College of Southern Idaho Radiologic Technology Program Outcome Assessment Plan for the Class of 2018

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

Category I: Graduate Performance

Goal I: Program effectiveness will be measured on an ongoing basis

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Outcome	Tool	Benchmark	Time Frame	Responsibility	Result	Action			
Enrolled students will complete the program.	CSI Institutional Research Graduation Report	≥ 80 % annual graduation rate.	Commencement (May)	Program Director	Yes 12/12 = 100%	None			
2.	A.	A.	A.	A.	A.	A.			
Graduates will pass the ARRT exam in radiography on the first attempt. [Note: Data is taken	Annual first-time pass rate.	≥ 80 % Annual first time pass rate.	January 1 to December 31 for graduating class.	Program Director.	Yes 12 out of 12 total students (100%) passed the registry on their first attempt this year.	None			
from the ARRT	В.	В.	В.	В.	В.	В.			
Radiography Examination Summary.]	5-year first time pass rate.	≥ 80 % 5-year first time pass rate.	January 1 to December 31 for graduating class.	Program Director.	Yes 58 out of 61 total students (95%) passed the registry on their first attempt during the past five years.	None			
	C. Annual program mean scaled score.	C. ≥ 80 Annual program mean scaled score.	C. January 1 to December 31 for graduating class.	C. Program Director.	C. Yes The annual program mean scaled score for 12 out 12 total students (100%) was 89.	C. None			



	D. 5-year program mean scaled score.	D. ≥ 80 5-year program mean scaled score.	D. January 1 to December 31 for graduating class.	D. Program Director.	D. Yes The five-year program mean scaled score for 58 students who passed out of 61 total students was 95.	D. None
3. Graduates will be employed within 6 months of graduation.	CSI RT Program Graduate Survey (Q # 4 & List).	≥ 80 % of those seeking employment of those surveys returned. (Excludes military and continuing education.)	Last day of class during the final spring semester of training. (Note: Students who are not employed as of last day of class are contacted within 6 months of graduation.)	Program Director	Yes 12/12 students = 100% employed within 6 months	None
4. Graduates will receive a quality education.	CSI RT Program Graduate Survey Q # 1. Did the CSI Radiologic Technology Program adequately prepare you for entry level employment as an ARRT Registered Technologist in Radiography? (Note: Answers to this question are anonymous.)	≥ 80% students answer YES of those who returned surveys and answered the question.	Last day of class during final spring semester.	Program Director	Yes 12/12 students (100%) received a quality education	None

5. Employers will be satisfied with the (hard – technical) performance of graduates.	Employer Survey Question #4: Please rate this person's overall technical abilities (i.e., rad protection, equip operation, quality control, image acquisition, image analysis, imaging procedures, patient	≥ 95 % Combined satisfactory rating of those surveys returned.	Six months post - graduation.	Program Director	Do	Do
	care).					

Category II: Clinical Performance.

Goal II: Students will be clinically competent.

Outcome	Tool	Benchmark	Time Frame	Responsibility	Result	Action
1.	A.	A.	A.	A.	A.	A.
Students will	RADT 102	≥ 80 % Combined	First Semester.	Didactic Instructor.	Yes	None
demonstrate	Orientation to	average score.			12 of 12 students	
essential	Radiologic				combined average	
knowledge of	Technology Exam				score = 98.6%	
radiography patient	#10 Response to					
care.	Patients' Personal					
	and Physical Needs.					
[NOTE: All CSI						
Radiologic	В.	В.	В	В.	В.	В.
Technology	RADT 102	≥ 80 % Combined	First Semester.	Didactic Instructor.	Yes	None
students are	Orientation to	average score.			12 of 12 students	
credentialed	Radiologic	_			combined average	
patient care givers	Technology Exam				score = 98%	
in either CNA, EMT-	#11					
Basic, MA, DA, DH,	Patient					
or LPN prior to	Assessment.					
being accepted into						
the program.						
CSI HSHS Program						
Directors have						

verified via email C. C. C. C. C. C. C.
Leantirmation that LDADT 102 L > 20.0/ Combined L First Competer Didagtic Instructor Vac Name
confirmation that graduates of theirRADT 102 Orientation to≥ 80 % Combined average score.First Semester.Didactic Instructor.Yes 12 of 12 students
programs in the Radiologic combined average
above credentialing Technology Exam score = 99%
areas have #12
demonstrated Patient Transfer.
competence in the
essential D. D. D. D. D. D.
knowledge and RADT 102 ≥ 80 % Combined First Semester. Didactic Instructor. Yes None
skills in basic Orientation to average score. 12 of 12 students
patient care that Radiologic combined average
are identified in the Technology Exam score = 99%
ARRT general #15
patient care Emergency
requirements Response.
except for
knowledge and
competence to
perform
venipuncture,
which is taught in
RADT 102
Orientation to
Radiologic
Technology and
RADT 165
Fundamentals of
Computed
Tomography.]

