Outcomes Assessment Plan,

Bacone College Radiography Program Summer2020-Spring 2021

The mission of Bacone College Radiography Program is to assist in meeting community needs for highly competent radiographers, who give skilled care with the respect for individual, cultural, and spiritual differences, while maintaining the college commitment to serving American Indians. This is accomplished through didactic education, offered in a nurturing Christian environment, and clinical education provided at affiliated hospitals and clinics. The combination of theory and clinical practice enables the student to acquire the knowledge, skills, and professional values necessary for the practice of radiography in diverse community and clinical settings.

Outcome	Measurement Tool	Benchmark	Timeframe	Responsible Party	Results
1.1 Students will demonstrate overall clinical competency.	RAD2254-Clinical IV Clinical Student Evaluation Line items #1-10 2 nd 8 weeks *Review of clinical competency	Class average of 80% on line items # 1-10 DB 95 BB 100 LC 100 SP 100	2 nd year -Fall 2020 semester (4 th semester)	Clinical Instructor	395/400 points possible= 98.75% Benchmark Met
	RAD2363-Clinical V Terminal Competency Evaluation All line items 1st & 2nd 8 weeks *Final four competencies	Class average of 80% on all line items DB 100,98,100,98= 99 BB 100,100,100,100= 100 LC 100,100,100,100= 100 SP 100,100,100,100= 100	2 nd year -Spring 2021 semester (5 th semester)	Clinical Coordinator	399/400 points possible= 99.75% Benchmark Met
	RAD2254-Clinical IV Clinical Student Self Evaluation Line item #3 (Total out of 3) *Projections, requisition review, room preparation	Class average of 80% on line item #3 DB 2 BB 3 LC 3 SP 3	2 nd year -Fall 2020 semester (4 th semester)	Clinical Coordinator	11/12 points possible= 91.67% Benchmark Met

1.2 Students will demonstrate proper radiation protection.	RAD1403-Radiation Protection: Comprehensive Final Exam *Retained knowledge of proper protection	Class average of 80% AB 98 NKB 68	1st year -Spring 2021 semester (2nd semester)	Course Instructor	166/200 points possible= 83% Benchmark Met
	RAD2363-Clinical V All Terminal Competency Evaluations Line item #11 1st & 2nd 8 weeks *Addresses shielding	Class average of 80% on line item #11 DB 100,100,100,100 BB 100,100,100,100 LC 100,100,100,100 SP 100,100,100,100	2 nd year -Spring 2021 semester (5 th semester)	Clinical Coordinator	400/400 points possible= 100% Benchmark Met
	RAD2143-Clinical III Clinical Student Evaluation Line item #6 2 nd 8 weeks *Proper use of shielding	Class average of 80% on line item #6 DB 100 BB 100 LC 100 SP 100	2 nd year-Summer 2020 semester (3rd semester)	Clinical Coordinator	400/400 points possible= 100% Benchmark Met
1.3 Students will demonstrate proper patient care skills.	Patient Care; Comprehensive Final Exam *Retained knowledge of patient care skills	Class average of 80% AB 93 NKB 97 JH 91 WT 82	1st year -Fall 2020 semester (1st semester)	Course Instructor	363/400 points possible= 90.75 Benchmark Met
	RAD2363-Clinical V All Terminal Competency Evaluations Line items #3-5 1st & 2nd 8 weeks *ID patient, explain exams, patient preparation	Class average of 80% on line items #3-5 DB 100,100,100,100 BB 100,100,100,100 LC 100,100,100,100 SP 100,100,100,100	2 nd year -Spring 2021 semester (5 th semester)	Clinical Coordinator	400/400 points possible= 100% Benchmark Met

RAD2313-Clinical IV	Class average of 80%	2 nd year -Fall 2020 semester	Clinical Coordinator	387.5/400 points possible= 96.88
Clinical Student Evaluation	on line items #7-10	(4 th semester)		
Line items #7-10	DB 87.5			Benchmark Met
1 st 8 weeks	BB 100			
	LC 100			
*Compare skills from the	SP 100			
beginning of the semester				

