

College of Southern Idaho

Radiologic Technology Program Outcome Assessment Plan -- Class of 2010

**Mission: To prepare 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 Commencement Ceremony Program Listing	≥ 80 % graduation rate per class.	Commencement (May)	Program Director	Yes 12/12 = 100%	Committee recommended using CSI Institutional Research Graduation Report as a more valid tool for 2011.
2. Graduates will pass the ARRT exam in radiography on the first attempt.	ARRT Radiography Examination Summary	Class mean scaled score ≥ 80 with ≥ 80 % first time pass rate.	December	Program Director	Yes 86% Mean 100% First Time Pass Rate	None
3. Graduates will be employed or continuing their education within 6 months.	Alumni Survey Question #11, 12.	≥ 80 % of those seeking employment or continuing their education in 6 months of those surveys returned.	Six months post-graduation.	Program Director	Yes 7/7 = 100% 12 surveys mailed or emailed. Only 7 answered questions 11 and 12.	Shorten alumni survey to improve data collection.
4. Graduates will receive a quality education.	Alumni Survey Question #4.	≥ 80% say Yes of those surveys returned.	Last day of class during final spring semester.	Program Director	Yes 10/10 Mean = 4.37 12 surveys mailed or emailed. Only 10 answered question #4.	None

5. Employers will be satisfied with the performance of graduates.	Employer Survey Question #1	≥ 95 % Combined satisfactory rating of those surveys returned.	Six months post - graduation.	Program Director	Yes 4/4 = 100% 7 surveys mailed or emailed based on data from 1-1-3. Only 4 surveys returned answering question 1.	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 Unit Exams # 4 - 7. B. RADT 150 Patient Care in Radiography II Unit Exams # 11 and 12 C. No simulation Competency Evaluation Forms for (1) UGI Series and (2) Trauma Hip.	A. ≥ 80 % Combined average score. B ≥ 80 % Combined average score C. ≥ 100 % Combined satisfactory rating on the first attempt.	A. First semester B. Second semester C. Third, Fourth or Fifth semester	A. Didactic Instructor B. Didactic Instructor C. Clinical Coordinator	A. Yes = 90% B. Yes = 92.5% C. No UGI 10/10 = 100% T/HIP 9/10 = 90% Mean = 95%	A. None B. None C. Note: 2 comps were simulations and not used. Benchmark of “on the first attempt” is not realistic as students have three chances to pass comps. Committee recommended benchmark be changed to 3 attempts. Comp evaluation was instructive for student who failed to shield patient. Student passed second attempt.

<p>2. Students will demonstrate quality positioning.</p>	<p>A. RADT 162 Radiographic Procedures II Unit Exams # 11 - 17.</p> <p>B. No simulation Competency Evaluation Form for (1) Humerus and (2) Barium Enema # 5, 6, 7.</p>	<p>A. $\geq 80\%$ Combined average score.</p> <p>B. $\geq 100\%$ Combined satisfactory rating on the first attempt.</p>	<p>A. Fourth semester</p> <p>B. Third, Fourth or Fifth semester</p>	<p>A. Didactic Instructor</p> <p>B. Clinical Coordinator</p>	<p>A. Yes</p> <p>= 93%</p> <p>B. No</p> <p>Hum = 11/12 = 91.6%</p> <p>BE = 8/8 = 100%</p> <p>Mean = 95.8%</p>	<p>A. None</p> <p>B. Committee recommended change benchmark to 3 attempts to better reflect the competency eval process. Comp eval was instructive for this student who failed to remove artifacts on the AP but removed them for the LAT.</p>
<p>3. Students will apply appropriate radiation safety principles.</p>	<p>A. RADT 152 Radiation Protection Unit Exams # 7 and 8.</p> <p>B. Competency Evaluations # 3, 4, 8, for three randomly selected non-invasive radiography exams.</p>	<p>A. $\geq 80\%$ Combined average score.</p> <p>B-1. $\geq 100\%$ Combined satisfactory rating on the first attempt.</p> <p>B-2 $\geq 100\%$ Combined satisfactory rating on the first attempt.</p> <p>B-3 $\geq 100\%$ Combined satisfactory rating on the first attempt.</p>	<p>A. Second semester</p> <p>B-1 Third semester</p> <p>B-2 Fourth semester.</p> <p>B-3. Fifth semester.</p>	<p>A. Didactic Instructor</p> <p>B-1 Clinical Coordinator</p> <p>B-2 Clinical Coordinator</p> <p>B-3 Clinical Coordinator</p>	<p>A. Yes</p> <p>Mean = 87.8%</p> <p>B-1 Yes</p> <p>12/12 = 100%</p> <p>B-2 Yes</p> <p>12/12 = 100%</p> <p>B-3 Yes</p> <p>12/12 = 100%</p>	<p>A. None</p> <p>B-1-2-3. Change benchmark to 3 attempts to reflect the competency eval process. Note: RT evaluator scored shielding as N/A which is unacceptable. Memo sent to CIs that all tasks must be assessed by RTEs.</p>