E:	E.	E.	E.	E.	E.
	E. ≤ 5% first time		Clinical		
Competency		Third, Fourth and	Coordinator.	Yes	None
evaluation form	unsatisfactory rate	Fifth Semester.	Coordinator.	0 unsatisfactory	
task 4: Examination	of patient care			comps /633 total	
order verified, on	tasks of all comps.			comps= 0% first	
all unsatisfactory				time unsatisfactory	
competency				rate for 12 out of	
exams.				12 students	
				(100%).	
[Note: In "B"					
through "E" above					
we are counting					
the number of					
comps that are					
affected by the					
evaluated task and					
NOT the number of					
tasks in each comp					
that are affected.					
Note: It only takes					
one unsatisfactory					
task to fail a comp.					
And, students may					
fail a comp in one					
or more of the					
above three areas.					
F.	F.	F.	F.	F.	F.
RADT 182 Clinical	≥ 3 Combined	Fifth Semester.	Clinical	Yes	None
Education III Final	average score.		Coordinator	47.8/12 students	
Grade	2.2.4 <u>6</u> 2.500.2.		22214111401	= 3.9 combined	
Determination				average score	
Form B - # 6:				410.480 30010	
Professional and					
Ethical Conduct.					
Ethical Conduct.					

	Τ.	1 .	Т.,	Γ.	Ι.	· ·
3.	Α.	Α.	A	A.	Α.	A.
Students will	RADT 102	≥ 80 % Combined	First Semester.	Didactic Instructor.	Yes	None
demonstrate	Orientation to	average score.			15.7/16 points =	
essential	Radiologic				98% combined	
knowledge in	Technology				average score for	
venipuncture.	Chapter Exam # 14				12 out of 12	
	Medication				students (100%)	
	Administration					
	(which includes					
	knowledge of					
	venipuncture).					
	B.	В.	В.	В.	В.	В.
	RADT 165	≥ 80 % Combined	Fifth Semester.	Didactic Instructor.	Yes	None
	Fundamentals of	average score.			25.23/26 points =	
	Computed				97% combined	
	Tomography				average score for	
	Chapter Exam #9				12 out of 12	
	Intravenous Drug				students (100%)	
	Administration					
	Technique					
	(Venipuncture).					
4.	RADT 165	≥ 90% first time	Fifth Semester.	Didactic Instructor.		To Be
Students will	Fundamentals of	pass rate on all				
demonstrate	Computed	venipuncture				Determined
competence in	Tomography	competency				for Class of
performing	Venipuncture	evaluations.				
venipuncture.	Competency					<mark>2019.</mark>
	Evaluation.					

5.	Α.	Α.	Α.	Α.	Α.	A.
Students will	RADT 151	≥ 80 % Combined	Second Semester.	Didactic Instructor.	Yes	None
demonstrate	Radiographic	average score.	Second Semester.	Didactic instructor.	46.75/50 points	None
essential	Procedures I: Exam	average score.			=93.5% combined	
	2: Chest.					
knowledge of	2: Cnest.				average score for	
radiographic					12 out of 12	
positioning.		_			students (100%)	
	В.	В.	В.	В.	В.	В.
	RADT 151	≥ 80 % Combined	Second Semester.	Didactic Instructor.	Yes	None
	Radiographic	average score.			46.59/50 points =	
	Procedures I: Exam				93% combined	
	8: Cervical and				average score for	
	Thoracic Spine.				12 out of 12	
					students (100%)	
	C.	C.	C.	C.	C.	C.
	RADT 180 Clinical	≥ 80 % Combined	Third Semester.	Didactic Instructor.	Yes	None
	Education I: Exam	average score.			46.7/50 points	
	13: Lower	_			=93.4% combined	
	Gastrointestinal				average score for	
	System.				12 out of 12	
					students (100%)	
	D.	D.	D.	D	D.	D.
	RADT 162	≥ 80 % Combined	Fourth Semester.	Didactic Instructor.	Yes	None
	Radiographic	average score.			47.2/50 points	
	Procedures II: Exam	average score.			=94.4% combined	
	# 11: Cranium,		•		average score for	
	Facial Bones, and				12 out of 12	
	Paranasal Sinuses.				students (100%)	
6.	A.	A.	A.	Α.	A.	A.
Students will	Competency	A. ≤ 5% first time	Third, Fourth and	Clinical	Yes	None
	evaluation form		Fifth Semester.			NOTIE
demonstrate		unsatisfactory rate	riitii Semester.	Coordinator.	1 unsatisfactory	
competence in	task 10: Patient	of positioning			comp /633 total	
radiographic	Position on all	tasks.			comps= 0.15% first	
positioning.	unsatisfactory				time unsatisfactory	
	competency				rate for 12 out of	
	exams.				12 students	
					(100%).	

