# Assessment Cycle 2019-2020

## Bachelor of Science in Radiologic Sciences

**College: Nursing and School of Allied Health**

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**Northwestern State University Mission Statement**: NSU is a responsive, student-oriented institution that is committed to the creation, dissemination, and acquisition of knowledge through teaching, research, and service. The University maintains as its highest priority excellence in teaching in graduate and undergraduate programs. Northwestern State University prepares its students to become productive members of society and promotes economic development and improvements in the quality of life of the citizens in its region.

**College of Nursing and School of Allied Health Mission Statement:** NSU CONSAH serves the people of Louisiana and in so doing improves the health of its citizens while advancing the mission of Northwestern State University through excellence in accessible undergraduate, graduate, and continuing education programs that are designed to assist individuals in achieving their professional goals as responsible and contributing members of their profession and society.

**School of Allied Health Mission Statement:** The SAH at NSU provides high quality undergraduate and graduate programs that prepare individuals for a variety of professional healthcare roles and to be conscientious, contributing members of their profession and society.

**BSRS Mission.** The mission of the Radiologic Sciences Program is to provide students with advanced knowledge and skills through guided experiences and clinical practice that culminates in professional radiologic technologists becoming an integral part of the healthcare community and society.

**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 which 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

# Assessment Cycle 2019-2020

**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.
- Propose a plan to respond to imaging department scenarios.
- Demonstrate service to the profession and the community.
- 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.

# Assessment Cycle 2019-2020

**Goal 1: Students will be CLINICALLY COMPETENT radiologic technologist.**

| Student Learning Outcomes | Tool | Benchmark | Results |
|---|---|---|---|
| 1.1 Students will perform quality radiographic procedures. | A. **RADS 4611** (Clinic 5): Clinical Instructor Evaluation of Student Q16: Quality of work and performance | 100% of students will score at least 3.5/5 on the quality of work and performance question. | |
| | B. **RADS 3820** (Positioning II): Comprehensive Lab Final Exam | 100% of students will score 85 or higher | |
| 1.2 Students will develop assessment skills of a radiographer. | A. **ALHE 3840** (Advanced Patient Care): Overall Assessment Tests | 100% of students will score 80 or higher | |
| | B. **RADS 3820** (Positioning 2): Trauma lab scenario | 100% of students will score 77 or Higher. | |

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|---|
| N | 33 | 41 | 24 | 25 | 32 |
| Met | 33 | 41 | 24 | 24 | 32 |
| Mean | 4.77 | 4.56 | 5 | 3.96 | 4.25 |
| Range | 4.25-5 | 3.5-5 | 5 | 3-4 | 4-5 |
| % | 100 | 100 | 100 | 96 | 100 |

| | 2020 | 2019 | 2018 | 2017 | 2016 |
|---|---|---|---|---|---|
| N | | 31 | 33 | 43 | 26 |
| Met | | 13 | 15 | 14 | 21 |
| Mean | | 82.5 | 83.03 | 80.6 | 81.76 |
| Range | | 71-99 | 70-95 | 37-92 | 43-100 |
| % | | 42 | 45 | 32 | 81 |

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|---|
| N | 32 | 32 | 43 | 21 | 35 |
| Met | 32 | 30 | 30 | 17 | 30 |
| Mean | 97 | 95 | 88 | 90 | 92 |
| Range | 80-100 | 60-100 | 45-83 | 65-96 | 72-100 |
| % | 100 | 94 | 69 | 81 | 86 |

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|---|
| N | 31 | 33 | 43 | 26 | 36 |
| Met | 29 | 30 | 38 | 22 | 35 |
| Mean | 89.5 | 97 | 93 | 92 | 93 |
| Range | 63-100 | 77-100 | 75-100 | 82-100 | 81-100 |
| % | 94 | 91 | 88 | 91 | 95 |

# Assessment Cycle 2019-2020

**SLO: 1.1 Students will perform quality radiographic procedures.** Throughout the clinical and didactic, students will learn about the importance of performing quality radiographic procedures. Each student is required to pass the course in order to progress to the next semester. The target is to have 100% of students to score 3.5/5.0 on the clinical instructor evaluation for the first measure and to score an 85% 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: Clinical Instructor Evaluation of Student Q16: Quality of work and performance**

2019: Met—100% of students achieved a 3.5 or higher.
2018: Met—100% of students achieved a 3.5 or higher.
2017: Met—100% of students achieved a 3.5 or higher.
2016: Unmet—only 96% of students achieved 3.5 or higher.
2015: Met—100% of students achieved 3.5 or higher.

**Measure B: RADS 3820 (Positioning II): Comprehensive Lab Final Exam**

2019: Unmet—Only 42% of students achieved 85% or higher
2018: Unmet—Only 45% of students achieved 85% or higher.
2017: Unmet—only 32% of students achieved 85% or higher.
2016: Unmet—only 81% of students achieved 85% or higher.
2015: Data not available

**Measure A: RADS 4611: Clinical Instructor Evaluation of Student Q16: Quality of work and performance:** In 2019, the target was **met** indicating that all students were demonstrating a suitable quality of work and performance. 100% of students scored 3.5/5.0 on the clinical instructor evaluation of student performance. This measure is obtained from the evaluation of clinical students and quantifies the student's quality of work and performance in the clinical setting. This measure has been met for 4 of the past 5 years.

Based on the analysis of the 2018 results the faculty made the following changes in 2019 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, faculty created a discussion board post in Moodle. This post asked about clinical procedures and created 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 dialog and constructive criticism were also offered to help the student perform better in the clinical setting. Faculty reviewed submitted evaluations and any student scoring below a 4.0 on an evaluation will be called in for a counseling session regarding quality of work and performance.
As a result of these changes, in 2019, the target was met, 100% of students scored 3.5/5.0 on the clinical instructor on a 5-point Likert scale 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 2019, the target was **unmet**. The target is to have 100% of the students score 85% or higher on the comprehensive lab final exam. In 2019, only 42% of the students scored

an 85 or higher, specifying that 58% of the students did not successfully display the performance of quality radiographic procedures during the comprehensive lab final exam. This measure focuses 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 2018 assessment cycle results, the faculty made the following changes in 2019 to drive the cycle of improvement. Faculty implemented RadTech BootCamp as a learning resource. Students were required to purchase BootCamp and review the material posted, take the quizzes and exams for a course grade. Added additional "open lab" for practice sessions. Faculty created image critique videos and the videos will be posted in Moodle for the students to review. Equipment were added to the radiography lab classroom to allow for synchronous lab sessions between Shreveport and Alexandria. The test format was also changed, all of the radiographs, which were previously analog have been updated to digital images.