- **SLO 1–Tool 1:** The students were above average for this assessment tool. The beginning of the clinical student evaluation focuses on the introductory preparation of the exam. Students were assessed during the 2nd 8 weeks to see if their skills had evolved from the beginning of the semester. Generally, this section has good scores. The benchmark was met. It is recommended that this tool stay on the assessment plan because it covers the areas needed to demonstrate students' overall competency.
- **SLO 1 Tool 2:** The terminal competencies are completed at the last semester of the program. The students are observed by the Program Director, Clinical Coordinator, or tech at the clinical site. The competencies come from different categories and allows the one observing to see that the student has retained knowledge and the skills to perform the exams. The benchmark was met. It is recommended that this tool stay on the assessment plan because it demonstrates students' abilities to master an exam.
- **SLO 1-Tool 3:** The clinical self evaluation is a tool for students to assess themselves from the clinical standpoint. Most students will evaluate themselves as doing well in all areas. On this particular assessment plan, there was one that did not do that. The tool provides a talking point during conferences and allows the Program Director/Clinical Coordinator to assist the students with any issues. The benchmark was met. It is recommended that it stays on the assessment plan so the student can assess their skills and note the progress they are making.
- **SLO 2 Tool 1:** The comprehensive final exam is to be a review of the information that is delivered during Radiation Protection. The exam allows the instructor to see if the students are retaining the information from the beginning to the end of the class. One of the students did not meet the expected score of 76. A final exam is not repeated but can lower the grade average. The exam average has to meet the 76 C requirement then all other grades are added. The benchmark was met. It is recommended that the tool stay on the assessment plan because low scores can indicate an area of weakness that need remediation.
- **SLO 2 Tool 2:** This tool is about shielding or radiation protection. This tool shows that all students are strong in this area per their scores. The program needs to ensure that students are properly protecting the patients and others involved with exams. The benchmark was met. It is recommended that the tool stay on the assessment plan because of the importance of radiation protection and that it is being maintained.

- **SLO 2 Tool 3:** The clinical student evaluation is completed by the clinical instructor at the clinical site. The clinical instructor may include the feedback of the techs working with students. It is important that everyone is making sure the students are using radiation protection. The benchmark was met. It is recommended that the tool stay on the assessment plan because the tool indicates shielding is taking place.
- **SLO 3-Tool 1:** The students have to demonstrate skills in the classroom prior to clinic. The comprehensive final exam does not include the hands-on portion but does include other important information that needs to be retained such as critical thinking skills, professionalism, diversity of patients and co-workers, adverse reactions, etc. The benchmark was met. It is recommended that the tool stay on the assessment plan to ensure students are retaining the knowledge of how to properly care for patients.
- **SLO 3- Tool 2:** The terminal competencies offer a look at students completing a variety of exams. With each patient, the student needs to check the patient's ID, explain the exam to the patient, and prepare the patient for the exam. Students need to possess the skills to verbally interact with the patient and know what questions to ask the patient. Students do well in this area. The benchmark was met. It is recommended that the tool stay on the assessment plan because it shows that students are demonstrating and retaining the skills prior to graduation.
- **SLO 3- Tool 3:** This evaluation is completed by the clinical instructor after the 1st 8 weeks of the semester. The students are getting their feet wet during that time, especially if they are at a new site. This first evaluation of the semester is to provide a comparison from the beginning of the semester to the end. This particular evaluation is for the fourth semester of the program so students should really be demonstrating a strong skill set. The benchmark was met. Tt is recommended that the tool stay on the assessment plan to show progress between the 1st and 2nd weeks of the clinical rotation.

Goal #2: Students will demonstrate communication skills.

Outcome	Measurement Tool	Benchmark	Timeframe	Responsible Party	Results
2.1 Students will be able to communicate orally with others in classroom and clinic settings.	RAD1224L-Imag. II Routine Chest Lab Skills Exam Line item #4 *Student is explaining the exam to the patient	Class average of 80% on line item #4 AB 100 NKB 100 JH 100	1st year-Fall 2020 semester (1st semester)	Lab instructor	300/300 points possible= 100% Benchmark Met
	RAD1224-Imag. II Oral Film Critique presentation scoring rubric *Public speaking skills	Class average of 80% AB 76 NKB 76 JH 76	1 st year-Fall 2020 semester (1st semester)	Course Instructor	228/300 points possible= 76% Benchmark Not Met
	RAD1223-Clinical I Clinical Student Evaluation Line items #11-13 1st 8 weeks	Class average of 80% on line items #11-13 AB 83 NKB 100	1 st year-Fall 2020 semester (1st semester)	Clinical Coordinator	183/200 points possible= 91.5% Benchmark Met
2.2 Student will be able to perform proper written skills.	RAD1224-Imag. II Written Film Critique Presentation Scoring Rubric *Follow directions for outline format	Class average of 80% AB 76 NKB 76 JH 76	1st year-Fall 2020 semester (1st semsester)	Course Instructor	228/300 points possible= 76% Benchmark Not Met

