

College of Southern Idaho

Radiologic Technology Program Outcome Assessment Plan—Class of 2014

**Mission: To prepare students to become graduates for entry-level employment
as ARRT Registered Technologists in Radiography.**

Category 1: Graduate Performance

Goal 1: Program effectiveness will be measured on an ongoing basis.

Outcome	Tool	Benchmark	Time Frame	Responsibility	Result	Action
1. Enrolled students will complete the program.	CSI Institutional Research Graduation Report	≥ 80 % annual graduation rate.	Commencement (May)	Program Director	Yes 14/14 = 100%	None
2. Graduates will pass the ARRT exam in radiography on the first attempt.	A. Annual first time pass rate.	A. ≥ 80 % Annual first time pass rate.	January 1 to December 31 for graduating class.	Program Director	A. Yes Annual first time pass rate = 86%	A. None
	B. 5 year first time pass rate.	B. ≥ 80 % 5 year first time pass rate.			B. Yes 5 year first time pass rate = 89%	B. None
	C. Annual program mean scaled score.	C. ≥ 80 Annual program mean scaled score.			C. Yes Annual program, mean scaled score = 86%	C. None
	D. 5 year program mean scale score.	D. ≥ 80 % 5 year program mean scaled score.			D. Yes 5 year program mean scaled score (1/2010 to 12/2014) = 84 %	D. None
	[Note: Data from the ARRT Radiography Examination Summary.)					

3. Graduates will be employed within 6 months.	Alumni Survey Question # 4.	≥ 80 % of those seeking employment of those surveys returned. (Excludes military and continuing education.)	Six months post-graduation.	Program Director	Yes 12/12 = 100% (2 out of 14 graduates didn't actively seek (find) employment within 12 months of graduation.)	None
4. Graduates will receive a quality education.	Alumni Survey Question # 1.	≥ 80% students answer YES of those who returned surveys and answered the question.	Last day of class during final spring semester.	Program Director	Yes 14/14 = 100%	None
5. Employers will be satisfied with the (hard – technical) performance of graduates.	Employer Survey Question #4	≥ 95 % Combined satisfactory rating of those surveys returned.	Six months post - graduation.	Program Director	Yes 5/5 = 100% (Check for updates)	None

Category 2: Clinical Performance.

Goal 2: Students will be clinically competent.

Outcome	Tool	Benchmark	Time Frame	Responsibility	Result	Action
1. Students will provide appropriate patient care	A. RADT 102 Patient Care in Radiography I Unite Exams # 4 – 7	A. ≥ 80 % Combined average score	A. First semester	A. Didactic Instructor	A. Yes 14/14 = 89.47	A. None
	B. RADT 165 Fundamentals of CT.	B. ≥ 80 % Combined average score	B. Second semester	B. Didactic Instructor	B. Yes 14/14=93.6%	B. None
	C. All competency evaluation forms.	C. ≥ 90 % First time pass rate on all competency	C. Third, Fourth, Fifth semesters	C. Clinical Coordinator	C. Yes 671/698=96.1%	C. None

	D. All unsatisfactory competency exams. #1,2,9.	evaluations. D. ≤ 2% first time unsatisfactory rate of patient care tasks of all comps. (Note: We are counting comps, not tasks because it only takes one unsatisfactory to fail a comp. And, students may fail in one or more of the three areas for each Unsat comp.)	D. Third, Fourth or Fifth semester	D. Clinical Coordinator	D. Lost Unsatisfactory Comps.	D. None. Note: ARRT Patient Care section score was 8.8 (7.5 is passing).
2. Students will demonstrate quality positioning.	A. RADT 162 Radiographic Procedures II Unit Exams # 12 - 16. B. All unsatisfactory competency exams. #5, 6, 7.	A. ≥ 80 % Combined average score. B. ≤ 2% first time unsatisfactory rate of positioning tasks.	A. Fourth semester B. Third, Fourth and Fifth semester	A. Didactic Instructor B. Clinical Coordinator	A. Yes 14/14 90.23 B. Lost Unsatisfactory Comps.	A. None B. None Note: ARRT Procedures section score was 8.2 (7.5 is passing).
3. Students will apply appropriate radiation safety principles.	A. RADT 152 Radiation Protection Unit Exams # 7 and 8. B - 1 All unsatisfactory competency exams #3, 4, 8.	A. ≥ 80 % Combined average score. B-1. ≤ 2% first time unsatisfactory rate of radiation safety	A. Second semester B-1. Third, Fourth and Fifth semester.	A. Didactic Instructor B-1. Clinical Coordinator	A. Yes 14/14 89.5% B-1. Lost Unsatisfactory Comps	A. None B-1. None Note: ARRT Radiation Protection