As a result of these changes, in 2019, the target was still unmet, 100% of students did not score 85% or higher on the comprehensive lab final exam. Only 42% of the students scored an 85% or higher. These changes had a direct impact on the student's ability to perform quality radiographic procedures.

**Decisions:** In 2019**,** the target was met for measure A but was unmet for measure B.

**Measure A**: Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 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. This discussion board will provide another mechanism for students 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. Review evaluation scores and counsel any student scoring below a 4.0 on quality of work and performance.

**Measure B:** Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 to drive the cycle of improvement;

1. Students purchase RadTech Bootcamp.
2. Additional "open lab" practice opportunities
3. Faculty will create image critique videos and the videos will be posted in Moodle for the students to review.
4. Equipment will be added to the radiography lab classroom to allow for synchronous lab sessions between Shreveport and Alexandria.
5. The test format was be changed, all of the radiographs, which were previously analog have been updated to digital images. This will allow for more objective grading.

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

# Assessment Cycle 2019-2020

**SLO: 1.2 Students will develop assessment skills of a radiographer.** Throughout the clinical and didactic, students will learn about the assessment skills needed for a radiographer. Each student is required to pass the course in order 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 to 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 assessment skills of a radiographer.**

**Measure A: ALHE 3840 (Advanced Patient Care): Comprehensive Final Exam**

2019: Met—100% of students achieved 80% or higher
2018: Unmet—only 94% of students achieved 85% or higher.
2017: Unmet—only 69% of students achieved 85% or higher.
2016: Unmet—only 81% of students achieved 85% or higher.
2015: Unmet—only 86% of students achieved 85% or higher.

**Measure B: RADS 3820 (Positioning 2): Trauma lab scenario**

2019: Unmet—only 94% of students achieved 77% or higher
2018: Unmet—only 91% of students achieved 85% or higher.
2017: Unmet—only 88% of students achieved 85% or higher.
2016: Unmet—only 91% of students achieved 85% or higher.
2015: Unmet—only 95% of students achieved 85% or higher.

**Measure A: ALHE 3840 (Advanced Patient Care): Comprehensive Final Exam:** In 2019, the target was **met**, 100% of students achieved an 80% or higher on the comprehensive final exam. This is an improvement over the 2018 AY In the 2018 AY when only 94% of the students scored an 85 or higher on the final exam.

Based on the analysis of the 2018 assessment cycle results, the faculty made the following changes in 2019 to drive the cycle of improvement: the open resource material used in the course was updated with the most current information and included links to multiple online resources, including video demonstrations and material specific to the radiologic sciences profession. Also, the measure was changed from one comprehensive final exam to an evaluation of multiple assessment exams. The exams covered each body system separately. Also, the discussion forums were focused on assessment.

As a result of these changes, in 2019, the target was met, 100% of students scored 85% or higher on the comprehensive final exam in ALHE 3840. These changes had a direct impact on the student's ability to develop assessment skills of a radiographer. These changes had a direct impact on the student's ability to perform patient assessment.

# Assessment Cycle 2019-2020

**Measure B: RADS 3820 (Positioning II): Trauma Lab Scenario:** In 2019, the target was **unmet**. The target is to have 100% of the students score 85% or higher on the trauma lab scenario exam. In 2019, 94% of the students scored a 77 or higher. 2 students did not meet the benchmark. One student was extremely anxious during exam, therefore, he did not perform well. The other student was not prepared for the exam. She made multiple errors and failed to score above a 77%. This measure focuses 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 2018 assessment cycle results, the faculty made the following changes in 2019 to drive the cycle of improvement. Faculty implemented supplemental videos will added to the course to demonstrate proper trauma assessment, and the videos were posted in Moodle. Students were required to view the videos prior to the trauma lab exam. Faculty recorded the trauma practice labs so students can evaluate their assessment skills. Faculty reviewed and critiqued the videos with the students. Added additional "open lab" for practice sessions.

As a result of these changes, in 2019, the target was still unmet, 100% of students did not scored 77% or higher on the trauma lab scenario exam. These changes had a direct impact on the student's ability to produce quality work and performance.

**Decisions:**
In 2019**,** the target was met for measure A but was unmet for measure B.

**Measure A**: Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 to drive the cycle of improvement:

1. The open resource material in the course will be updated with the most current information and will include links to multiple online resources, including video demonstrations, and material specific to the radiologic science profession.
2. Measure to be changed from one assessment to multiple assignments to appraise the student's ability to assess patients to include exams and discussion board postings.
3. Discussion forums revised to focus on patient assessment.

**Measure B:** Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 to drive the cycle of improvement:

1. Supplemental videos added to course that demonstrate proper trauma assessment. These videos will be posted in Moodle. Students will be required to view the videos prior to the trauma lab exam.
2. Faculty will record the trauma practice labs so students can evaluate their assessment skills. Faculty will review and critique the videos with the students.
3. Added additional "open lab" for practice sessions

# Assessment Cycle 2019-2020

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

**Goal 2: Students will demonstrate CRITICAL THINKING skills.**

| Student Learning Outcomes | Tool | Benchmark | Results |
|---|---|---|---|
| 2.1 Students will evaluate a clinical situation and perform accordingly using critical thinking skills. | A. **RADS 3820** (Positioning 2): Trauma lab scenario | 100% of students will score 77 or higher | |
| | B. **RADS 4510** (Professional Imaging Practices): Clinical Scenario Assignment | 100% of students will score 85 or higher | |
| 2.2 Students will propose a plan to respond to imaging department scenarios. | A**. ALHE 4610** (Healthcare Quality): QC project | 100% of students will score 80 or higher | |
| | B. **ALHE 4630** (Healthcare Organization and Management): Mgmt. Case Study Project | 100% of students will score 80 or higher | |

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|---|
| N | 31 | 33 | 43 | 26 | 36 |
| Met | 29 | 30 | 38 | 22 | 35 |
| Mean | 89.5 | 97 | 93 | 92 | 93 |
| Range | 70-99 | 77-100 | 75-100 | 82-100 | 81-100 |
| % | 94 | 91 | 88 | 91 | 95 |

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|---|
| N | 33 | 41 | 24 | 33 | 31 |
| Mean | 100 | 99.8 | 100 | 98 | 96 |
| Range | 100 | 95-100 | 100 | 95-100 | 80-100 |
| % | 100 | 100 | 100 | 100 | 97 |

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|---|
| N | 35 | 41 | 24 | 32 | 32 |
| Met | 34 | 33 | 23 | 23 | 28 |
| Mean | 90.25 | 88.7 | 93.4 | 88.8 | 93.5 |
| Range | 73-100 | 0-100 | 51-100 | 0-100 | 78-100 |
| % | 97 | 80 | 96 | 72 | 88 |

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|---|
| N | 41 | 25 | 32 | 31 | 24 |
| Met | 100 | 25 | 31 | 31 | 24 |
| Mean | 92.9 | 88 | 95 | 93 | 97 |
| Range | 85-100 | 85-100 | 42-100 | 88-100 | 93-100 |
| % | 100 | 100 | 97 | 100 | 100 |

# Assessment Cycle 2019-2020

**SLO: 2.1 Students will evaluate a clinical situation and perform accordingly using critical thinking skills.** Throughout the clinical and didactic, 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 to score a 77% or higher on the trauma lab simulation exam and an 85% or higher on the clinical scenario assignment.