RAD1333-Clinical II Clinical Competency Form Line item #16 *Completion of paperwork, closing out exam, adding text notes	Class average of 80% Line item #16 AB 100 NKB 100	1 st year-Spring 2021 semester (2nd semester)	Clinical Coordinator	200/200 points possible= 100% Benchmark Met
RAD2413-Career Skills Cover Letter Scoring Rubric *Follow directions for professional letter	Class average of 80% NM 95	2 nd year-Summer 2020 semester (5 th semester)	Course Instructor	95/100 points possible= 95% Benchmark Met

- **SLO 1 Tool 1:** The chest x-ray is the first lab competency. This tool is showing that the students can speak and explain the exam to their patients. This is done repetitively in the lab so the students can demonstrate the skill at clinic. It is important part of the job. The benchmark was met. It is recommended that the tool stay on the assessment plan because it demonstrates that the student is prepared to complete chest competencies at clinic.
- **SLO 1 Tool 2:** The students have an oral presentation to show their public speaking skills and the ability to critique x-ray images in the classroom. This cohort was all American Indian students who traditionally shy away from any public speaking. It was difficult to get them to complete these types of assignments. This was the first oral presentation for the program. The benchmark was not met. It is recommended that this tool stay on the assessment plan as this is a part of professionalism and to see what will engage the students to make better efforts. There may different ways for the students to complete this assignment such as recording a video. The Program Director will look into other options.
- **SLO 3- Tool 3:** The clinical student evaluation is a tool used by the clinical instructor and staff to assess the students' communication skills. Again, this cohort's abilities to interact with patients and colleagues at the clinical sites is of concern due to their traditional shyness. It is noted on the evaluations that the students need to show more initiative. The benchmark was met. It is recommended that the tool stay on the assessment plan to gauge future communication skills in the classroom and clinic.
- **SLO 2 Tool 1:** The students did not turn this assignment in on time. The scores reflect the late grade policy. The work that was submitted did not follow the directions. Students have the ability to show improvement for future assignments. The benchmark was not met. It is recommended that the tool stay on the assessment plan because students need to be able to demonstrate writing skills for future employment or furthering their education. The instructor may have the students complete their first presentation in class so it can be reviewed for editing.
- **SLO 2 Tool 2:** At this point, the students have completed a semester of clinic. They should have an understanding of how the workflow process works. This tool is specifically looking at how the student deals with paperwork and the completion of an exam. The students have demonstrated the knowledge that they can complete an exam, which includes, adding tech notes to the image, closing out the exam, submitting paperwork, etc. The benchmark was met. It is recommended that the tool stay on the assessment plan to ensure students are competent with the workflow process and documentation of an exam.
- **SLO 2 Tool 3:** In Career Skills, the student goes through the process of how to start a job search to the completion of a mock interview. This tool is demonstrating that the student can follow directions and submit a professional cover letter. The student did well on the assignment. The student did research the current trends for a professional cover letter. The benchmark was met. It is recommended that the tool stay on the assessment plan to demonstrate writing skills for employment purposes.

Goal #3: Students will model professionalism.

Outcome	Measurement Tool	Benchmark	Timeframe	Responsible Party	Results
3.1 Students will gain professional development knowledge outside the classroom.	RAD1223- Clinical I Clinical Research Paper of Professional Societies Scoring Rubric Line items #1-3	Class average of 80% Line items #1-3	1 st year-Fall 2020 semester (1 st semester)	Clinical Coordinator	NA- assignment not completed
	RAD2363-Clinical V Clinical Modality Evaluation Line items #15-19 1st & 2nd 8 weeks *Students receive knowledge of specialty areas	Class average of 80% Line items #15-19 DB 100 BB 100 LC 100 SP 100	2 nd year -Spring 2021 semester (5 th semester)	Clinical Coordinator	400/400 points possible= 100% Benchmark Met
3.2 Students will develop job placement skills.	RAD 2413-Career Skills Resume Scoring Rubric	Class average of 80% DB 100 BB 100 LC 100 SP 100 NM 95	2 nd year-Spring 2021 semester (5 th semester) 2 nd year-Summer 2020 semester (5 th semester)	Course Instructor	400/400 points possible= 100% Benchmark Met for Spring 2021 95/100 points possible= 95% Benchmark Met for Summer 2020
	RAD2413-Career Skills Mock Interview Score Sheet	Class average of 80% DB 78 BB 100 LC 96 SP 96 NM 96	2 nd year -Spring 2021 semester (5 th semester) 2 nd year-Summer 2020 semester (5 th semester)	Course Instructor	370/400 points possible= 92.5% Benchmark Met for Spring 2021 96/100 points possible= 96% Benchmark Met for Summer 2020