		D	I 8	I n		
	В.	В.	B.	B.	В.	В.
	Competency	≤ 5% first time	Third, Fourth and	Clinical	Yes	None
	evaluation form	unsatisfactory rate	Fifth Semester.	Coordinator.	4 unsatisfactory	
	task 11: Part	of positioning			comps /633 total	
	Position on all	tasks.			comps= 0.6% first	
	unsatisfactory				time unsatisfactory	
	competency				rate for 12 out of	
	exams.				12 students	
	CAGAIII O				(100%).	
	C.	C.	c.	C.	C.	C.
		-	=		-	
	RADT 182 Clinical	≥ 3 combined	Fifth Semester.	Clinical	Yes	None
	Education III Final	average score on a		Coordinator.	45.87 total	
	grade	scale of 4 to 1			points/12 students	
	determination form	4 = Excellent			= 3.82 (Acceptable)	
	B # 7: Student can	1 = Unsatisfactory			combined average	
	perform previously				score.	
	comped exams					
	without					
	intervention.					
7.	A.	Α.	A.	Α.	A.	
Students will	RADT 152 Radiation	≥ 80 % Combined	First Semester.	Didactic Instructor.	Yes	
demonstrate	Protection Chapter	average score.	That semester.	Diddette moti detoi.	41.92 total average	
	Exam # 3:	average score.			points /43 possible	
essential	Interaction of X-					
knowledge in					points = 97.5%	
radiation safety	Radiation on				combined average	
principles and	Matter.				score.	
practices.	B.	В.	В.	B.	В.	
	RADT 152 Radiation	≥ 80 % Combined	First Semester.	Didactic Instructor.	Yes	
	Protection Chapter	average score.			47.8 total average	
	Exam # 12:				points / 49 possible	
	Management of				points = 97.5%	
	Patient Radiation				combined average	
	Dose during				score.	
	Diagnostic X-Ray				120.0.	
	Procedures.					
	i i ocedures.					

	C. RADT 152 Radiation Protection Chapter Exam # 13: Management of Imaging Personnel Radiation Dose	C. ≥ 80 % Combined average score.	C. First Semester.	C. Didactic Instructor	C. Yes 51.4 total average points / 53 possible points = 97% combined average score.	
	during Diagnostic X-Ray Procedures.				Score.	
8. Students will demonstrate competence in radiation safety principles and practices.	A. Competency evaluation form task # 9: Shielding,	A. ≤ 5% first time unsatisfactory rate of radiation safety tasks on all unsatisfactory competency exams.	A. Third, Fourth and Fifth Semester.	A. Clinical Coordinator.	A. Yes 0 unsatisfactory comps /633 total comps= 0.0% first time unsatisfactory rate for 12 out of 12 students (100%).	
	B. Competency evaluation form task # 13: Collimation.	B. ≤ 5% first time unsatisfactory rate of radiation safety tasks on all unsatisfactory competency exams.	B. Third, Fourth and Fifth Semester.	B. Clinical Coordinator.	B. Yes 0 unsatisfactory comps /633 total comps= 0% first time unsatisfactory rate for 12 out of 12 students (100%).	

	T -	Ι _	Т	Τ _	T _	
	C.	C	C.	C.	C.	
	RADT 181 Clinical	≥ 3 Combined	Fourth Semester.	Clinical	Yes	
	Education II:	average score on a		Coordinator.	48 possible points /	
	Final grade	scale of 4 to 1			12 total students =	
	determination form	4 = Excellent			4 (Excellent)	
	B #1: The student	1 = Unsatisfactory			combined average	
	observes safety				score.	
	practices. He/she					
	practiced radiation					
	protection for					
	patients,					
	themselves, co-					
	workers, and					
	others and strives					
	to maintain a safe					
	working					
	environment					
	always for					
	everyone.					
9.	A.	A.	A.	A.		
Students will	RADT 153 Image	≥ 80 % Combined	Second Semester.	Didactic Instructor.		
demonstrate	Analysis Exam 1:	average score.				
essential	Radiographic					
knowledge of	Properties of Image					
image analysis	Visibility.					
the effects of x-ray	В.	В.	В.	B.		
exposure factors on	RADT 153 Image	≥ 80 % Combined	Second Semester.	Didactic Instructor.		
radiographic image	Analysis Exam 2:	average score.				
quality at the IR.	Geometric					
	Properties of Image					
To Be	Formation.					
	C.	C	C.	D.		
Determined	RADT 153 Image	≥ 80 % Combined	Second Semester.	Didactic Instructor.		
for Class of	Analysis: Exam 3:	average score.				
	Perceptual					
2019.	Properties of Image					
	Formation.					