**Findings:** Target was unmet for Measure A and met 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**

2019: Unmet—only 94% of students achieved an 77% or higher
2018: Unmet-- only 91% of students achieved an 85% or higher.
2017: Unmet—only 88% of students achieved 85% or higher.
2016: Unmet—only 91% of students achieved 85% or higher.
2015: Unmet—only 95% of students achieved 85% or higher.

**Measure B: RADS 4510 (Professional Imaging Practices): Clinical Scenario Assignment**

2019: Met—100% of students achieved 85% or higher.
2018: Met—100% of students achieved 85% or higher.
2017: Met—100% of students achieved 85% or higher.
2016: Met—100% of students achieved 85% or higher.
2015: Unmet—only 97% of students achieved 85% or higher.

**Measure A: RADS 3820 (Positioning II): Trauma lab scenario:** In 2019, the target was **unmet**. The target is to have 100% of the students score 85% or higher on the trauma lab scenario exam. In 2019, 94% of the students scored a 77 or higher on the trauma lab scenario. 2 students did not meet the benchmark. One student was extremely anxious during exam, therefore, he did not perform well. The other student was not prepared for the exam. She made multiple errors and failed to score above a 77%. This measure focuses 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 2018 assessment cycle results, the faculty made the following changes in 2019 to drive the cycle of improvement. Faculty implemented supplemental videos to the course to demonstrate proper trauma assessment. Students were required to view the videos prior to the trauma lab exam. Faculty recorded the trauma practice labs so students can evaluate their assessment skills. Faculty reviewed and critiqued the videos with the students. Added additional "open lab" for practice sessions.

As a result of these changes, in 2019, the target was still unmet, 100% of students did not score 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.

# Assessment Cycle 2019-2020

**Measure B: RADS 4510 (Professional Imaging Practices): Clinical Scenario Assignment:** In 2019, the target was met, 100% of students met the benchmark of 85% or higher. This measure has been met since 2016. Based on the investigation of the 2019 assessment cycle results, and regardless of the fact that this measure was met, recognizing the importance of critical thinking in radiologic sciences, faculty decided to revise the clinical scenarios to include more variety to continue the pattern of continuous improvement.

Based on the analysis of the 2018 assessment cycle results, the faculty made the following changes in 2019 to drive the cycle of improvement. Faculty reviewed and revised the guidelines for the clinical scenario assignment. A discussion board forum was added to allow students to post questions related to the assignment. And, a short video was created to describe the expectations of the assignment.

As a result of these changes, in 2019, the target was met, 100% of students scored 85% or higher on the clinical scenario assignment. These changes had a direct impact on the student's ability to produce quality work and performance.

**Decisions:**
In 2019**,** the target was unmet for measure A and was met for measure B.

**Measure A:** Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 to drive the cycle of improvement:

1. Supplemental videos added to course that demonstrate proper trauma assessment. These videos will be posted in Moodle. Students will be required to view videos prior to the exam.
2. Faculty will record the trauma practice labs so students can evaluate their assessment skills. Faculty will review and critique the videos with the students.
3. Added additional "open lab" for practice sessions.

**Measure B**: Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 to drive the cycle of improvement:

1. Review and revise the guidelines of the clinical scenario assignment.
2. Provide a discussion board in a forum to allow students to post questions related to the assignment.
3. A short video was created to describe the expectations of the assignment.

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.

# Assessment Cycle 2019-2020

**SLO: 2.2 Students will propose a plan to respond to imaging department scenarios.** Throughout the clinical and didactic, 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 to score a 80% or higher on the clinical scenario assignment and an 80% or higher on the case study project.

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

**Analysis: SLO: 2.2 Students will propose a plan to respond to imaging department scenarios.**

**Measure A: ALHE 4610 (Healthcare Quality): QC project**

2019: Unmet—only 97% of students achieved 80% or higher
2018: Unmet—only 80% of students achieved 80% or higher.
2017: Unmet—only 96% of students achieved 80% or higher.
2016: Unmet—only 72% of students achieved 85% or higher.
2015: Unmet—only 88% of students achieved 85% or higher.

**Measure B: ALHE 4630 (Healthcare Organization and Management): Mgmt. Case Study Project**

2019: Met—100% of students achieved 80% or higher.
2018: Met—100% of students achieved 85% or higher.
2017: Unmet—Only 97% of students achieved 85% or higher.
2016: Met: 100% of students achieved 85% or higher.
2015: Met—100% of students achieved 85% or higher.

**Measure A: ALHE 4610 (Healthcare Quality): QC Project:** In 2019, the target was **unmet**. The target is to have 100% of the students score 80% or higher on the quality control project. In 2019, 97% of the students scored an 80% or higher. One student did not meet the benchmark.

Based on the analysis of the 2018 assessment cycle results, the faculty made the following changes in 2019 to drive the cycle of improvement. Faculty reassessed the guidelines for this assignment. Writing examples were also added to the guidelines. A video was created to explain the assignment in detail. Additionally, faculty posted recurrent announcements and reminders in the course as to the due dates of assignments and a forum was added for student's questions regarding assignments. The course, and all assignments, were adjusted to coincide with the changes made in the profession.

As a result of these changes, in 2019, the target was still unmet, 100% of students did not score 80% or higher on the quality control project.

# Assessment Cycle 2019-2020

**Measure B: ALHE 4630 (Healthcare Organization and Management): Case Study Project:** In 2019, the target was **met.** The target is to have 100% of students achieve an 80% or higher on the case student project. This measure asks students to generate a plan and respond to a simulated healthcare management scenario in an imaging department. This measure helps to assess the overall goal of producing students with critical thinking abilities.

Based on the analysis of the 2018 assessment cycle results, the faculty made the following changes in 2019 to drive the cycle of improvement. Faculty made frequent announcements and reminders in the class as to the due dates of assignments and created a discussion forum for questions related to assignments. The guidelines for the assignment were reviewed and revised. A short video was created to explain the assignment in detail. The number of possible case studies was increased to offer more variety to students.

