IDAHO STATE UNIVERSITY – Program Assessment Summary Report

Program: Radiographic Science
Contact Person: Christopher Wertz, Program Director
College: KCHP

PURPOSE OF THE RADIOGRAPHIC SCIENCE PROGRAM

The Radiographic Science Program is designed to develop the technical skills and knowledge necessary for the student to satisfactorily function in the role of a radiologic technologist. The program seeks to provide pertinent learning experiences which will enable the student to demonstrate competency in the technical aspect of the profession as well as the human relations aspect. The program further seeks to develop the students' interests in the professional societies as well as the possibilities for continuing education.

The Radiographic Science Program is eighteen months in duration after completing the necessary prerequisites. During this two-year period, the student will receive didactic experience at the University, combined with clinical experience at the affiliated hospitals and clinics. The student can earn a Bachelor of Science degree after satisfactorily completing the appropriate curriculum. Upon satisfactory completion of the radiographic science curriculum and prerequisites, the student is eligible to write the national registry examination for radiologic technologists sponsored by the American Registry of Radiologic Technologists (ARRT).

Bachelor of Science in Radiographic Science

The Bachelor of Science degree is a four-year curriculum. During the first two years the student takes general education, basic science, and business courses at the University. During the two professional years, the student studies and practices the clinical application of radiography at the University's energized laboratory and at affiliated hospitals. Upon completion of the program, the graduate is eligible to take the national examination for certification administered by the ARRT.

PROGRAM PHILOSOPHY

Idaho State University's Radiographic Science Program was developed with the philosophy that didactic education and clinical experience, which includes "hands on" should happen together for continuity during learning. Therefore, during the entire program the student learns in the laboratory setting and applies those skills acquired in the clinical setting. This happens on a weekly basis. Furthermore, in the classroom students acquire the theoretical information necessary to perform as technologists. The next step involves laboratory experiences where the opportunity to apply technological skills is acquired by using phantoms and simulations. Students then progress and perfect their skills by working with technologists in a clinical environment. Additionally, several of the classes are taught by the Physics, Biology, and Healthcare Administration Faculties. This is atypical of most Radiographic Science programs and is a unique feature that sets the program apart from other programs. Our philosophy is students who learn from experts become experts. When graduation approaches students are ready to enter the profession confidently.

MISSION STATEMENT

The Mission of the Radiographic Science Program is to provide students with both the academic and technical foundations to competently and safely perform Radiologic procedures, to prepare qualified imaging technologists who will ethically respond to the needs of patients with technical competence and compassion, and to assume a vital professional role as a medical team member.

Vision

Prepare leaders in radiography for today and tomorrow by providing baccalaureate education.

Core Values

- Academics – Promoting excellence in all academic endeavors.
- Knowledge – recognizing the significance of new knowledge in a profession that is predisposed to change while maintaining traditional values and emphasizing the needs of the patient.
- Dedication – to help meet the statewide and regional needs by providing access to quality education to prospective students.
- Community – to help meet the needs of the community in the health care setting by providing competent, qualified, technologists who are eligible upon graduation to sit for the national certification examination in radiography sponsored by the American Registry of Radiologic Technologists (ARRT)

PROGRAM GOALS/OUTCOMES

The Radiographic Science Program faculty promotes knowledge and discovery for all students in our program by committing to the following goals:

1. Students will use critical thinking and problem-solving skills**.**
2. Students/graduates will be clinically competent.
3. Students will be able to effectively communicate.
4. Students will demonstrate the importance of professional growth and development.

Student Driven Effectiveness Assessment

The Radiographic Science Program and the Division of Health Sciences also administers a Student Driven Effectiveness Assessment each semester. This assessment is a method used to evaluate the program from the vantage point of our customer, the student. Continuous Quality Improvement guides program officials in looking for opportunities to improve in all aspects of the collegiate experience provided to our customer. The assessment includes a four question evaluation administered at the end of each semester. Students are asked to answer the following questions:

1. Has the Radiographic Science Program met your expectations?
2. Would you recommend the Radiographic Program to another student?
3. List the Top 3 Positive experiences this semester.
4. List 3 things that would enhance the experience in the Radiographic Science Program.