	D. RADT 153 Image Analysis Exam 8: Effects of Focal Spot Size on Radiographic Quality. E. RADT 153 Image Analysis Exam 13: Effects of Grids on Radiographic	D. ≥ 80 % Combined average score. E. ≥ 80 % Combined average score.	D. Second Semester. E. Second Semester.	D. Didactic Instructor. E. Second Semester.	
10. Students will demonstrate competence in image analysis.	Quality. A. All unsatisfactory competency evaluations - image quality assessment factor: All anatomical structures demonstrated. B. All unsatisfactory competency evaluations - image	A. ≤ 5% First time unsatisfactory rate of image quality assessment factors. B. ≤ 5% First time unsatisfactory rate of image quality	A. Third, Fourth, and Fifth Semesters. B. Third, Fourth, and Fifth Semesters.	A. Clinical Coordinator. B. Clinical Coordinator.	A. Yes 4 unsatisfactory comps /633 total comps= 0.63% first time unsatisfactory rate for 12 out of 12 students (100%). B. 0 unsatisfactory comps /633 total comps= 0% first
	quality assessment factor: No visible motion. C. All unsatisfactory competency evaluations - image quality assessment factor: No unwanted size or shape distortion.	C. ≤ 5% First time unsatisfactory rate of image quality assessment factors.	C. Third, Fourth, and Fifth Semesters.	C. Clinical Coordinator.	time unsatisfactory rate for 12 out of 12 students (100%). C. Yes 0 unsatisfactory comps /633 total comps= 0% first time unsatisfactory rate for 12 out of

	D.	D.	D.	•	12 students				
	All unsatisfactory	≤ 5% First time	Third, Fourth, and	Clinical	(100%).				
	competency	unsatisfactory rate	Fifth Semesters.	Coordinator.	D.				
	evaluations -	of image quality			Yes				
i	image quality	assessment factors.			0 unsatisfactory				
	assessment factor:				comps /633 total				
	Image orientation				comps= 0% first				
	and annotation.				time unsatisfactory				
					rate for 12 out of				
					12 students				
					(100%).				
	E.	E.	E.	E.	E.				
	All unsatisfactory	≤ 5% First time	Third, Fourth, and	Clinical	Yes				
	competency	unsatisfactory rate	Fifth Semesters.	Coordinator.	0 unsatisfactory				
	evaluations - image	of image quality			comps /633 total				
	quality assessment	assessment factors.			comps= 0% first				
1	factor: EI & EI				time unsatisfactory				
	Range.				rate for 12 out of				
					12 students				
					(100%).				
	Catogory III. Problem Solving and Critical Thinking								

Category III: Problem Solving and Critical Thinking Goal III: Students will possess problem solving and critical thinking skills.

Outcome	Tool	Benchmark	Time Frame	Responsibility	Result	Action
1.	RADT 182 Clinical	≥8 Combined	Fifth Semester.	Clinical	Yes	Note: 8.9 was the
Students will think critically and be able to solve patient care problems.	Education III: Mock Registry Exam Section D: Patient Care.	average predicted section scaled score on four mock registry exams		Coordinator.	318.32 total points from 12 out of 12 students / 4 mocks = 79.6 average points X 0.1 = 7.96 (section score) + 1 = 8.96 predicted registry score.	actual ARRT section score for Class of 2018.

2. Students will think critically and be able to solve radiation protection problems.	RADT 182 Clinical Education III: Mock Registry Exam Section E: Radiation Protection.	≥ 8 Combined average predicted section scaled score on four mock registry exams.	Fifth Semester.	Clinical Coordinator.	Yes 292.95 total points from 12 out of 12 students / 4 mocks = 73.23 average points X 0.1 = 7.32 (converts to section score) + 1 = 8.32 (converts to predicted registry score).	Note: 9.1 was the actual ARRT section score for Class of 2018.
3. Students will think critically and be able to solve radiographic anatomy and positioning problems.	A. RADT 162 Radiographic Procedures II Lab Assessment Part A: Oral and hands-on lab assessment of radiographic anatomy and positioning knowledge and skill.	A. ≥ 3 combined average score on a scale of 4 to 1 4 = Excellent 1 = Unsatisfactory.	A. Fourth Semester.	A. Didactic Instructor.	A. Yes 40 possible points / 12 total students = combined average score of 3.3 (Acceptable).	A. None
	B. RADT 182 Clinical Education III: Mock Registry Exam Section F: Radiographic Procedures.	B. ≥ 8 Combined average predicted section scaled score on four mock registry exams.	B. Fifth Semester.	B. Clinical Coordinator.	B. 289.2 total points from 12 out of 12 students / 4 mocks = 72.3 average points X 0.1 = 7.23 (converts to section score) + 1 = 8.23 (converts to predicted registry score).	B Note: 8.9 was the actual ARRT section score for Class of 2018.

