the brochure assignment.

Based on the analysis of the 2020 results, the faculty made the following changes in 2021 to drive the cycle of improvement. The faculty provided examples of professional brochures to students. The faculty reviewed and revised the guidelines for the assignment.

As a result of these changes, in 2021, the target was met. 100% of students scored 85% or higher on the brochure assignment. These changes had a direct impact on the student's ability to develop written communication skills, thereby continuing to push the cycle of improvement forward.

Decisions: In 2021, the target was unmet for measure A and was met for measure B.

Measure A: Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement:

- 1. The peer-review process will be mandatory for all student paper submissions.
- 2. Further revision of ALHE 4520 (Research Methods) to include additional resources to explain the research proposal paper assignment, an APA formatted template, and academic writing activities to aid in the development of writing skills.
- **3.** The faculty will continue to advise students to enroll in the special section ENGL 2110 that incorporates APA format. It is projected that students will enter the program more prepared and with better writing and APA skills.

Measure B: Based on the analysis of the 2021 assessment cycle results, the faculty will implement the following changes in 2022 to drive the cycle of improvement:

- **1.** The faculty will provide examples of brochures in the classroom setting.
- 2. The faculty will discuss in class the importance of the assignment.

These changes will improve the students' ability to develop written communication skills, thereby continuing to push the cycle of improvement forward.

Comprehensive Summary of Key Evidence of Improvements Based on Analysis of Results

Based on the analysis of the 2020 results, in the 2021 assessment year, the BSRS program implemented many plans to enhance student learning with the overall goals of students demonstrating student learning outcomes, graduating, passing the certification exam administered by the American Registry of Radiologic Technologists (ARRT), and finding employment. Statistics related to these goals are:

- 79% pass rate for first-time test takers for the ARRT in 2021
- 100% of graduates who sought employment were able to find employment in radiologic sciences
- 82.1% of students completed the program within the stated program length

Continuous improvement is an emphasis for the radiologic sciences program. The focus on continual improvement has brought forth many changes that have been executed, throughout the program, to positively affect student learning to meet the needs of the radiologic sciences student while preparing them for the future as radiologic technologists. Many of these changes were initiated during the assessment process. Below is the summary of changes that have occurred during the 2021 AY related to the student learning outcomes for the BSRS program.

Summary of Goal 1: Students will be CLINICALLY COMPETENT radiologic technologists.

Additional discussion boards were utilized to increase student dialog regarding clinical procedures, quality, performance, and patient assessment. The discussions provided another mechanism for students to discuss their work and performance with both faculty and peers. Positive dialogue and constructive criticism encouraged students to be conscientious of their performance in the clinical setting.

Clinical evaluation benchmarks were adjusted to align with the seven-point grading scale utilized in the course. Faculty reviewed student clinical evaluations, and any student in RADS 4611 scoring below 85% on an evaluation was counseled regarding the quality of work and performance.

The faculty integrated the ASRT professional video series on positioning and image critique and RadTech BootCamp as a learning resource. Also, additional "open lab" sessions were added for practice sessions. Due to class size, labs were reconfigured into two sections to have fewer students in each section, increasing students' opportunities to practice during lab time.

Additional open resource material used in the course was updated with the most current information, including links to multiple online resources, video demonstrations, and material specific to the radiologic sciences profession.

Summary of Goal 2: Students will demonstrate CRITICAL THINKING skills.

Supplemental videos were added to RADS 3820 (Positioning II) to demonstrate proper trauma assessment. Students are required to view the videos before the trauma lab exam. In addition, the faculty provided additional "open lab" for practice sessions and recorded the trauma practice labs so students could evaluate their assessment skills. The faculty reviewed and critiqued the videos with the students.

A new tool was selected to measure SLO 2.1. Due to changes within RADS 4510 (Professional Imaging Practices), the faculty changed the tool to the clinical preceptor evaluation in RADS 3911 as it was more reflective of the student's ability to demonstrate critical thinking skills within the clinical situation.

In ALHE 4610 (Healthcare Quality) and ALHE 4630 (Healthcare Organization and Management), the faculty reassessed the guidelines for major assignments and clarified expectations in videos and examples.

Summary of Goal 3: Students will demonstrate an understanding of professionalism.

Due to the impact of the COVID pandemic and restrictions in place to mitigate its spread combined with the emphasis on professional advocacy within the curriculum, one tool used to measure 3.1 was changed from a research assignment of a charitable organization to measuring student involvement in professional associations. Changes included educating students on the benefits of professional associations and sharing opportunities for involvement.

Frequent interaction between faculty members and students was utilized, reinforcing the importance of producing quality work and the importance of adherence to the American Society of Radiologic Technologists (ASRT) and the American Registry of Radiologic Technologists (ARRT) Codes of Conduct in class and clinical settings. In addition, the faculty reviewed clinical evaluation scores and counseled any student in RADS 3911 and RADS 4611 scoring below 90% on the quality of work and performance.

Summary: Goal 4: Students will demonstrate the ability to communicate effectively.