	B - 2 Final grade determination form B. #1	tasks. B-2. ≥ Score of 3 on a scale of 1 – 4 (Excellent to Unsatisfactory)	B-2. Fifth semester.	B-2. Clinical Coordinator	B-2. Yes 14/14 4.43	section score was 8.8 (7.5 is passing). B-2. None
4. Students will demonstrate the ability to evaluate image quality.	A. RADT 153 Image Analysis Unit and Final Exams 1-15, Final Exam A and B. B. All unsatisfactory competency exams image quality assessment factors.	A. ≥ 80 % Combined average score. B. ≤ 2% First time unsatisfactory rate of image quality assessment factors.	A. Second semester. B. Third, Fourth and Fifth semester.	A. Didactic Instructor B. Clinical Coordinator	A. Yes 14/14 Mean = 92.7% = A B. No 25/698 = 3.6% (Note: This data was obtained before all unsatisfactory competencies were lost.)	A. None B. Note: After reviewing this data, at the end of fall-2015 semester, a new clinical education outcome for assessing positioning errors was developed for Class of 2016 to reinforce evaluation of image quality. Note: ARRT Image Acquisition & Evaluation section score was 8.7.

Category 3: Problem Solving and Critical Thinking						
Goal 3: Students will possess problem solving and critical thinking skills.						
Outcome	Tool	Benchmark	Time Frame	Responsibility	Result	Action
1. Students will apply ALARA exposure techniques resulting in quality images using optimum kVp/Low mAs for the exposure index range (S#, LgM, IE).	A. RADT 164 Imaging and Processing Unit Exams # 5, 6. (Note: Exposure Techniques and AEC units)	A. $\geq 80\%$ Combined average score.	A. Fourth Semester	A. Didactic Instructor	A. Yes 14/14 = 100% Mean = 87.85%	A. None.
	B. Final Grade Determination Form B. # 2 (Student thinks critically.)	B. \geq Score of 3 on a scale of 1 –4 (Excellent to Unsatisfactory)	B. Fifth Semester	B. Clinical Coordinator	B. Yes 3.71 14/14 = 100%	B. None
2. Students will assess the quality of radiographic images.	RADT 182 Clinical Education III # 4 Mock Exam / Section 3: Image Production and Evaluation.	≥ 7.0 Combined average ARRT normalized section score.	Fifth Semester	Clinical Coordinator	Yes 14/14 Mean = (7.4) 8.4	None
3. Students will adjust equipment operation and quality control factors.	RADT 182 Clinical Education III # 4 Mock Exam: Section 2: Equipment Operation and Quality Control	≥ 7.0 combined average ARRT normalized section score.	Fifth semester	Clinical Coordinator	Yes 14/14 Mean = (6.8) 7.8	None