As a result of these changes, in 2019, the target was met, 100% of students scored 80% or higher on the case study project.

**Decisions:** In 2019**,** the target was unmet for measure A and was met for measure B.

**Measure A:** Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 to drive the cycle of improvement:

1. **Revise and improve the guidelines for the assignment.**
2. **Add examples and clearer explanations of expectations for the assignment.**
3. **Create a video to explain the assignment in detail.**
4. **Faculty posted recurrent announcements and reminders in the course as to the due dates of assignments.**
5. **A forum was added for student's questions regarding assignments**

**Measure B**: Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 to drive the cycle of improvement:

1. Frequent announcements and reminders posted in the course.
2. Provide a discussion board forum to allow students to post questions related to the assignment.
3. Review and revise the guidelines of the case study assignment.
4. Create a video to explain the assignment in detail.
5. Increase the number of case studies offered to students.

These changes will improve the students' ability to propose a plan to respond to imaging department scenarios.

# Assessment Cycle 2019-2020

**Goal 3: Students will demonstrate an understanding of PROFESSIONALISM.**

| Student Learning Outcomes | Tool | Benchmark | Results/Findings |
|---|---|---|---|
| 3.1 Students will demonstrate service to the profession and the community. | A. **ALHE 3840** (Advanced Pt. Care): Service-Learning Project | 100% of students will score 80 or higher | |
| | B. **RADS 3320** (Patient Care): Reflection of Service-Learning Event | 100% of students will score 85 or higher | |
| 3.2 Students will integrate adherence to professional behaviors. | A. **RADS 4611** (Clinic 5): Clinical Instructor Evaluation of Student Q2: Professional Behavior | 100% of students will score an average of at least 4/5. | |
| | B. **RADS 3911** (Clinic 3): Clinical Instructor Evaluation of Student Q2: Professional Behavior | 100% of students will score an average of at least 4/5. | |

**A. ALHE 3840 (Advanced Pt. Care): Service-Learning Project**

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|---|
| N | 32 | 32 | 32 | 21 | 35 |
| Met | 32 | 29 | 30 | 100 | 27 |
| Mean | 97 | 98 | 99 | 99 | 96 |
| Range | 80-100 | 80-100 | 80-100 | 90-100 | 0-100 |
| % | 100 | 91 | 94 | 100 | 77 |

**B. RADS 3320 (Patient Care): Reflection of Service-Learning Event**

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|---|
| N | 33 | New Measure for 2019 | | | |
| Met | 33 | | | | |
| Mean | 99.0 | | | | |
| Range | 95-100 | | | | |
| % | 100 | | | | |

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

| | 2020 | 2019 | 2018 | 2017 | 2016 |
|---|---|---|---|---|---|
| N | | 33 | 41 | 24 | 33 |
| Met | | 29 | 40 | 24 | 33 |
| Mean | | 4.83 | 4.71 | 4.79 | 4.74 |
| Range | | 3.6-5 | 3-5 | 4-5 | 4.14-5.0 |
| % | | 88 | 98 | 100 | 100 |

**B. RADS 3911 (Clinic 3): Clinical Instructor Evaluation of Student Q2: Professional Behavior**

| | 2020 | 2019 | 2018 | 2017 | 2016 |
|---|---|---|---|---|---|
| N | | 30 | 41 | 32 | 24 |
| Met | | 30 | 40 | 32 | 24 |
| Mean | | 4.68 | 4.88 | 5 | 5 |
| Range | | 4-5 | 3-5 | 5 | 5 |
| % | | 100 | 97 | 100 | 100 |

# Assessment Cycle 2019-2020

**SLO: 3.1 Students will demonstrate service to the profession and the community.** Throughout the clinical and didactic, 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. The target is to have 100% of students to score a 80% or higher on the service learning project and an 80% or higher on the reflection of service-learning event.

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

**Analysis: Students will demonstrate service to the profession and the community.**

**Measure A: ALHE 3840 (Advanced Pt. Care): Service-Learning Project**

2019: Met--100% of students achieved 80 or higher
2018: Unmet—only 91% of students achieved 85 or higher.
2017: Unmet—only 94% of students achieved 85 or higher.
2016: Met—100% of students achieved 85 or higher.
2015: Unmet—only 77% of students achieved 85 or higher.

**Measure B: 3320 (Patient Care): Reflection of Service-Learning Event**

2019: Met--100% of students achieved 85 or higher.
2018: Data not available.
2017: Data not available.
2016: Data not available.
2015: Data not available.

**Measure A: ALHE 3840 (Advanced Pt. Care): Service-Learning Project:** In the 2019, the target was met, 100% of students scored 80% or higher on the service-learning project. A service-learning project is used to evaluate this SLO. The service-learning project is performed during the ALHE 3840 Advanced Patient Care class. For the project, students volunteer their time at a local community facility. Once students have completed the required number of hours, they describe their experience through a narrated PowerPoint and a written paper.

Based on the analysis of the 2018 results the faculty made the following changes in 2019 to drive the cycle of improvement. Changes included revising the open resources used in the course to reflect current practice. A video was created to explain the assignment. The guidelines for the assignment were revised to include clear, concise instructions.

As a result of these changes, in 2019, the target was met. 100% of students scored 80% or higher on the assignment. These changes had a direct impact on the student's ability to demonstrate service to the profession and community.

**Measure B: RADS 3320 (Patient Care): Reflection of Service Learning:** In 2019, the target was met. The second measure utilized to evaluate the students' service to the profession and community came via their reflection of a service-learning event. Students were directed to participate in community service at a local facility or organization. After the service has been completed, students reflected on the experience in a written paper. Because is it too early to confirm a trend in the findings, faculty will continue to evaluate service to the community utilizing these methods.

# Assessment Cycle 2019-2020

As a result of these changes, in 2019, the target was met. 100% of students scored 80% or higher on the assignment. These changes had a direct impact on the student's ability to demonstrate service to the profession and community.

**Decisions:** In 2019**,** the target was met for measure A and was met for measure B.

**Measure A:** Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 to drive the cycle of improvement:

1. Discontinue assignment due to restrictions of visiting extended care facilities.
2. Create guidelines for new assignment, charitable organization presentation.
3. Create a video to explain the assignment in detail.

**Measure B**: Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 to drive the cycle of improvement:

1. Review and revise the guidelines of the assignment.
2. Create a video to explain the assignment in detail.
3. The new assignment will include a "pre and "post" reflection assignment.