4. Students will demonstrate the ability to evaluate image quality on non-routine patients.	No simulation Competency Evaluations / Image Quality Assessment Section for (1) Trauma C-Spine, (2) Pediatric Chest and (3) Portable Abdomen.	≥ 100 % Combined satisfactory rating on the first attempt.	Third, Fourth or Fifth semesters combined.	Clinical Coordinator	Yes TCS 6/6 = 100% PC = 11/11 = 100% PABD = 9/9 = 100% Mean = 100%	Change benchmark to 3 attempts to reflect the competency eval process. Note: RTE passed one student but failed to record image analysis assessment. Memo to CIs that all tasks must be assessed by RTEs.
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 the least amount of radiation (High kV & Low mAs).	A. RADT 164 Imaging and Processing Unit Exams # 9, 10, 11 B. Competency Evaluations # 8, 10 and Image Quality Assessment section of one randomly selected competency evaluation of each student.	A. ≥ 80 % Combined average score. B. ≥ 100 % Combined Satisfactory rating on the first attempt.	A. Fourth Semester B. Fifth Semester	A. Didactic Instructor B. Clinical Coordinator	A. Yes Mean = 90% B. No 10/11 = 91%	A. None B. Committee recommended to remove “on the first attempt” to reflect competency evaluation process. Note: Memo to students, CIs / RTEs that exposure techniques must be on all comp evals. Re-emphasize in clinical ed orientation and CI workshops.

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 section score.	Fifth Semester	Clinical Coordinator	Yes 12/12 Mean = 7.8	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 section score.	Fifth semester	Clinical Coordinator	Yes 12/12 Mean = 7.2	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 radiography-related discussions with patients, staff and each other.	Explanation # 1 & 2 of the competency evaluation. (Randomly selected non-invasive.)	A-1. ≥ 80 % Combined satisfactory rating.	A-1 Third semester.	A-1 Clinical Coordinator	A-1 Yes 12/12 = 100%	A-1 None
		A-2. ≥ 85 % Combined satisfactory rating.	A-2. Fourth semester.	A-2. Clinical Coordinator	A-2 Yes 12/12 = 100%	A-2 None
		A-3. ≥ 90 % Combined satisfactory rating.	A-3. Fifth semester.	A-3. Clinical Coordinator	A-3 Yes 12/12 = 100%	A-3 None
2. Students in clinical setting will exhibit good oral, written, listening communication skills.	Clinical Education Grade Determination Form B # 5. Note. Some students will attend	≥ 90 % Combined satisfactory rating.	A-1 Third semester.	A-1 Clinical Coordinator	A-1 Yes 14/14 = 100%	A-1 None
			A-2. Fourth semester.	A-2. Clinical Coordinator	A-2 Yes 17/17=100%	A-2 None