This assessment tool, which includes all student responses, an evaluation by faculty, an action plan, follow-up, and all survey results, can be reviewed on the department Web site. It is titled "Division of Health Sciences Student Driven Effectiveness Assessment Plan, and is located at the bottom of the page at the following hyperlink:

Division of Health Sciences Student Driven Effectiveness Assessment

Outcomes Assessment Plan

Radiographic Science Program

The Radiographic Science Program at Idaho State University will provide a quality and diverse education that enables our graduates to become a valuable member of the health care team.

(The cycle of assessment for the plans below was August 2015 – July 2016)

Goal 1: Students will use critical thinking and problem-solving skills.					
Outcome	**Measurement Tool**	**Benchmark**	**Timeframe/Responsible Party**	**Results**	**Analysis/Action Plan**
1-Students will develop library literacy skills.	Library Instruction Test offered by Ruiling Guo	All students will receive a ≥90% on the exam	4th Semester Faculty	n=21	Did not assess this outcome last year because Ruiling Guo did not give the library instruction. Students still attended the library instruction workshop, but no assessment was given. Will change this outcome for next assessment cycle to assess students critical thinking and problem-solving skills in another area.
2-Students will adapt positioning for cervical spine trauma patients.	RS 3311-Positioning Lab for C-spine, Laboratory Assignment x-table lateral, x-table swimmers, and trauma obliques.	Students will receive a rating ≥ 4 on a Likert scale 1-5	2nd Semester Faculty	n=21	RS 3311 lab assessments changed, so no Likert scale data was collected for these positions. Will change this outcome to reflect new lab assessment methods and positions.

Goal #2: Students/graduates will be clinically competent.					
Outcome	**Measurement Tool**	**Benchmark**	**Timeframe/Responsible Party**	**Results**	**Analysis/Action Plan**
1.Students will apply positioning skills.	RS 3342 Clinical Competency Form (Sampling of four competencies per student)	Each exam is worth 25 points for a possible 100 point total. Average score of >80%.	4th Semester Clinical Coordinator	n=20 Results = 96%	Proper positioning is key to producing diagnostic images. Positioning is an important element in clinical competency. Benchmark was met. Will continue to monitor.
2. Students will have no greater than 2 simulations when applying to sit the ARRT exam.	Competency Spreadsheet	< 2 simulated exams	5th Semester Program Director/Clinical Coordinator	n=20 Results = 0 simulations	The goal of the program is to graduate clinically competent technologists. Faculty feels that simulations are not comparable to real life situations. Benchmark was met. Will continue to monitor.

3. Students will demonstrate knowledge in radiation protection.	RS 3388 Radiation Protection- Comprehensive Final Exam Grades	Average score > 80%.	2nd Semester Course Instructor	n=21 Results = 93% average	The RS 3388 course focuses on radiation practices and standards. The final exam for the course comprehensively assesses all the material covered throughout the semester. Benchmark was met. Will continue to monitor.
	Every year students will complete annual radiation training through the technical safety office.	All students will score 100%	1st and 3rd Semester Clinical Coordinator	n=41 Results = 100%	The online radiation training instructs and assesses students' knowledge of the university's radiation policies and procedures. This tool is a mandatory requirement for all radiographic science students by the radiation safety committee. Radiation protection is a practice that is becoming more and more an issue with the consumer. It is a vitally important measurement tool. Benchmark was met. Will continue to monitor.

Goal 3: Students will be able to effectively communicate.					
Outcome	**Measurement Tool**	**Benchmark**	**Timeframe/Responsible Party**	**Results**	**Analysis/Action Plan**
1. Students will write clearly using AMA format.	10-12 page research paper in RS 4450	All students will receive a >80% at the completion	4th Semester Course Instructor	n=20 Results = 94% average	Benchmark was met. Faculty thought the measure for this outcome was too broad and assessed more than stated in the outcome, meaning the measure was too broad for the outcome. Will change this measure to more accurately reflect the outcome of AMA formatting and the goal of effective communication.
2. Students will communicate clearly to the CI's by completing an inventory analysis of contrast media used in the clinical environment.	RS 3342 Lab Worksheet	>80% on the clinical site contrast media inventory assignment for Imaging of the lower GI.	4th Semester Clinical Coordinator	n=20 Results = 98%	This tool correlates with the written communication skills, but shifts the emphasis to oral communication with a student and a mid-level manager, in this case the clinical instructor Benchmark was met. Will continue to monitor