These changes will improve the students' ability to propose a plan to demonstrate service to the profession and community and thereby continuing to push the cycle of improvement forward.

**SLO: 3.2 Students will integrate adherence to professional behaviors.**

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

**Analysis Students will integrate adherence to professional behaviors.**

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

2019: Unmet—88% of students achieved 4.0 or higher.
2018: Unmet—98% of students achieved 4.0 or higher

**Measure B: RADS 3911 (Clinic 3): Clinical Instructor Evaluation of Student Q2: Professional Behavior**

2019: Met—100% of students achieved 4.0 or higher.
2018: Unmet—97% of students achieved 4.0 or higher

# Assessment Cycle 2019-2020

2017: Met—100% of students achieved 4.0 or higher.
2016: Met—100% of students achieved 4.0 or higher.
2015: Data not available.

2017: Met—100% of students achieved 4.0 or higher.
2016: Met—100% of students achieved 4.0 or higher.
2015: Data not available.

**Measure A: Students will integrate adherence to professional behaviors (RADS 4611).** In the 2019, the target was unmet, 100% of students did not score 4.0/5.0 on the clinical instructor evaluation of student professional behavior. 88% of the students met the benchmark. 29 of 32 students met the benchmark. The students that did not meet the benchmark were counseled on the importance of professional behaviors.

Based on the analysis of the 2018 results the faculty made the following changes in 2019 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, faculty created a discussion board post in Moodle. This post asked about clinical procedures and create 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 dialog and constructive criticism was offered to help the student perform better in the clinical setting. Faculty reviewed submitted evaluations and any student scoring below a 4.0 on an evaluation was called in for a counseling session regarding quality of work and performance. Lastly, faculty continually accentuated the importance of the 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.

As a result of these changes, in 2019, the target was unmet. 100% of students did not score 4.0 or higher on question 2 of the clinical instructor evaluation of student professional behavior. These changes had a direct impact on the student's ability to adhere to professional behaviors, however, thereby continuing to push the cycle of improvement forward.

**Measure B: Students will integrate adherence to professional behaviors (RADS 3911).** In the 2019, the target was met, 100% of students score 4.0/5.0 on the clinical instructor evaluation of student professional behavior. 88% of the students met the benchmark. 29 of 32 students met the benchmark. The students that did not meet the benchmark were counseled on the importance of professional behaviors.

Based on the analysis of the 2018 results the faculty made the following changes in 2019 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, faculty created a discussion board post in Moodle. This post asked about clinical procedures and create 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 dialog and constructive criticism was offered to help the student perform better in the clinical setting. Faculty will review submitted evaluations and any student scoring below a 4.0 on an evaluation will be called in for a counseling session regarding quality of work and performance. Lastly, faculty continually accentuated the importance of the 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.

# Assessment Cycle 2019-2020

As a result of these changes, in 2019, the target was met. 100% of students scored 4.0 or higher on question 2 of the clinical instructor evaluation of student 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.

**Decisions:** In 2019**,** the target was unmet for measure A and was met for measure B.

**Measure A**: Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 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. This discussion board will provide another mechanism for students 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. Review evaluation scores and counsel any student scoring below a 4.0 on quality of work and performance.
4. Accentuate the importance of the 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 Instructor Evaluation of Student Q2: Professional Behavior.** Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 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. This discussion board will provide another mechanism for students 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. Review evaluation scores and counsel any student scoring below a 4.0 on quality of work and performance.
4. Accentuate the importance of the 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 propose a plan to demonstrate service to the profession and community and thereby continuing to push the cycle of improvement forward.

# Assessment Cycle 2019-2020

**Goal 4: Students will demonstrate the ability to COMMUNICATE effectively.**

| Student Learning Outcomes | Tool | Benchmark | Results/Findings |
|---|---|---|---|
| 4.1 Develop oral communication skills. | A. **RADS 4611** (Clinic 5): Clinical Instructor Evaluation of Student Q4: Communication with patients | 100% of students score an average of at least 4/5. | |
| | B. **RADS 4611** (Clinic 5): Clinical Instructor Evaluation of Student Q5: Communication with technologists | 100% of students will score an average of at least 4/5. | |
| 4.2 Develop written communication skills. | A. **RADS 4510** (Professional Imaging Practices): Senior Research paper | 100% of students will score 85 or higher. | |
| | B. **RADS 4530** (Radiation Protection): Brochure Assignment | 100% of students will score 85 or higher. | |

| | 2020 | 2019 | 2018 | 2017 | 2016 |
|---|---|---|---|---|---|
| N | | 33 | 41 | 24 | 33 |
| Met | | 33 | 39 | 23 | 32 |
| Mean | | 4.85 | 4.64 | 4.62 | 4.93 |
| Range | | 4-5 | 2-5 | 3.2-5 | 3.86-5 |
| % | | 100 | 95 | 96 | 97 |

| | 2020 | 2019 | 2018 | 2017 | 2016 |
|---|---|---|---|---|---|
| N | | 33 | 41 | 24 | 33 |
| Met | | 33 | 41 | 24 | 33 |
| Mean | | 4.79 | 4.56 | 4.66 | 4.86 |
| Range | | 4.4-5.0 | 4-5 | 4-5 | 4-5 |
| % | | 100 | 100 | 100 | 100 |

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|---|
| N | 33 | 41 | 24 | 33 | 30 |
| Met | 22 | 38 | 17 | 25 | 26 |
| Mean | 88 | 93 | 90 | 91 | 90 |
| Range | 77-100 | 83-99 | 73-100 | 38-100 | 80-100 |
| % | 66 | 95 | 71 | 88 | 85 |

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|---|---|---|---|---|---|
| N | 41 | 42 | 24 | 35 | 24 |
| Met | 40 | 42 | 23 | 34 | 24 |
| Mean | 93.7 | 88 | 97 | 98 | 95 |
| Range | 80-100 | 85-100 | 80-100 | 80-100 | 90-100 |
| % | 98 | 100 | 96 | 97 | 100 |

# Assessment Cycle 2019-2020

**SLO: 4.1 Students will develop oral communication skills.** Throughout the clinical and didactic, students will learn to effectively communicate orally with patients and fellow radiologic technologists. Each student is required to pass the course in order to progress to the next semester. The target is to have 100% of students to score a 4.0 or higher on questions 4 and 5 of the clinical instructor evaluation of student performance.

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

**Analysis: Students will develop oral communication skills.**

**Measure A: RADS 4611 (Clinic 5): Clinical Instructor Evaluation of Student Q4: Communication with patients**

2019: Met—100% of students achieved 4.0 or higher.
2018: Unmet—only 95% of students achieved 4.0 or higher.
2017: Unmet—only 96% of students achieved 4.0 or higher.
2016: Unmet—only 97% of students achieved 4.0 or higher.
2015: Data not available.