3.3 Students will display professional attitudes and behaviors.	RAD2363-Clinical V Clinical Student Evaluation Line items #15-19 1st 8 weeks *Professionalism at clinic	Class average of 80% on line items #15-18 DB 100 BB 100 LC 100 SP 100	2 nd year-Spring 2021 semester (5 th semester)	Clinical Instructor	400/400 points possible= 100% Benchmark Met
	RAD2254-Clinical IV Clinical Student Self Evaluation Line item #2 (Total out of 3) 2 nd 8 weeks *Student critique	Class average of 80% on line item #2 DB 3 BB 3 LC 3 SP 3	2 nd year-Fall 2020 semester (4 th semester)	Clinical Coordinator	12/12 points possible= 100% Benchmark Met

- **SLO 1 –Tool 1:** This assignment was not completed. The students were getting back into clinic after being gone for COVID. The focus was on them trying to get caught up on their competencies. The grade sheet reflects the change in the scoring system. It is recommended that the tool stay on the assessment plan because it will be part of the grade for clinic.
- **SLO 1 Tool 2:** The specialty rotations allow the student to get an introduction to other areas besides x-ray. The students went to MRI, CT, Nuclear medicine, and Mammography. This allows the student to gain knowledge outside the department. It offers that one on one with a tech to see what needs to be done to work in that area. The benchmark was met. It is recommended that the tool stay on the assessment plan to be a part of developing professional knowledge.
- **SLO 2 Tool 1:** The resume allows the student to demonstrate their skills on paper. Students need to produce a resume that outlines their skills, goals, employment, extracurricular activities, etc. The benchmark was met. It is recommended that the tool stay on the assessment plan to ensure students are able to provide a presentable resume for job opportunities.
- **SLO 2 Tool 2:** The mock interview allows students to take part in an interview at the clinical facility. The score sheet is provided to the student and presented at the time of their interview. Once the interview is completed, it is returned with a grade. One student had a lower score compared to the rest but it was still a passing grade. The student is shy and it affected her score. The benchmark was met. It is recommended that the tool stay on the assessment plan to demonstrate that students will be adequately prepared for an interview.
- **SLO 3 Tool 1:** The clinical student evaluation is a tool for the clinical site to provide feedback on the students' professionalism. This tool was used the first eight weeks to show a comparison between the beginning and end of the semester. The benchmark was met. It is recommended that tool stay on the assessment plan so it can provide a comparison range for the student and show them what they made need to work on.
- **SLO 3 Tool 2:** The self evaluation lets the students gauge their progress. This is another tool to demonstrate professionalism at clinic after completing the second eight weeks. Most students rate themselves as being professional. The benchmark was met. It is recommended that the tool stay on the assessment plan to monitor the professionalism of the student at clinic.

Goal #4: Students will develop critical thinking skills.

Outcome	Measurement Tool	Benchmark	Timeframe	Responsible Party	Results
4.1 Students will learn to apply exposure technique adjustments when necessary.	RAD2363-Clinical V All Terminal Competency Evaluation Line item #7 1st & 2nd 8 weeks *Final competencies to show technique adjustments	Class average of 80% Line item #7 DB 100,100,100,100 BB 100,100,100,100 LC 100,100,100,100 SP 100,100,100,100	2 nd year-Spring 2021 semester (5 th semester)	Clinical Coordinator	400/400 points possible= 100% Benchmark Met
	RAD2254-Clinical IV Clinical Student Self Evaluation Line item #1 (Total out of 3) 2 nd 8 weeks *Student critique	Class average of 80% on line item #1 DB 2 BB 3 LC 3 SP 3	2 nd year-Fall 2020 semester (4 th semester)	Clinical Coordinator	11/12 points possible= 91.67% Benchmark Met
4.2 Students will adapt to trauma situations within the clinical setting.	Clinical I thru V Trauma Competency Evaluation (4 different trauma scores)	Class average of 80% on the four trauma evaluations DB 100,100,100,100 BB 100,100,100,100 LC 100,100,100,100 SP 100,100,100,100	1st semester thru 5th semester-Summer 2020- Spring 2021	Clinical Instructor	400/400 points possible= 100% Benchmark Met
	RAD2313-Clinical IV Clinical Student Self Evaluation Line items #20-23 (Total out of 3) 2nd 8 weeks	Class average of 80% on line items #20-23 DB 87.5 BB 100 LC 100 SP 100	2 nd year-Fall 2020 semester (4 th semester)	Clinical Coordinator	387.5/400 points possible= 96.88% Benchmark Met

SLO 1 – Tool 1: The line item states that the student has the knowledge to adjust technical factors as necessary. The students demonstrate that they have the knowledge to complete this task. The benchmark has been met. It is recommended that the tool stay on the assessment plan so weak areas of technique can be remediated.