	more than one clinical affiliate during a semester and get more than one Form B Grade Determination.		A-3. Fifth semester.	A-3. Clinical Coordinator	A-3 Yes 13/13 = 100% Mean = 100%	A-3 None
3. Students in didactic setting will communicate effectively in writing.	A. Post certification report B. Post certification report. Note: Student split her report between 2 post certification modalities.	A. ≥ 8 points combined satisfactory rating. B. ≥ 8 points combined satisfactory rating.	A. Third semester. B. Fourth semester.	A. Clinical Coordinator B. Clinical Coordinator.	A. Yes 12/12 Mean = 9.87 pts B. Yes 12/12 Mean = 9.1 pts	A. None 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 values, ethics and compassion of a radiographer.	A. Final Grade Determination Form B. Note: For data see 4-4-2.	A-1. ≥ 90 % Combined satisfactory rating. (30 % of grade) A-2. ≥ 90 % Combined satisfactory rating. (30 % of grade) A-3. ≥ 90 % Combined satisfactory rating. (30% of grade)	A-1 Third semester. A-2. Fourth semester. A-3. Fifth semester.	A-1 Clinical Coordinator A-2. Clinical Coordinator A-3. Clinical Coordinator.	A-1 Yes 14/14 = 100% A-2 Yes 17/17 = 100% A-3 Yes 13/13 = 100%	A-1 None A-2 None A-3 None

2. Graduates will apply the values, ethics and compassion of a radiographer.	Employer's Survey # 1 Note: For data see 1-1-5.	≥ 95 % Combined satisfactory rating of those surveys returned.	Six months post graduation.	Program Director	Yes 4/4 = 100% 7 surveys mailed or emailed based on data from 1-1-3. Only 4 surveys returned answering question 1.	None
3. Students will develop a five year career development plan.	Five Year Career Development Plan	≥ 90 % Combined satisfactory rating.	Fifth semester	Clinical Coordinator	Yes 12/12 Mean = 96%	None

**College of Southern Idaho
Radiologic Technology Program
Minutes of the “Communities of Interest” Committee
for the Class of 2010 Outcomes Assessment Plan
July 8, 2011 – 10 am to 12 am – HSHS 178**

Attending:

Dr. O. Gary Lauer, RT, Radiologic Technology Program Director, CSI

Ms. Karen J. Roberts, MTD, RT, Radiologic Technology Program Clinical Coordinator, CSI

Ms. Teresa Adams, RT, Director of Imaging, Cassia Regional Medical Center, Burley, Idaho

Mr. Robin Albee, Professional-Technical Education Evaluation Specialist, CSI

Ms. Tamara Janak, BSRS, RT, Sim Lab Coordinator, Instructor Allied Health, Mammography Course Director, CSI

Ms. Michele McFarlane, Evaluation & Assessment Coordinator, CSI

Ms. Cyndie Woods, Project Manager, CBJTII, CSI

Mr. Dustin Robinson, Health Sciences and Human Services Student Academic Advisor, CSI

Ms. Cynthia Harding, MS. RDH, Program Director, Dental Hygiene, CSI

Dr. Mark Sugden, HSHS Instructional Dean, CSI

Ms. Merry Olsen, Career Readiness Facilitator, CSI

Ms. Susan Petruzzelli, HSHS Office Specialist, CSI

Dr. Lauer welcomed and thanked everyone for attending and asked everyone to introduce themselves. Then, Dr. Lauer reviewed the agenda items which included: (1) a discussion of the JRCERT Standards / Standard 5: Assessment, (2) Summary Overview of the Classes of 2008 – 2011, and (3) the presentation of the Class of 2010 Outcome Assessment Plan for which the committee was assembled. Dr. Lauer asked the committee to keep three assessment questions in mind when reviewing the Results column: (1) Why are the results lower than expected (if they are)? (2) What contributed to the low results? (3) What is the program doing to improve the results. Dr. Lauer explained that at the end of each of the five (5) categories that he is presenting, he will call for a motion to accept or amend the action on all results for a category and that these motions be reflected in the minutes. Dr. Lauer presented the Program Effectiveness Outcomes first (as it is the first category in the assessment plan) followed by Student Learning Outcomes and the Assessment Plan Review. The following reflects the data points presented by Dr. Lauer and all motions amending the Class of 2010 Outcomes Assessment Plan as recorded by Ms. Susan Petruzzelli, HSHS Office Specialist. Meeting adjourned at 11:45 am.