4. Students will think critically and be able to solve multiple conversion type x-ray exposure technique problems.	RADT 162 Radiographic Procedures II Lab Assessment Part B: Multiple X-Ray Exposure Technique Conversion	≥ 80 % Combined exam pass rate.	Fourth Semester.	Didactic instructor.	No 7 out of 12 students passed for a 58.3% combined exam pass rate.	Significantly increase the time to review and practice multiple x-ray exposure technique conversion problems at the end of the fourth
5. Students will think critically and be able to solve equipment operation and quality control problems.	Problem Exam. RADT 182 Clinical Education III: Mock Registry Exam Section B: Equipment Operation and Quality Control.	≥ 8 Combined average predicted section scaled score on four mock registry exams.	Fifth Semester.	Clinical Coordinator.	No 269.1 total points from 12 out of 12 students / 4 mocks = 67.3 average points X 0.1 = 6.73 (converts to section score) + 1 = 7.73 (converts to predicted registry score).	semester. Continue to simplify rad science, imaging equipment, and imaging and processing and image analysis subject matter for easier learning by students. Note: 8.7 was the actual ARRT section score for Class of 2018.
6. Students will think critically and be able to solve image production and evaluation problems.	RADT 182 Clinical Education III # 4 Mock Registry Exam Section C: Image Production and Evaluation.	≥ 8 Combined average predicted section scaled score on four mock registry exams.	Fifth Semester.	Clinical Coordinator.	No 277.66 total points from 12 out of 12 students / 4 mocks = 69.4 average points X 0.1 = 6.94 (converts to section score) + 1 = 7.94 (converts to predicted registry score).	Continue to simplify rad science, imaging equipment, and imaging and processing, and image analysis subject matter for easier learning by students. Note: 8.8 was the actual ARRT section score for Class of 2018.

7.	A.	A.	A.	A.	A.	A.
Students will think and act creatively in the clinical setting and be flexible.	RADT 182 Clinical Education III: Final grade determination form B #3: Students take initiative, anticipate, think through to completion, get desired end results.	≥ 3 combined average score on a scale of 4 to 1 4 = Excellent 1 = Unsatisfactory.	Fifth Semester.	Clinical Coordinator.	Yes 45.875 possible points / 12 total students = 3.82 (Acceptable) combined average score.	None
	B. RADT 182 Clinical Education III: Final grade determination form B # 2: Students adjust to deviations from the norm, think outside the box to achieve desired imaging end results.	B. ≥ 3 combined average score on a scale of 4 to 1 4 = Excellent 1 = Unsatisfactory.	B. Fifth Semester.	B. Clinical Coordinator.	B. Yes 43.8 possible points / 12 total students = 3.7 (Acceptable) combined average score.	B. None

Category IV: Communication Skills Goal IV: Students will communicate and interact effectively with patients and staff.									
Outcomes									
1. Students will engage in productive radiography-related communications in the clinical education setting.	RADT 180 Clinical Education I: Final grade determination form B # 4: The student communicates. He/she listens, is courteous, is responsive to constructive criticism, and communicates effectively orally and in writing.	≥ 3 combined average score on a scale of 4 to 1 4 = Excellent 1 = Unsatisfactory	Third semester.	Clinical Coordinator	Yes 39.8 possible points / 12 total students = 3.3 (Acceptable) combined average score.	None			
2. Students in the didactic setting will communicate effectively in writing and orally.	A. RADT 152 Radiation Protection: Student assessment letter to the instructor on their performance on 2 mock registry exams. (Rubric: (1) typed letter, (2) formally structured, (3) copy of exam section scores from 2 mocks, (4) identification of strengths, (5) identification of weaknesses, (6) identification of a plan for improvement.)	A. ≥ 3 combined average score on a scale of 4 to 1 4 = Excellent 1 = Unsatisfactory	A. First Semester.	A. Didactic Instructor.	A. Yes 48 possible points / 12 total students = 4 (Excellent) combined average score.	A, None			

	T	T	T	T	T	T
	В.	В.	В.	В.	В.	В.
	RADT 151	≥ 3 combined	Second Semester.	Didactic Instructor.		To Be
	Radiographic	average score on a				
	Procedures I:	scale of 4 to 1				Determined
	Professional	4 = Excellent				for Class of
	Presentation by	1 = Unsatisfactory.				
	student to HS or					2019.
	CSI science class on					
	the CSI rad tech					
	program and the					
	profession of					
	radiologic					
	technology.					
	[Rubric: (1)					
	Presenter					
	knowledge of					
	subject, (2) clarity					
	of speaking style,					
	(3) effective use of					
	visual aids, (4)					
	audience rapport,					
	(5) organization of					
	presentation.]					
<u>L</u>	1	l .	l .	l .	l .	l .