In 2021, the evaluation ratings were adjusted to align with a standard academic grading scale (0-100%) instead of the Likert scale used previously (0-5). Faculty reviewed submitted evaluations, and any student scoring below 90% on an evaluation was called in for a counseling session regarding oral communication skills with patients and radiologic technologists. Additionally, in both class and clinical settings, the faculty accentuated the importance of adherence to the American Society of Radiologic Technologists (ASRT) and the American Registry of Radiologic Technologists (ARRT) Codes of Conduct.

Due to curriculum changes in RADS 4510 (Professional Imaging Practices), the senior paper assignment was eliminated from the course. The faculty continued with the proactive approach and selected the research proposal assignment in ALHE 4520 as a tool to measure SLO 4.2. Within ALHE 4520, faculty integrated additional resources to facilitate peer-review, and electronic tools providing automated feedback for spelling, grammar, academic writing, and more. In addition, current APA format resources have been added to the course. Added resources include virtual workshops, anonymous peer-review activities, and Feedback Fruits (an assignment tool integrated within Teams to provide students opportunities to give and receive feedback, work collaboratively, and review written assignments with an automated feedback checker).

In RADS 4530 (Radiation Protection), the faculty reviewed and revised the guidelines for key assignments and provided examples of professional brochures to students.

Plan of Action Moving Forward in 2022

Based on the evidence provided from the 2021 AY, the BSRS program will make the following changes for continuous program improvement:

Goal 1: Students will be clinically competent radiologic technologists.

- SLO 1.1: Students will perform quality radiographic procedures.
 - 1. Frequent interaction between faculty members and students will continue to be utilized.
 - 2. Create a discussion board post in Moodle.
 - 3. Faculty will review evaluation scores and counsel any student scoring below 85%
 - 4. Students will complete assignments in RadTech Bootcamp.
 - 5. Faculty will integrate ASRT video series within positioning course.
 - 6. Additional "open lab" practice opportunities
 - 7. Faculty will create image critique videos, and post in Moodle for the students to review.

- 8. The lab will be reconfigured into two sections to have fewer students in each section.
- SLO 1.2: Students will develop the assessment skills of a radiographer.
 - 1. The open resource material in the course will be updated with the most current information.
 - 2. Discussion forums revised to focus on patient assessment.
 - 3. Faculty will integrate ASRT video series on positioning and image critique into the course.
 - 4. The lab will be reconfigured into two sections to have fewer students in each section.
 - 5. The faculty will record the trauma practice labs so students can evaluate their assessment skills.
 - 6. Added additional "open lab" for practice sessions.
 - 7. Trauma content will be moved earlier in the program for repeated exposure.

Goal 2: Students will demonstrate critical thinking skills.

- SLO 2.1: Students will evaluate a clinical situation and perform accordingly using critical thinking skills.
 - 1. Faculty will record the trauma practice labs so students can evaluate their assessment skills. The faculty will review and critique the videos with the students.
 - 2. Added additional "open lab" for practice sessions.
 - 3. Faculty will review evaluation scores and counsel any student scoring below 85% on the adapt routine to patient condition question.
- SLO 2.2: Students will critically evaluate and assess challenges within the healthcare administrative setting.
 - 1. Course revisions to align with Quality Matters guidelines.
 - 2. Components of the QC project will be threaded through the course to provide multiple opportunities for students to incorporate feedback prior to the final submission.
 - 3. Create a video to explain the assignment in detail.
 - 4. A forum was added for student's questions regarding assignments

Goal 3: Students will demonstrate an understanding of professionalism.

- SLO: 3.1: Students will demonstrate service to the profession and the community.
 - 1. Faculty will encourage student participation in LSRT/ASRT membership and competitive events.
 - 2. Faculty and student leaders will share opportunities to participate in professional events during class meetings.

- 3. Faculty will facilitate review and prep sessions for student competitions
- SLO: 3.2: Students will integrate adherence to professional behaviors.
 - 1. Faculty will recommend and approve service-learning project focus.
 - 2. Faculty will provide weekly announcements reminding students of upcoming due dates and assignment criteria.
 - 3. Faculty will provide a video within the course detailing project requirements and clarifying assignment components.

Goal 4: Students will demonstrate the ability to communicate effectively.

- SLO: 4.1: Students will develop oral communication skills.
 - 1. Review evaluation scores and counsel any student scoring below 90% on communication with patients and technologists.
 - 2. Accentuate the importance of adherence to the ASRT and ARRT Codes of Conduct and Ethics.
 - 3. Faculty will review evaluation scores and counsel any student scoring below 90% on communication skills with technologists.
 - 4. Accentuate the importance of adherence to the American Society of Radiologic Technologists (ASRT) and the ARRT Codes of Conduct in class and clinical settings.
- SLO: 4.2: Students will develop written communication skills.
 - 1. Peer-review process will be mandatory for all student paper submissions.
 - 2. Further revision of ALHE 4520 (Research) to include additional resources and academic writing activities.
 - 3. Faculty will advise students to enroll in the section ENGL 2110 that incorporates APA format.
 - 4. Faculty will provide examples of brochures in the classroom setting.
 - 5. Faculty will discuss in class the importance of the assignment.