SLO 1 – Tool 2: The line item shown on the self evaluation lets the student determine if they understand technical factors. This means they can critique their images and know how to fix them if they are too dark, too light, etc. Most of the students give themselves good scores. One felt they needed to work on it. The benchmark was met and it is recommended that the tool stay on the assessment plan to show consistency with competency scores and self evaluation scores.

SLO 2 – Tool 1: The trauma competencies show that the students can think outside the box and they are using their critical thinking skills. All the students did well in this area. The benchmark was met. It is recommended that the tool stay on the assessment plan to demonstrate critical thinking skills.

SLO 2 – Tool 2: The self evaluation allows the student to critique their skills. Most of the students had high scores. One student states they need more help in with this area. The tech states the student needs to be more assertive when performing these type of exams. The benchmark was met. It is recommended that the tool stay on the assessment plan.

Goal 5: Students will believe that the program is effective.

Outcome	Measurement Tool	Benchmark	Timeframe	Responsible Party	Results
5.1 Students will complete the program.	Graduation Spreadsheet	75% will complete the program	End of program- Spring 2021 semester (5 th semester)	Program Director	4/4= 100% Benchmark Met
5.2 Students will pass national certification on the 1 st attempt.	ARRT National Certification Exam Pass Rate- 1st attempt	75% will pass the national certification exam on the 1 st attempt	6 months upon completion of program	Program Director	2021- 2/4= 50% 2020- 1/1= 100% 2019- NA 2018- 0/2= 0% 2017- 3/3= 100% 5-year pass rate 60% (2017-2021) 6 passed out of 10 Benchmark Not Met *Note change to ARRT results; new pass rate is 75% Benchmark Met
5.3 Students will be satisfied with the education they received.	Student Satisfaction Survey Line items #1-7	75% will be satisfied with their education per line items #1-7	2 nd year -Spring 2021 semester (4 th semester) Finals Week	Program Director	21/28= 75% Benchmark Met
5.4 Graduates will be employed within 6 months.	Graduate Survey Line item #1	75% will be employed within 6 mths after graduation per line item #1	6 months upon completion of program	Program Director	% Not returned Per conversation 1 is employed, 1 is not employed, and the other 2 have not communicated with the program about employment *Mail out by November 30, 2021
5.5 Employer satisfaction of recent graduates.	Employer Survey Line items #4-8	75% of surveys returned will show employer satisfaction with the graduate per line items #4-8	6 months upon completion of program	Program Director	% Not Returned *Mail out by November 30, 2021

- **PE 1:** The completion rate met the benchmark. There were four students who started the program in Fall 2019 and those four students graduated in May 2021. Benchmark was met.
- **PE 2:** Without any edits to the ARRT results, the pass rate shows 60%. If edits are made, then the two failed exams from 2018 will be removed due to taking the exam six months after graduation. This will show the new pass rate to be at 75%. The low enrollment numbers really make it difficult to maintain the benchmark pass rate. The goal is to enroll more students.
- **PE 3:** The student satisfaction surveys met the benchmark even though one student strongly disagreed on all of the items. The student could have possibly made a mistake when marking the responses because on the question of recommending the program they stated yes. The general consensus was that the graduates would recommend the program and had the resources needed to assist them for preparation of the registry. The survey needs to be reviewed and updated to alleviate the issue of graduates misconstruing the questions.
- **PE 4:** The graduate surveys have not been returned. The Program Director has reached out to the students but only the two have responded. The benchmark has not been met at this time. The Program Director has looked at the possibility of offering an online survey.
- **PE 5:** The employer surveys have not been returned. The benchmark has not been met at this time. Per conversation, one graduate has been working and one has not. Still waiting on communication from the other two graduates. Per the graduate surveys, the Program Director is looking at different possibilities to see if there will be a better response time.

^{*}Assessment plan was reviewed by faculty on 12/14/2021