	Category V: Professional Growth and Development Goal V: Students and graduates will behave ethically.						
Outcomes	Tools	Benchmark	Tim Frame	Responsibility	Result	Action	
1. Students will apply the employability skills of a radiographer.	RADT 182 Clinical Education III: Final Grade Determination Form B # 1 – 7 all seven employability skills. (Includes: (1) safety practices, (2) flexibility, (3) creative thinking, (4) communications, (5) professional – ethical conduct, (6) follows policies and procedures, (7) continued competence.)	≥ 90 % Combined satisfactory rating. (out of 35 points.)	Fifth semester.	Clinical Coordinator.	No 374.15 points / 420 total points possible from 12 out of 12 students = 89% combined satisfactory rating.	This benchmark may be too high and recommend it be lowered to 85% Combined satisfactory rating (out of 35 points).	
2. Graduates will apply soft-personal employability skills of an RT (R).	Employer's Survey # 5: Soft-Personal Skills, (safety, flexibility, creativity, communication, professionalism).	≥ 95 % Combined satisfactory rating of those employer surveys returned.	Six months post-graduation. To be determined end of December 2018.	Program Director			

3.	Five Year Career	≥ 90 % Combined	Fourth semester	Clinical	Yes	
Students will	Development Plan	satisfactory rating.		Coordinator	113.5 points / 120	
develop a	(Cover letter,				total points	
five-year career	resume, summary				possible from 12	
development plan.	of successful				out of 12 students	
	interview, 5-year				= 94.6% combined	
	career plan, CE				satisfactory rating	
	requirements, 2					
	pages typed double					
	spaced.)					
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College of Southern Idaho Radiologic Technology Program Minutes of the Program Advisory Meeting For the Class of 2018 Outcomes Assessment Plan

Radiologic Technology Program Advisory Committee Meeting Minutes

February 27, 2019

HSHS CR 139 -- 10:00am - 2:00pm

Present:	Tamara Janak	CSI RADT Clinical Instructor Coordinator	tjanak@csi.edu	208-732-6716
	Jayson Lloyd	CSI HSHS Instructional Dean	jlloyd@csi.edu	208-732-6547
	RoseAnna Holliday	CSI HSHS Department Chair	rholliday@csi.edu	208-732-6737
	Rene Rambur	CSI HSHS Student Advisor	rrambur@csi.edu	208-732-6730
	Thomas Bandolin	CSI Career Readiness Facilitator	tbandolin@csi.edu	208-732-6303
	Pat Weber	CSI Center for New Directions	pweber@csi.edu	208-732-6688
	Justin Vipperman	CSI Grant Writer	jvipperman@csi.edu	208-732-6258
	Rae Jean Larsen	CSI Office Specialist	rlarsen@csi.edu	208-732-6701
	Brandon Dilworth	CSI Rad Tech Class of 2019	bdilworth@csi.edu	
	Kevin VanSickle	CSI Class of 2020 Rad Tech Club President	kvansickle@csi.edu	
	Rochelle Anderson	SLMV Manager of Diagnostic Imaging	andersro@slhs.org	<u>208-814-1521</u>
	Ryan Mumford	SLMV CT Supervisor	ryanm@slhs.org	208-814-1520
	Robert Schramm	SL Elmore Clinical Instructor	schrammr@slhs.org	
	Jake Kerley	Account Executive, Turn Key Medical	jkerley@trun-keymed	<u>ical.com</u>
	Stacey Mitchell	Product Specialist, Turn Key Medical	smitchell@turn-keyme	edical.com

Absent:	Gary Lauer	CSI RADT Program Director	glauer@csi.edu	208-732-6719
	Barry Pate	CTE Instructional Dean	bpate@csi.edu	208-732-6415
	Lindsay Smith	CRMC Director of Diagnostic Imaging	Lindsay.Smith@imail.org	
	Kelsey Dietz	SLMV Education Coordinator	kelseydietz24@gma	nil.com
	Melissa VanNoy	SLMV Imaging Clinical Education	melissava@slhs.org	
	Ty Rudkin	CSI Class of 2019 Rad Tech Club President	trudkin@csi.edu	

Introduction and Purpose of Meeting:

Tamara Janak called the meeting to order at 10 am. Members were introduced and the agenda was explained.

Review and Approval of Minutes:

The minutes from the February 28, 2018 Program Advisory Committee Meeting were reviewed and discussed. A motion to approve the previous minutes by RoseAnna Holliday, seconded by Robert Schramm. All approved.

Approval of Class of 2018 Outcome Assessment Plan The Outcome Assessment Plan for the Class of 2018 was discussed in detail. Gary Lauer had sent the plan to the committee through an email attachment a few weeks prior to the meeting for their review.

Topics of discussion included:

- **3.3.4** Students will think critically and be able to solve multiple conversion type x-ray exposure technique problems. Students did not meet the outcome so our plan of action is to start math skills earlier in the program.
- **3.3.5** Students will think critically and be able to solve equipment operation and quality control problems. Students did not meet the outcome but they did pass the Registry with a section score of 8.7 showing they studied to improve their knowledge.
- **3.3.6** Students will think critically and be able to solve image production and evaluation problems. Students did not meet the outcome but they did pass the Registry with a section score of 8.8.

The mock examinations in the 5th semester give students a clear picture of their learning and an opportunity to study their weaknesses. The Class of 2018 had a composite score of 89% on their Registry examinations.

A motion to approve the Class of 2018 Outcome Assessment Plan by RoseAnna Holliday, seconded by Jayson Lloyd. All approved.