Program Effectiveness Outcomes (Category I: Graduate Performance)	
Program Completion Rates	100% 12 students were selected for the Class of 2010 and 12 graduated. The program continues to meet its benchmark.
ARRT Pass Rates	100% first time pass rate for the Class of 2010 with an 86% mean standard score. The 5 year average is 99% pass rate with an 86 mean standard scaled score. The mock registry examination outcome conducted in the final 5 th semester of training appears to help students pass the registry exam. The program continues to meet its benchmark.
Employment / Continuing Education Rates	100% 12 surveys were sent out to graduates. Of the 7 who answered the question all 7 indicated they were employed. This benchmark is met.
Graduate Satisfaction	4.37 on a scale of 1-5 of those surveys returned. 10 out of the 10 surveys returned indicated that graduates felt they had received a quality education that is above average. This benchmark is met.
Employer Satisfaction	100% 7 surveys sent to 7 employers based on data from 1-1-3. Only 4 surveys returned answering questions indicating satisfaction with the performance of our graduates. All would consider rehiring our graduates if they left. All would hire another of our graduates. Two comments were positive indicating that since the program first began, there have been lots of changes and improvements and that the program runs pretty smooth. Another employer (radiology manager) registered negative comments on the survey instrument on a long standing issue that only BIOL 227/228 Anatomy and Physiology I and II (8 Credits) be required instead of BIOL 127 Human Structure and Function (4 Credits) as the latter course lowers the bar according to the radiology manager. Both courses have been deemed appropriate options by program officials and JRC site visitors for entry level radiography training. This individual continues to press this issue (as well as others) at every opportunity although she knows our official position.
Motion to Amend Category I: Graduate Performance (Program Effectiveness)	Motion made by Tamara Janak to amend Category 1: Goal 1: Outcome 1: Wording of Tool section – change CSI Commencement Ceremony Program Listing for data collection for the Class of 2011 to CSI Institutional Research Graduation Report. Michele McFarlane’s office can provide this report. Rationale was that a student can be listed in the official commencement pamphlet and not be officially graduated. Also to amend Goals 3,4,5: Wording of Result section – Include number of surveys sent and number of respondents along with methods used. Motion to amend was seconded by Cindy Harding. Vote taken of all present, all in favor, motion passed.

	Summary: The CSI Associate of Applied Science Radiologic Technology Program appears to be effective in meeting its mission statement and goals. A high percentage of students complete the program, pass the ARRT examination on the first attempt, gain employment or continue their education. Graduates appear to be satisfied with the quality of their education. Employers are satisfied with program graduates.
Student Learning Outcomes (Categories II – V)	
Category II: Clinical Performance	Benchmark 2-2-1-C was not met although the competency evaluation was instructive for the student who failed but passed on her second competency evaluation attempt.
	Benchmark 2-2-2-B was not met. The competency evaluation experience was instructive for the student who failed to remove artifacts on the AP but removed them for the Lateral.
	Regarding benchmark 2-2-3-B-1 (which was met), please note that the RT evaluator scored shielding as not applicable (N/A) and then passed the student undergoing competency evaluation. This practice is unacceptable. Therefore, the clinical coordinator has emailed a memo to all Clinical Instructors requiring that they notify RT evaluators to make sure all tasks are assessed on each student during the competency evaluation procedure.
Amendments to Category II: Clinical Performance	Motion made by Cyndie Woods to amend Category 2: Goal 2: Outcomes 1-4: Benchmark sections for the Class of 2011 (2-2-1-C; 2-2-2-B, 2-2-3-B-1-2-3; 2-2-4) – change combined satisfactory rating to three attempts, instead of first attempt to better reflect the competency evaluation process. Motion seconded by Dustin Robinson. Vote taken of all present, all in favor, motion passed.
	Summary: Although 2 out of the 10 benchmarks were not met, the program appears to be effective in preparing students to become clinically competent as entry level radiographers. They evidence 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 clinical education. They are correctly evaluating images on non-routine patients.
Category III: Problem Solving and Critical Thinking	Benchmark 3-3-1-B was not met for this goal. The present benchmark of 100% combined satisfactory rating on the first attempt is considered unrealistic since students receive three chances to pass each competency evaluation. Memo was sent to students, clinical instructors and RT evaluators that exposure techniques must be written down on all competency evaluations to verify ALARA exposure techniques (Optimum kV and Low mAs). The Clinical Coordinator will re-emphasize this request during clinical site visits, student