**Measure B: RADS 4611 (Clinic 5): Clinical Instructor Evaluation of Student Q5: Communication with technologists**

2019: Met—100% of students achieved 4.0 or higher.
2018: Met—100% of students achieved 4.0 or higher.
2017: Met—100% of students achieved 4.0 or higher.
2016: Met—100% of students achieved 4.0 or higher.
2015: Data not available

**Measure A: RADS 4611 (Clinic 5): Clinical Instructor Evaluation of Student Q4: Communication with patients:** In the 2019, the target was met, 100% of students score 4.0/5.0 on the clinical instructor evaluation of student's oral communication skills with patients. 100% of the students met the benchmark.

Based on the analysis of the 2018 results the faculty made the following changes in 2019 to drive the cycle of improvement. Faculty added an online resource regarding the importance of oral communication in the clinical setting. Faculty reviewed submitted evaluations and any student scoring below a 4.0 on an evaluation will be called in for a counseling session regarding quality of work and performance. Lastly, faculty continually accentuated the importance of the 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.

As a result of these changes, in 2019, the target was met. 100% of students scored 4.0 or higher on question 4 of the clinical instructor evaluation of student's 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.

# Assessment Cycle 2019-2020

**Measure B: RADS 4611 (Clinic 5): Clinical Instructor Evaluation of Student Q5: Communication with technologists:** In the 2019, the target was unmet, 100% of students did not score 4.0/5.0 on the clinical instructor evaluation of student professional behavior. 88% of the students met the benchmark. 29 of 32 students met the benchmark. The students that did not meet the benchmark were counseled on the importance of professional behaviors.

Based on the analysis of the 2018 results the faculty made the following changes in 2019 to drive the cycle of improvement. Faculty added an online resource regarding the importance of oral communication in the clinical setting. Faculty reviewed submitted evaluations and any student scoring below a 4.0 on an evaluation will be called in for a counseling session regarding quality of work and performance. Lastly, faculty continually accentuated the importance of the 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.

As a result of these changes, in 2019, the target was met. 100% of students scored 4.0 or higher on question 5 of the clinical instructor evaluation of student student's oral communication skills with technologists. 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.

**Decisions:** In 2019**,** the target was unmet for measure A and was met for measure B.

**Measure A**: Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 to drive the cycle of improvement:

1. Add an online resource on the importance of oral communication.
2. Review evaluation scores and counsel any student scoring below a 4.0 on oral communication skills with patients. .
3. Accentuate the importance of the 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 2019 assessment cycle results, the faculty will implement the following changes in 2020 to drive the cycle of improvement:

1. Add an online resource on the importance of oral communication.
2. Review evaluation scores and counsel any student scoring below a 4.0 on quality of work and performance.
3. Accentuate the importance of the 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, students will develop written communication 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 to score an 85% or higher on the senior research paper and to score 85% or higher on the brochure assignment in radiation protection.

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

**Analysis**

**Measure A: RADS 4510 (Professional Imaging Practices): Senior paper**

2019: Unmet—only 66% of students achieved 85 or higher.
2018: Unmet—only 95% of students achieved 85 or higher.
2017: Unmet—only 71% of students achieved 85 or higher.
2016: Unmet—only 88% of students achieved 85 or higher.
2015: Unmet—only 85% of students achieved 85 or higher.

**Measure B: RADS 4530 (Radiation Protection): Brochure Assignment**

2019: Unmet—only 98% of students achieved 85 or higher.
2018: Met—100% of students achieved 85 or higher.
2017: Unmet—only 96% of students achieved 85 or higher.
2016: Unmet—only 97% of students achieved 85 or higher.
2015: Met—100% of students achieved 85 or higher.

**Measure A: Senior Research Paper:** In the 2019, the target was unmet, 100% of students did not score 85% or higher on the senior research paper. Only 66% of the students met the benchmark.

Based on the analysis of the 2018 results the faculty made the following changes in 2019 to drive the cycle of improvement. Faculty continued the proactive approach to improve student engagement in improving their writing skills. Additional electronic APA format resources were added to the course. These additional resources included OWL (online writing lab) and Turnitin. Faculty revised research paper guidelines to aid students in their writing. A peer-review process, submission of papers through Turnitin, became mandatory. ALHE 4520 (Research Methods) course in the curriculum were revised. Lastly, students were advised to enroll in the special section of ENGL 2110, which incorporates APA format, instead of MLA, for allied health and nursing students will continue. This practice should show results in coming years.

Despite these changes, in 2019, the target was unmet. 66% of students did not score 85% or higher on the senior research paper. 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: RADS 4530 (Radiation Protection): Brochure Assignment:** In the 2019, the target was unmet, 98% of students scored an 85% or higher on the brochure assignment. One student did not meet the benchmark. The assignment for this student demonstrated a poor effort.

# Assessment Cycle 2019-2020

Based on the analysis of the 2018 results the faculty made the following changes in 2019 to drive the cycle of improvement. Faculty continued the proactive approach to improve student engagement in improving their writing skills. Faculty provided examples of professional brochures to students. Faculty reviewed and revised the guidelines for the assignment.

As a result of these changes, in 2019, the target was still unmet. 98% of students score 85% or higher on the brochure assignment. These changes had a direct impact on the student's ability to adhere to professional behaviors, however, thereby continuing to push the cycle of improvement forward.

**Decisions:** In 2019**,** the target was unmet for measure A and was unmet for measure B.

**Measure A:** Based on the analysis of the 2019 assessment cycle results, the faculty will implement the following changes in 2020 to drive the cycle of improvement:

1. Faculty will continue the proactive approach to improve student engagement in improving their writing skills.
2. Faculty will provide additional electronic APA resources including OWL and Turnitin.
3. Peer-review process will be mandatory for all student paper submissions.
4. Revision of ALHE 4520 (Research Methods)
5. 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 2019 assessment cycle results, the faculty will implement the following changes in 2020 to drive the cycle of improvement:

1. Faculty will continue the proactive approach to improve student engagement in improving their writing skills.
2. Faculty will provide examples of brochures.
3. Review and revise the guidelines for the assignment.

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.

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

Continuous improvement is an emphasis for the radiologic sciences program. The focus of 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 a radiologic technologist. Many of these changes were initiated from the assessment process. Below is the summary of changes that have occurred during the 2019 AY related to the student learning outcomes for the BSRS program.