JRECERT OA Workshop Review:

Gary and Tamara travelled to Chicago in November 2018 to attend a JRCERT Outcome Assessment Workshop. The JRCERT now requires direct and indirect assessment. The JRC only wants two or three outcomes for each category/benchmark, but want more evaluation and comparisons between cohorts. The Class of 2019 Outcome Assessment has been revised to reflect this requirement. Indirect questionnaires and surveys are being developed to collect the indirect evaluations. The plan will be fully developed for the Class of 2020. The new outcome assessment will be sent to the JRCERT for approval.

A motion to approve the new outcome assessment plan by RoseAnna Holliday, seconded by Ryan Mumford. All approved.

Program Concerns and Updates:

The Class of 2019 during the fall 2018 semester had no failed competency exams in clinical education. This is unrealistic. There was discussion on possible reasons – students are practicing longer before comping exams, the RT evaluators are not grading strictly, failed comps are not turned into the clinical instructor. This will be a topic of discussion at the Clinical Instructor Workshop in May.

To meet ARRT and JRCERT standards an online venipuncture course from Pedagogy Online Learning Systems was added to the 4th semester of training. Feedback from students who took the course was good. There was some discussion on developing comps for students to show proficiency. Jayson Lloyd said CSI is moving away from allowing students to practice on each other. Ryan Mumford teaches venipuncture on a mannequin to students in the CT course but they still need live sticks.

Approval from the clinical sites will be needed to have students perform venipuncture on patients. The group felt three venipuncture sticks in clinical ed would show proficiency.

Increased proficiency in trauma imaging has been a concern for some students. We are developing an outcome to assess students' ability to handle trauma situations. The group had some discussion on the indirect evaluation of the trauma outcome and the benchmark of 90% for the outcome. We feel students will work to meet the expectation placed on them.

The group reviewed all of the new indirect assessment forms. A motion to accept the proposed 2019 Outcome Assessment by RoseAnna Holliday, seconded by Ryan Mumford. All approved.

Industry Update and Equipment Needs: Jake Kerley and Stacey Mitchell

The Quantum DR software needs updated to include the deviation index (DI). The Cannon imaging receptor is tethered and 10 years old. All other Radiologic Technology Programs in Idaho have a Carestream wireless system which is the most common equipment in hospitals around the state. Justin Vipperman will look for a grant to purchase new DR equipment. Jake and Stacey from Turn-Key Medical will work on a quote.

Turn-Key Medical will give us a quote to upgrade the software for the Agfa CR system to include the deviation index (DI). The Rad Tech lab equipment needs a PM. We no longer budget yearly for PMs but there are several problems that need attention.

Jake and Stacey reported there is more standardization in equipment and operations between vendors. Artificial Intelligence (AI) is being used more in CT to lower the dose to the patient and for second readings on scans. Al is helping with data management to provide immediate access to patient records no matter where the patient presents for treatment. The size of the patient population is getting larger so equipment must accommodate them. Tables are getting larger weight limits, MRIs are able to accommodate larger patients, and digital technology is able to provide more anatomical detail in images. 3D technology is not currently used in most practices. Insurance does not want to reimburse for it and the benefits are not clear yet.

Travel:

Gary and Tamara travelled to Salt Lake City to meet with Varex Imaging engineers in April 2018. Varex was very accommodating, providing us with access to their engineers for questions and answers and then a tour of their entire facility. They manufacture x-ray tubes and flat panel DR detectors. Varex gave us a sample of the glass substrate with the circuits etched into it for demonstration.

Gary and Tamara travelled to Boise in April 2018 to attend the annual Idaho Society of Radiologic Technologists (ISRT) conference.

Upcoming Travel:

Gary and Tamara are planning to attend the 2019 ISRT conference to be held in Twin Falls. Both were asked to speak at the conference.

Gary and Tamara are planning to attend the JRCERT 50th Anniversary Conference in Chicago in November 2019.

We still would like to travel to Lewis and Clark State College to talk with them about our articulation agreement. We also would like to travel to Salt Lake City to meet with the University of Utah MRI Program Director and the University of Utah Imaging Director. While in Utah we would like to meet with the officials from Weber State University to discuss an articulation agreement with them since many of our students complete their education in advanced imaging modalities there.

Clinical Instructor Workshop:

Tamara gave an update on the 2018 Clinical Instructor Workshop. We now allow students to participate in exams where an RT holds the patient. The student is not allowed to hold but they can make the exposure. The student will document the incident in their weekly log.

Concerns for this year include the discontinuation of the IOC rotation at St. Luke's Magic Valley. The RTs are reporting a huge increase in their workload and they do not feel they have time to work with students. St. Luke's is looking into adding a mobile x-ray unit there to alleviate some of the patient load and add an additional technologist. St. Luke's will reevaluate the situation when these changes are complete. The loss of IOC is a concern to the program. The site gives students an intense orthopedic experience they do not receive at the other clinical sites. Some suggestions were given on alternative orthopedic offices that may be able to accommodate students.