Category 4: Communication Skills						
Goal 4: Students will communicate and interact effectively with patients and staff.						
Outcomes	Tools	Benchmark	Time Frame	Responsibility	Result	Action
1. Students will engage in productive radiography-related discussions with patients, staff and each other.	Clinical Education Grade determination Form B # 5.	≥ Score of 3 on a scale of 1 – 4, (Excellent to Unsatisfactory).	Fifth semester.	Clinical Coordinator	Yes 14/14 = 100% 3.93	None
2. Students in didactic setting will communicate effectively in writing.	A. Post certification report.	A. ≥ 8 points combined satisfactory rating .	A. Third semester.	A. Clinical Coordinator	A. Yes 14/14 Mean = 9.3 pts	A. None
	B. Post certification report.	B. ≥ 8 points combined satisfactory rating.	B. Fifth semester.	B. Clinical Coordinator.	B. Yes 14/14 Mean = 9.9 pts	B. None
Category 5: Professional Growth and Development						
Goal 5: Students and graduates will behave ethically.						
Outcomes	Tools	Benchmark	Tim Frame	Responsibility	Result	Action
1. Students will apply the employability skills of a radiographer.	Final Grade Determination Form B. #1-5	≥ 90 % Combined satisfactory rating. (out of 30 points.)	Fifth semester.	Clinical Coordinator.	Yes 14/14 Mean= 28.94/30=96.4%	None
2. Graduates will apply soft-personal employability skills of an RT (R).	Employer's Survey # 5 (personal skills)	≥ 95 % Combined satisfactory rating of those surveys returned.	Six months post graduation.	Program Director	YES 5/5 = 100 %	None
3. Students will develop a five year career development plan.	Five Year Career Development Plan	≥ 90 % Combined satisfactory rating.	Fourth semester	Clinical Coordinator	Yes 14/14 97.1%	None

**College of Southern Idaho
Radiologic Technology Program
Program Advisory Committee Meeting Minutes
For the Class of 2014 Outcomes Assessment Plan
Feb 17, 2016 – 10 am to 2 pm – HSHS 139 (Lunch) & 178**

NOTE: The February, 2015 meeting was cancelled due to committee members scheduling conflicts with an eye toward a Summer 2015 meeting which was postponed until February 17, 2016 for the review and approval of the Class of 2014 Outcomes Assessment Plan data along with Class of 2013 Outcome Assessment Plan data.

[Note: Here are the details of how two Outcome Assessment Plan data for the Class of 2013 and 2014 got back-logged due to unforeseen circumstances. Due to several member scheduling conflicts, review and approval of the Class of 2013 Outcome Assessment Plan data which was scheduled for the Summer Session 2014 Program Advisory Committee on July 17th was cancelled. Instead, Gary Lauer sent all members a copy of the Outcome Assessment Plan data for the Class of 2013 for review and comments (which there were none). The meeting was rescheduled tentatively for mid-February, 2015 which also was cancelled due to scheduling conflicts resulting in further rescheduling for the upcoming Summer of 2015. However, Gary Lauer had an emergency health crisis that resulted in surgery in June of 2015 and recovery in July 2015 which necessitated a third cancellation of the Program Advisory Committee meeting. Finally, the Program Advisory Committee assembled on February 17, 2016 for review and approval of two back-logged Outcome Assessment Plans regarding the Classes of 2013 and 2014.]

Members Present at this February 17, 2016 Meeting: Dr. Gary Lauer, Tamara Janak, Rene Rambur, Janet Milligan, Dr. RoseAnna Holliday, Jayson Lloyd, Martha Scott, Merry Olson, Jeff Shelton, Lawrence Blamires, Dennis Buettner, Robert Schramm, Jake Kerley. Members Absent: Ron Jones, Ryan Mumford, Kandis Petersen, Lindsay Smith.

Motion to Accept Class of 2014 Outcome Assessment plan as presented by Gary and Tamara was made by member Dr. RoseAnna Holliday and seconded by member Merry Olson.