Goal #4: Students will demonstrate the importance of professional growth and development.					
Outcome	**Measurement Tool**	**Benchmark**	**Timeframe/Responsible Party**	**Results**	**Analysis/Action Plan**
Students will advance professionally by performing qualitative research.	RS 4450, Senior students will write an 8-10 page literature review or case study and submit the work to a professional society competition.	All students will receive a >80% at the completion of the paper and an ISU student will place 1st, 2nd, or 3rd place at the ACERT and/or ISRT conference.	4th Semester Faculty	n=20	Results = 94% average ACERT = placed 1st in essay competition ISRT = placed 1st, 2nd, and 3rd in informative category, placed 1st in investigative category This indicator gives students a sense of accomplishment. Generally some students complain at the beginning of the semester, but upon completion of the exercise most generally agree that the experience was highly beneficial. Success this year at the ACERT conference is validation for faculty of quality and feedback from students provides a sense of accomplishment by knowing that they can succeed professionally and add to the knowledge base of the profession. This outcome is important as the degree awarded at ISU is a B.S. degree in Radiographic Science. This tool will be used repeatedly. The goal of the program is to instill in students the importance of contributing knowledge at the collegiate level that will instill desires to publish professionally in the Journal Radiologic Technology in the future. Benchmark met. Will continue to monitor
	RS 4430, Senior students will develop a poster presentation and submit the work to a professional society competition.	All students will receive a >80% at the completion of the poster and will place 1st, 2nd, or 3rd place at the ISRT conference.	5th Semester Faculty	n=20	Results = 94% average ISRT = 1st, 2nd, and 3rd in the informative category Same evaluation as the previous measure. Benchmark met. Will continue to monitor

Program Effectiveness Measures (1/1/2015 – 12/31/2015)					
Outcome	**Measurement Tool**	**Benchmark**	**Timeframe/Responsible Party**	**Results**	**Analysis/Action Plan**
1.Students will pass the national certification examination on the 1st attempt.	National Certification Exam 1st Time Pass Rates	100% each year	6 months post graduation (or upon completion by all) Program Director	2011: 94.7% 2012: 100% 2013: 100% 2014: 94.7% 2015: 100% 5 year Avg = 98%	Benchmark was met for 2015, but not for the 5 year average. However, the benchmark was met for 3 of the past 5 years.
2.Students who are actively seeking a job will be gainfully employed within 6 months post-graduation.	Graduate Survey Or "word of mouth" On line Alumni Survey	75% or higher yearly 75% 5 year average	post graduation survey Program Director Clinical Coordinator	2011: 81% 2012: 77% 2013: 94.6% 2014: 100% 2015: 100% 5 year average= 91%	Benchmark was met in 2015 and for the 5 year average.
Job Placement Rate **1 year from graduation** for those actively seeking a job.	Graduate Survey or "word of mouth" On line Alumni Survey	75% of those actively seeking employment within 12 months of graduation	12 months post graduation Program Director/Clinical Coordinator	2010:94% 17/18 2011: 89% 16/18 2012: 89% 16/18 2013: 100% 17/17 2014: 100% 17/17 5 year average = 94%	Benchmark was met for 2014 and for the 5 year average
Students will complete the program.	Graduation roster	100%	End of program Program Director	n=20 2015= 20	Benchmark was met. All students completed the program in 2015.
Graduates will be satisfied with their education by feeling prepared for their 1st job.	Graduate Alumni Survey	≥ 4 (5 point scale)	Alumni Survey Program Director	n=20 5 surveys returned 2015 = 100%	Benchmark was met.
Employers will be satisfied with the performance of newly hired technologists	Employer Survey	≥ 4.0 (5point scale)	12 months post graduation Program Director	n=18 0 survey returned 2014=	Since there were no surveys returned there was no data to compare. More emphasis and follow-up communication will be used in the future. The program is also looking into giving respondents the opportunity to complete surveys online, which will hopefully increase the response rate
Faculty will review curriculum yearly.	Documentation in advisory committee meeting minutes or during JRCERT self study phase.	100% each year	Fall Semester Program Director	2015= yes	The faculty will continue to review the curriculum yearly as documented in the Advisory Committee meeting minutes (February 2016).