	clinical education orientation and at clinical instructor workshops.
Amendments to Category III: Problem Solving and Critical Thinking	Motion made by Merry Olsen to amend Category 3: Goal 3: Outcome 1-B: Benchmark section – remove “on the first attempt” wording. Action section – explain steps taken to get closer to the benchmark. Outcome 2 & 3: Results section – reflect number of participants. Motion seconded by Teresa Adams. Vote taken of all present, all in favor, motion passed.
	Summary: Three out of four benchmarks were met. Students are learning how to set ALARA exposure techniques, assess radiographic image quality, and adjust equipment operation and control factors.
Category IV: Communication Skills	All 8 benchmarks for this goal were met.
Amendments to Category IV: Communication Skills	Motion made by Dr. Sugden to amend Category 4: Goal 4: Outcome 2: Move note in Action section to Tools section. Outcome 3: Result section – include number of participants involved in results.
	Summary: The program appears effective in engaging students with patients, staff and each other. Students are listening and comprehending. They are communicating effectively orally and in writing. The new Clinical Education Grade Determination Form B in use for the Class of 2010 has improved assessment of their communication employability skills in the clinical setting.
Category V: Professional Growth and Development	All 5 benchmarks for this goal were met.
Amendments to Category V: Professional Growth and Development	Motion made by Michele McFarlane to amend Category 5: Goal 5: Outcome 1: Benchmark section change from 30 points to 30 percent as percentage accurately reflects the percentage the grade is weighted. Outcome 2: Wording of Results section – include number of employee surveys sent and number of respondents along with methods used. Outcome 3: results section – include number of participants (i.e., 12 participants, 96% average). Motion seconded by Teresa Adams. Vote taken of all present, all in favor, motion passed.
	Summary: Students and graduates are applying the values, ethics and compassion of a radiographer. Students are developing a 5 year career development plan.
Assessment Plan Review	
Mission Statement	The mission statement was reviewed and amended.
Goals	The goals were reviewed and felt to be still applicable by the committee.

Amendments to Mission and Goals	Motion made by Dustin Robinson to approve Goals and amend Mission Statement: -- replace “is to prepare graduates” with “is preparing students to become graduates.” Thus, the revised mission statement would read as follows: The mission of the College of Southern Idaho’s Associate of Applied Science Radiologic Technology Program in Radiography is to prepare students to become graduates for entry level employment as ARRT Registered Technologists in Radiography. Motion seconded by Merry Olsen. Vote taken of all present, all in favor, motion passed.
Assessment Plan	Motion made by Michele McFarlane for Dr. Lauer to revise Assessment Plan to reflect amended changes from the minutes of today’s meeting. Motion seconded by Teresa Adams. Vote taken of all present, all in favor, motion passed.
	<p>The graduate survey for the Class of 2011 was shortened to simplify and improve pertinent data collection in a fashion that is similar to our employer satisfaction survey which only asks just a few pertinent questions. To improve data collection, we will have students complete this survey the last week of the final semester of training, when the student is on site and accessible. Then, in six months, Dr. Lauer will follow up to obtain employment or continuing education confirmation. The present graduate survey that has been in use since the beginning of the program has 20 questions and only three apply to our outcomes assessment plan. The revised survey will ask only four questions: (1) Did the JRCERT Approved CSI Radiologic Technology program adequately prepare you for entry level employment as an ARRT Registered Technologist in Radiography? YES/NO (2) Are you presently employed as a radiographer? YES/NO (3) If presently employed, please provide employer contact information. (4) Please provide the following contact information where we may reach you within six months to verify your employment or continuing education status.</p> <p>Overall 90.6% of the benchmarks (29/32 = 90.6%) were met for the Class of 2010.</p> <p>Final thoughts: This is the 3rd of four outcome assessment plans and the first to be reviewed and amended by a “communities of interest” committee as reflected in these minutes.</p>