Program Effectiveness Measures (Category I: Graduate Performance)	
Program Completion Rates	Benchmark for 1.1.1. of $\geq 80\%$ annual graduation rate was met at 100%
ARRT Pass Rates	All 4 benchmarks for 1.1.2. was met.
Employment Rates	Benchmark for 1-1-3 of $\geq 80\%$ of those seeking employment of those surveys returned (excluding military and continuing education) was met at 100%. 2 out of 14 graduates didn't actively seek (find) employment within 12 months of graduation.
Graduate Satisfaction	Benchmark for 1-1-4 of $\geq 80\%$ students received a quality education was met at 100%.
Employer Satisfaction (of Graduate Technical Skills).	Benchmark for 1.1.5 $\geq 95\%$ combined satisfactory rating of those surveys returned was met at 100%.
Amendments to Category I: Graduate Performance (Program Effectiveness)	None.
Summary	All 8 benchmarks reflecting 5 outcomes were met for Category I: Graduate Performance. Students are completing the program, passing the registry exam, gaining employment, receiving a quality education, and satisfying employers with their technical competence.
Student Learning Outcomes (Categories II – V)	
Category II: Clinical Performance	7 out of 11 benchmarks for this goal were met goal except 2.2.4.B (Image Quality). Continued increased awareness and reinforcement of this critical content area will be implemented during all lectures, demonstrations, and labs. NOTE: 2.2.1.D. (Pt. Care), 2.2.2.B. (Positioning), and 2.2.3.B.1. (Radiation Safety) could not be calculated due to misplaced / lost unsatisfactory comps. However, the actual average performance by the Class of 2014 on their ARRT Registry exam in Radiography with respect to these

	section scores was as follows: Patient Care was 8.8; Procedures (Positioning) was 8.2; Image Quality (Image Acquisition and Evaluation) was 8.7 and Radiation Protection was 8.8. All section scores exceeded the minimum ARRT section passing score of 7.5.
Amendments to Category II: Clinical Performance	None
Summary	7 out of 11 benchmarks reflecting 4 outcomes for Category II: Clinical Performance was met. Even though three benchmarks could not be assessed, graduates exceeded ARRT section scores in these areas on their actual registry exams. Therefore, the program appears effective in preparing students to become clinically competent as entry level radiographers. Students seem to be evidencing an understanding of professional communications, safety and transfer of patients, patient care and assessment, infection control, how to deal with acute situations and exam prep. They are demonstrating quality positioning skills for both entry level noninvasive and invasive procedures in class and in clinical education. They are applying appropriate radiation safety measures in protecting the patient, themselves and others. They are correctly evaluating images on non-routine patients.
Category III: Problem Solving and Critical Thinking	All 4 benchmarks for this goal were met.
Amendments to Category III: Problem Solving and Critical Thinking	None
Summary	All 4 benchmarks reflecting 3 outcomes for Category III: Problem Solving and Critical Thinking were met. The program appears effective in providing problem solving and critical thinking skills. Students learn how to set fixed and variable exposure techniques in the production of quality images. They learn how to evaluate image quality and demonstrate this understanding during competency evaluations. ALARA exposure techniques are being selected by the students and monitored by RT evaluators, clinical instructors and the program's clinical coordinator.
Category IV: Communication Skills	All 3 benchmarks for Category IV: Communication Skills was met.
Amendments to	None.

Category IV: Communication Skills	
Summary	All 3 benchmarks reflecting 2 outcomes for Category IV: Communication Skills was met. The program appears effective in having students communicate effectively orally and in writing with patients, staff and faculty.
Category V: Professional Growth and Development	All 3 benchmarks for this goal were met.
Amendments to Category V: Professional Growth and Development	None
Summary	All 3 benchmarks reflecting 3 outcomes for Category V: Professional Development were met. The program appears effective in having students applying the values, ethics and compassion of a radiographer. They are developing a 5-year career development plan.
Assessment Plan Review	
Mission Statement	Recommend no changes to the program mission statement.
Goals	Recommend no changes to the program goals.
	NOTE: 25 out of 29 benchmarks that were measured (86.2%) reflecting 17 outcomes covering five goals were met. 3 out of these 4 benchmarks were unable to be measured due to lost data (all unsatisfactory competencies could not be found after we had measured outcome 2.2.4. regarding the number of unsatisfactory comps due to poor image quality.
Recommended changes to the assessment plan.	None.
Final Thoughts	None