

North Central State College
Radiological Sciences Assessment Plan

College Mission

"To provide quality, responsive, lifelong learning opportunities, including occupational, degree and other educational programs for individuals, business and industry, and the communities we serve."

College Vision

North Central State College, a model college of the 21st century, will promote a flexible and responsive, learner-centered environment that is committed to meeting community educational and training needs. By offering progressive educational programs, NC State will revitalize the learning process. We are committed to quality faculty and staff building bridges to local communities by actively contributing to the social, economic, educational, and cultural well-being of North Central Ohio.

Program Mission

The mission of the radiography program sponsored by North Central State College is to produce technically competent, entry-level radiographers. Our graduates will demonstrate compassion and empathy toward patients, possess critical thinking and problem-solving skill and demonstrate professionalism.

Megan -2nd Maria-1st

**Program Assessment
2014-2015**

Student Learning Outcome 1 (SLO 1). Students demonstrate clinical competency.

Outcome:	Measurement Tool	Benchmark	Results	Analysis	Action Plan
The student effectively manipulates radiographic equipment.	Maintenance Evaluation Rubric (Routine Shoulder Exam is used)	Each 1 st yr. student will earn: ≥ 3.0/5.0 Each 2 nd yr. student will earn: ≥ 4.0/5.0	6/6 Benchmark Met 10/13 Benchmark Not Met	Students had difficulty with tube detents	No action at this time for SLO 1. Continue to monitor, especially for the 2 nd yr student benchmark. Maybe the skill to earn a 4 compared to a 3 (benchmark for 1 st yr) is too big a jump.
The student accurately applies positioning skills.	Maintenance Evaluation Rubric	Each 1 st yr. student will earn: ≥ 3.0/5.0 Each 2 nd yr. student will earn: ≥ 4.0/5.0	6/6 Benchmark Met 10/13 Benchmark Not Met	1 student needed physical help with the equipment	See above.
The student correctly utilizes radiation protection measures and principles.	Maintenance Evaluation Rubric	Each 1 st yr. student will earn: ≥ 3.0/5.0 Each 2 nd yr. student will earn: ≥ 4.0/5.0	6/6 Benchmark Met 11/13 Benchmark Not Met	Needed more collimation. 1 student forgot to shield.	See above.

SLO 1. Students demonstrate clinical competency.

The student accurately selects appropriate technical factors.	Maintenance Evaluation Rubric	Each 1 st yr. student will earn: ≥ 3.0/5.0 Each 2 nd yr. student will earn: ≥ 4.0/5.0	6/6 Benchmark Met 12/13 Benchmark Not Met	1 student had difficulty setting manual techniques.	See above.
The student demonstrates appropriate patient care skills.	Maintenance Evaluation Rubric	Each 1 st yr. student will earn: ≥ 3.0/5.0 Each 2 nd yr. student will earn: ≥ 4.0/5.0	6/6 Benchmark Met 12/13 Benchmark Not Met		See above.

SLO 2. Students demonstrate critical thinking and problem-solving skills.					
Outcome:	Measurement Tool	Benchmark	Results	Analysis	Action Plan
The student performs a lab simulation using adaptive positioning.	Lab Simulation Grade Sheet	Each 1 st yr. student will earn: $\geq 80\%$	5/6 Benchmark Not Met	1 student demonstrated poor positioning skills. This student met the benchmark when re-tested.	No action at this time.
The student evaluates images for diagnostic quality.	CI evaluation, Section 5, A-C	Each 1 st yr. student will earn: $\geq 75\%$ average (9/12 pts)	6/6 Benchmark Met		No action at this time.
	CI evaluation, Section 5, A-C	Each 2 nd yr. student will earn: $\geq 80\%$ average (10/12 pts)	12/13 Benchmark Not Met		
The student performs an image evaluation.	Image Analysis Rubric (Adult spine exam with a repeat exposure)	Each 2 nd yr. student will earn: $\geq 90\%$ average	11/13 Benchmark Not Met	1 student did not recognize motion	CI's should review rubric prior to use. Also encourage image review analysis on PACS prior to use of rubric.
The student demonstrates an organized process for completion of a multiple exam study.	Multiple Exam Study Assessment	Each 2 nd yr. student will earn: $\geq 90\%$ average	13/13 Benchmark Met		Students should all use a CR room for this exam. The DR room provides the list of projections in order and this is what we want the student to be able to do on their own.

SLO 3. Students demonstrate effective communication skills.