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

# Assessment Cycle 2019-2020

**1.1 Summary:** It is imperative that radiologic science students are able to perform radiographic procedures in a quality manner. This SLO focuses on this skill through two methods, one in the classroom and the other in the clinical environment. While there was an improvement in one of the measures for this outcome, signifying that students are developing in their skills to complete radiographic procedures with quality, it is vital that both measures are constantly met. To tackle that goal, the following activities were implemented in the 2019 AC:

**Measure A**: Based on the analysis of the 2018 assessment cycle results, the faculty will implement the following changes in 2019 were used to drive the cycle of improvement;

1. Frequent interaction between faculty members and students was to be utilized. This interaction reinforced to the student the importance of producing quality work.
2. Created a discussion board post in Moodle. This post asked about clinical procedures and created a dialog regarding performing quality procedures. This discussion board provided another mechanism for students to discuss their work and performance with both faculty and peers. Positive dialog and constructive criticism were offered to help the student perform better in the clinical setting.
3. Reviewed evaluation scores and counsel any student scoring below a 4.0 on quality of work and performance.

**Measure B:** Based on the analysis of the 2018 assessment cycle results, the faculty implemented the following changes in 2019 to drive the cycle of improvement;

1. Students purchasd RadTech Bootcamp.
2. Additional “open lab” practice opportunities
3. Faculty created multiple image critique videos and the videos were posted in Moodle for the students to review.
4. Equipment was added to the radiography lab classroom to allow for synchronous lab sessions between Shreveport and Alexandria.
5. The test format was changed, all of the radiographs, which were previously analog have been updated to digital images. This will allow for more objective grading.

**1.2 Summary**: For students to become clinically competent radiologic technologists, it is imperative that they develop patient assessment skills. This SLO assesses this occurrence using two measures. One of the measures were met for 2018 AC while the other was not. Therefore, a series of actions took place prior to AC 2019 to ensure that students develop the essential assessment skills. These actions included:

**Measure A**: Based on the analysis of the 2018 assessment cycle results, the faculty will implement the following changes in 2019 to drive the cycle of improvement:

1. The open resource material in the course was updated with the most current information and includes links to multiple online resources, including video demonstrations, and material specific to the radiologic science profession.
2. Measures were changed from one assessment to multiple assignments to appraise the student’s ability to assess patients which includes exams and discussion board postings.
3. Discussion forums were revised to focus on patient assessment.

# Assessment Cycle 2019-2020

**Measure B:** Based on the analysis of the 2018 assessment cycle results, the faculty implemented the following changes in 2019 to drive the cycle of improvement:

1. Supplemental videos were added to course that demonstrate proper trauma assessment. These videos were posted in Moodle. Students are required to view the videos prior to the trauma lab exam.
2. Faculty recorded the trauma practice labs so students can evaluate their assessment skills. Faculty will review and critique the videos with the students.
3. Added additional “open lab” for practice sessions were added.

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

Regarding students’ ability to think critically, there was indication that the bulk of students do have critical thinking skills. Despite the inspiring results obtained from the measures used to evaluate these outcomes, there are additional strategies that were adopted to further refine these needed skills.

**2.1 Summary**

**Measure A:** Based on the analysis of the 2018 assessment cycle results, the faculty will implement the following changes in 2019 to drive the cycle of improvement:

1. Supplemental videos were added to course that demonstrate proper trauma assessment. These videos were posted in Moodle. Students are required to view videos prior to the exam.
2. Faculty recorded the trauma practice labs so students can evaluate their assessment skills. Faculty reviewed and critiqued the videos with the students.
3. Added additional “open lab” for practice sessions were added.

**Measure B**: Based on the analysis of the 2018 assessment cycle results, the faculty implemented the following changes in 2019 to drive the cycle of improvement:

1. Reviewed and revised the guidelines of the clinical scenario assignment.
2. Provided a discussion board forum which allowed students to post questions related to the assignment.
3. A short video was created to describe the expectations of the assignment.

**2.2 Summary**

**Measure A:** Based on the analysis of the 2018 assessment cycle results, the faculty implemented the following changes in 2019 to drive the cycle of improvement:

1. Revised and improved the guidelines for the assignment.
2. Added examples and clearer explanations of expectations for the assignment.
3. Created a video to explain the assignment in detail.
4. Faculty posted recurrent announcements and reminders in the course as to the due dates of assignments.
5. A forum was added for student’s questions regarding assignments

# Assessment Cycle 2019-2020

**Measure B**: Based on the analysis of the 2018 assessment cycle results, the faculty implemented the following changes in 2019 to drive the cycle of improvement:

1. Frequent announcements and reminders were posted in the course.
2. Provided a discussion board forum to allow students to post questions related to the assignment.
3. Reviewed and revised the guidelines of the case study assignment.
4. Created a video to explain the assignment in detail.
5. Increased the number of case studies offered to students.

**Summary of Goal 3: Students will demonstrate an understanding of PROFESSIONALISM.**

Regarding students' displaying service to the profession and the community, based on the analysis of the 2019 assessment cycle results, there was indication that most students did demonstrate service to the profession and the community. Findings demonstrated an increase for the measure utilized to evaluate this SLO and a met benchmark for the new measure. However, there continues to be room for improvement. The following strategies were applied:

### 3.1 Summary

**Measure A:** Based on the analysis of the 2018 assessment cycle results, the faculty implemented the following changes in 2019 to drive the cycle of improvement:

1. Discontinued assignment due to restrictions of visiting extended care facilities.
2. Created guidelines for new assignment, charitable organization presentation.
3. Created a video to explain the assignment in detail.

**Measure B**: Based on the analysis of the 2018 assessment cycle results, the faculty implemented the following changes in 2019 to drive the cycle of improvement:

1. Reviewed and revised the guidelines of the assignment.
2. Created a video to explain the assignment in detail.
3. The new assignment includes a "pre and "post" reflection assignment.

### 3.2 Summary

**Measure A**: Based on the analysis of the 2018 assessment cycle results, the faculty implemented the following changes in 2019 to drive the cycle of improvement;

1. Frequent interaction between faculty members and students continued to be utilized. This interaction reinforced the importance of producing quality work.
2. Created a discussion board post in Moodle. This post asked about clinical procedures and created dialog regarding performing quality procedures. This discussion board provided another mechanism for students to discuss their work and performance with both faculty and peers. Positive dialog and constructive criticism was offered to help the student perform better in the clinical setting.
3. Reviewed evaluation scores and counseled any student scoring below a 4.0 on quality of work and performance.