Outcome:	Measurement Tool	Benchmark	Results	Analysis	Action Plan
The student demonstrates effective oral communication skills.	CI Evaluation, Section 7,A	Each 1 st yr. student will earn: ≥75% (3/4 pts)	4/5 Benchmark Not Met	Dorie to add to CI Eval. On 7A 3 pts for “explains procedures & gives clear instructions... 4 pts – “uses skills to effectively communicate with difficult or atypical patients” 10/13 students ≥15/20 3/13 students=14/20 (benchmark score)	Incorporate more role playing skills in labs. The new 5 semester program includes 5 semesters of positioning lab which may help in meeting the benchmarks. No action at this time
	CI Evaluation, Section 7, A	Each 2 nd yr. student will earn:100% (4/4 pts)	10/13 Benchmark Not Met		
	Oral Communication Value Rubric (RADS 2560)	Each 2 nd yr. student will earn: ≥70% (14/20 pts)	13/13 Benchmark Met		
The student demonstrates effective written communication.	Written Communication Value Rubric (RADS 2440)	Each 2 nd yr. student will earn: ≥70% (14/20 pts)	10/13 Benchmark Not Met		Faculty will encourage students to use resources (writing tutors, online tutors, etc) available on the campus.

SLO 4. Students demonstrate professional attitudes, behaviors and ethics.					
Outcome:	Measurement Tool	Benchmark	Results	Analysis	Action Plan
The student demonstrates professional work ethics.	CI Evaluation, Section 1, A-E Section 2, A-C	Each 1 st yr. student will earn: ≥75% (21/28 pts)	6/6 Benchmark Met	2 students had chronic attendance issues	Reviewed the attendance policy at the CI meeting in October, 2015. Adjusted the attendance policy to reflect the reduction in clinical days with 5 semesters. Advisory Committee agreed to this change.
	CI Evaluation, Section 1, A-E Section 2, A-C	Each 2 nd yr. student will earn: ≥85% (24/28 pts)	11/13 Benchmark Not Met		
The graduate demonstrates professional and ethical standards.	Employer Survey	≥3.0 average score on the employer survey. (5 point scale)	Average score 4.6 Benchmark Met	4/5 employers rated the graduate as 5; 1/5 rated the graduate as 3	See summary comments

Program Effectiveness Measures

Outcome:	Measurement Tool	Benchmark	Results	Analysis	Action Plan
The graduates pass the credentialing exam.	ARRT Examination Summary Report	85% of the graduates will pass the exam on the first attempt.	13/13 – 100% Benchmark Met	The program continues to prepare students who successfully pass the national board examination.	No action
Employer respondents indicated they would hire future graduates from the program.	Employer Survey	75% of the employers will respond “yes” to this question on the employer survey.	5/5 – 100% Benchmark Met		No action
Graduates who seek employment in the radiology field are employed within 12 months of graduation.	Graduate survey or “word of mouth” or social media.	75% of the graduates will respond “yes” to this question on the graduate survey, or through social media or word-of-mouth.	13/13 Observation / word of mouth/ 2 returned surveys	All students were employed within 1 year of graduation.	No action
Students who begin the program successfully complete the program.	Program Completion Rate	60% of the students who begin the program will complete the program.	13/17 – 76.5% Benchmark Met	Continue to use the competitive admission procedure. Develop retention plans to help academically challenged students when enrolled in the program. Students who leave for personal reasons or it’s not the right field for them - ???	See summary comments
Graduates indicate that they were adequately prepared as an entry-level radiographer.	Graduate Survey	≥75% of graduate respondents	2/2 surveys returned 2/2 – 100% Benchmark Met	Surveys were sent out twice – a paper copy and an email copy 2 months following the letter.	See summary comments
Employer respondents indicate that graduates were adequately prepared as an entry-level radiographer.	Employer Survey	≥75% of employer respondents.	5/5 – 100% Benchmark Met		No action

Summary: In terms of assessment of the program, two main challenges are identified. One, retaining students in the program. In the last 5 years, (2011-2015) average retention is 64%. This is above the benchmark (60%) but the program recognizes the need to increase retention. In this 5 year period, we enrolled 90 students and 6 of the students were academically unsuccessful (7%). Each year faculty are asked to develop and implement retention plans. Faculty feel that our retention plans do benefit students who are struggling and reduce attrition. 26 students in the same 5-year period withdrew from the program for personal reasons (29%). This population presents the more immediate challenge for program faculty.

Challenge: What can we do to increase retainment of students who leave the program for “personal reasons”?

Advisory committee suggestions:

- Program faculty should break down the data above to:

- Students who left that completed 4 hours of observation vs Students who left that completed 20 hours of observation

- Develop a Panel Discussion Meeting to be held on an evening after Summer semester but prior to the start of Fall semester. Attendance would be mandatory for students entering the program in the fall semester. The panel would consist of program faculty, clinical instructors, technologists and 2nd year students. In addition to an open question time, topics might include time management, an 8 – hour day on your feet, juggling family, work and school, attendance requirements, etc. The goal of the meeting is to give students coming in a realistic look at what their life will be when they start the program.

Challenge: What can we do to get more returned completed surveys?

Advisory committee suggestions:

- Redesign the survey forms to be a little shorter

- Use SurveyMonkey for the surveys

- Ask graduates to email their supervisor’s email and use SurveyMonkey for the survey questions

Discussion also included reviewing the Assessment Plan and making some changes to some of the tools and when they are used. The changes are needed as a result of the reduction in clinical hours as a result of program only having 35 credit hours for all profession related instruction. A revised plan will be available for the committee to review at the Spring Advisory Committee meeting.