4. Accentuated the importance of the 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 Instructor Evaluation of Student Q2: Professional Behavior.** Based on the analysis of the 2018 assessment cycle results, the faculty implemented the following changes in 2019 to drive the cycle of improvement;

1. Frequent interaction between faculty members and students continued to be utilized. This interaction reinforced to the student the importance of producing quality work.
2. Created a discussion board post in Moodle. This post asks about clinical procedures and created dialog regarding performing quality procedures. This discussion board provided another mechanism for students to discuss their work and performance with both faculty and peers. Positive dialog and constructive criticism were offered to help the student perform better in the clinical setting.
3. Reviewed evaluation scores and counseled any student scoring below a 4.0 on quality of work and performance.
4. Accentuated the importance of the 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.

**Summary: Goal 4: Students will demonstrate the ability to communicate effectively.**
Effective communication is essential in all allied health professions. Oral and written communication are both methods to evaluate the communication skills of an individual. Goal 4 assesses students' ability to communicate effectively and utilizes two SLOs to evaluate the goal. The events used to evaluate the SLO comprises communication with patients and technologists—two abilities that are indispensable in any clinical setting.

**4.1 Summary:**
**Measure A**: Based on the analysis of the 2018 assessment cycle results, the faculty implemented the following changes in 2019 to drive the cycle of improvement:

1. Added an online resource on the importance of oral communication.
2. Reviewed evaluation scores and counseled any student scoring below a 4.0 on oral communication skills with patients.
3. Accentuated the importance of the 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 2018 assessment cycle results, the faculty implemented the following changes in 2019 to drive the cycle of improvement:

1. Added an online resource on the importance of oral communication.
2. Reviewed evaluation scores and counseled any student scoring below a 4.0 on quality of work and performance.
3. Accentuated the importance of the 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.

**4.2 Summary:**

# Assessment Cycle 2019-2020

**Measure A:** Based on the analysis of the 2018 assessment cycle results, the faculty implemented the following changes in 2019 to drive the cycle of improvement:

1. Faculty continued the proactive approach to improve student engagement in improving their writing skills.
2. Faculty provided additional electronic APA resources including OWL and Turnitin.
3. Peer-review process was mandatory for all student paper submissions.
4. Revised ALHE 4520 (Research Methods)
5. Faculty continued 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 2018 assessment cycle results, the faculty implemented the following changes in 2019 to drive the cycle of improvement:

1. Faculty continued the proactive approach to improve student engagement in improving their writing skills.
2. Faculty provided examples of brochures.
3. Reviewed and revised the guidelines for the assignment.

## Plan of Action Moving Forward.

Based on the evidence provided from the 2019 AY, the BSRS program will make the following changes for continuous program improvement:

**Goal 1: Students will be clinical 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. 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. This discussion board will provide another mechanism for students 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. Review evaluation scores and counsel any student scoring below a 4.0 on quality of work and performance.
  4. Students purchase RadTech Bootcamp.
  5. Additional “open lab” practice opportunities
  6. Faculty will create image critique videos and the videos will be posted in Moodle for the students to review.
  7. Equipment will be added to the radiography lab classroom to allow for synchronous lab sessions between Shreveport and Alexandria.
  8. The test format was be changed, all of the radiographs, which were previously analog have been updated to digital images. This will allow for more objective grading.
- SLO 1.2: Students will develop assessment skills of a radiographer.

1. The open resource material in the course will be updated with the most current information and will include links to multiple online resources, including video demonstrations, and material specific to the radiologic science profession.
2. Measure to be changed from one assessment to multiple assignments to appraise the student's ability to assess patients to include exams and discussion board postings.
3. Discussion forums revised to focus on patient assessment.
4. Supplemental videos added to course that demonstrate proper trauma assessment. These videos will be posted in Moodle. Students will be required to view the videos prior to the trauma lab exam.
5. Faculty will record the trauma practice labs so students can evaluate their assessment skills. Faculty will review and critique the videos with the students.
6. Added additional "open lab" for practice sessions

**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. Supplemental videos added to course that demonstrate proper trauma assessment. These videos will be posted in Moodle. Students will be required to view videos prior to the exam.
  2. Faculty will record the trauma practice labs so students can evaluate their assessment skills. Faculty will review and critique the videos with the students.
  3. Added additional "open lab" for practice sessions.
  4. Review and revise the guidelines of the clinical scenario assignment.
  5. Provide a discussion board in a forum to allow students to post questions related to the assignment.
  6. A short video was created to describe the expectations of the assignment.
- SLO 2.2: Students will propose a plan to respond to imaging department scenarios.
  1. Revise and improve the guidelines for the assignment.
  2. Add examples and clearer explanations of expectations for the assignment.
  3. Create a video to explain the assignment in detail.
  4. Faculty posted recurrent announcements and reminders in the course as to the due dates of assignments.
  5. A forum was added for student's questions regarding assignments
  6. Frequent announcements and reminders posted in the course.
  7. Provide a discussion board forum to allow students to post questions related to the assignment.
  8. Review and revise the guidelines of the case study assignment.
  9. Create a video to explain the assignment in detail.
  10. Increase the number of case studies offered to students.

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

- SLO: 3.1: Students will demonstrate service to the profession and the community.
  1. Discontinue assignment due to restrictions of visiting extended care facilities.
  2. Create guidelines for new assignment, charitable organization presentation.

3. Create a video to explain the assignment in detail.
4. Review and revise the guidelines of the assignment.
5. Create a video to explain the assignment in detail.
6. The new assignment will include a “pre and “post” reflection assignment.

- SLO: 3.2: Students will integrate adherence to professional behaviors.
  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. This discussion board will provide another mechanism for students 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. Review evaluation scores and counsel any student scoring below a 4.0 on quality of work and performance.
  4. Accentuate the importance of the 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.

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

- SLO: 4.1: Students will develop oral communication skills.
  1. Add an online resource on the importance of oral communication.
  2. Review evaluation scores and counsel any student scoring below a 4.0 on oral communication skills with patients.
  3. Accentuate the importance of the 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.
  4. Add an online resource on the importance of oral communication.
  5. Review evaluation scores and counsel any student scoring below a 4.0 on quality of work and performance.
  6. Accentuate the importance of the 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
- SLO: 4.2: Students will develop written communication skills.
  1. Faculty will continue the proactive approach to improve student engagement in improving their writing skills.
  2. Faculty will provide additional electronic APA resources including OWL and Turnitin.
  3. Peer-review process will be mandatory for all student paper submissions.
  4. Revision of ALHE 4520 (Research Methods)
  5. 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.
  6. Faculty will continue the proactive approach to improve student engagement in improving their writing skills.
  7. Faculty will provide examples of brochures.
  8. Review and revise the guidelines for the assignment.