St. Luke's is planning to implement a new student education portal. Students will have to pay for the service on top of the fees they already pay for Castle Branch to maintain their immunization records, health insurance, etc. and a background check.

We currently have a student who is not demonstrating professional conduct nor following all Rad Tech Program policies. How to enforce policies and suggestions of revising Form B will be discussed.

Mammography Course Update:

There are nine students enrolled in the Mammography Conference to be held March 7 - 10, 2019. RTs already certified in mammography have the option to enroll in the eight hour tomosynthesis class only. Marketing and registration for the conference has been

troublesome. Workforce training does not have the ability to register students online so community education enrolls students reluctantly but they do not provide any marketing. Rene reported workforce training should be able to handle registration next year.

The group also discussed registering RTs into the CT course through workforce training and offering a certificate if the student does not need college credits.

Clinical Manpower updates:

Robert Schramm reported St. Luke's Elmore is always looking for technologists to fill flex positions. The other RTs reflected similar concerns at their facilities. Flex positions do not include benefits so students are passing these job opportunities up for full-time benefited positions. Idaho's population is growing so there is a large demand for RTs across the state with many opportunities available for graduating students. St. Luke's Magic Valley is having a hard time recruiting new RTs. They rarely offer full-time benefited positions to new graduates so students are electing to take other job opportunities.

St. Luke's Restructuring:

Ron Jones was promoted from the Director of Imaging at St. Luke's Magic Valley to the Excellence of Care in Radiologic Technology position for the entire St. Luke's system. Kandis Pedersen was promoted from St. Luke's Wood River Imaging Manager to Population Health Director for southern Idaho.

Medical imaging Updates: Freshman and Sophomore Updates: Kevin Van Sickle, Class of 2020, reported the freshman class is doing well, preparing for their first clinical education rotation beginning in June 2019.

Brandon Dilworth, representing the class of 2019 reported all students are projected to pass their Registry. Six of the students are currently working as student RTs, four have not applied for jobs possibly due to wanting to relocate after graduation. Their class organized the 2018 Rad Tech Career Awareness Day to interested students. There were approximately 60 potential students in attendance.

Student Scholarships

Pat Weber from the Center for New Directions reported male students in the Rad Tech Program are non-traditional genders for the profession and she should be able to offer scholarships to them. We also have other non-traditional students who should qualify for scholarships.

Meeting Adjourned:	Tamara Janak thanked all attendees for travelling to Twin Falls to attend the meeting. The meeting was adjourned at 1:31 pm.
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% as 12 out of 12 students completed the program and graduated.
ARRT Pass Rates & Scaled Scores	All 4 benchmarks for 1.1.2 were met. Annual first-time pass rate was $\geq 80\%$ at 92%. 5-year first-time pass rate was $\geq 80\%$ at 95%. Annual program mean scaled score on the ARRT exam was $\geq 80\%$ at 89. 5-year program mean scaled score on the ARRT exam was $\geq 80\%$ at 95. Note: The increase in 5-year scores from last year's Class of 2017 scores (from 85 and 89 to 95 and 95 respectively) is due to the absence of low scoring data from the Class of 2013 being counted anymore.
Employment Rates	Benchmark for 1.1.3 of ≥ 80% of those seeking employment (excluding military and continuing education) was met at 100% with all 12 students obtaining employment within 6 months.
Graduate Satisfaction	Benchmark for 1.1.4 of ≥ 80% of students receiving a quality education was met at 100% for all 12 students.
Employer Satisfaction (of Graduate Technical Skills).	TBD by end of December. Benchmark for $1.1.5 \ge 95\%$ combined satisfactory rating of those surveys returned was met with only respondents at 100%.
Amendments to Category I: Graduate Performance (Program Effectiveness)	None
Summary	7 benchmarks reflecting 4 outcomes that were measured for Category I: Graduate Performance were met. Students are completing the program, graduating, passing the ARRT exam, gaining employment, receiving a quality education and satisfying employers with their technical competence.
	Student Learning Outcomes
	(Categories II – V)
Category II: Clinical Performance	All 30 benchmarks reflecting 8 outcomes for Category II: Clinical Performance were met.
Amendments to Category II: Clinical Performance	For the Class of 2018 there will be 2 additional outcomes added to Category II: Clinical Performance. Students will demonstrate competence in performing venipuncture. Students will demonstrate essential knowledge of image analysis – the effects of x-ray exposure factors on radiographic image quality at the IR (before the computer adjusts image quality)
Summary	All 30 benchmarks reflecting 8 outcomes for Category II: Clinical Performance were met. Students are demonstrating knowledge and competence in the essential aspects of radiography patient care, including patient transfer, emergency response, patient education, patient assessment, safety, patient verification, exam order fulfillment, professional and ethical conduct, medication administration, IV drug administration, radiographic positioning, and radiation protection. 2 additional outcomes will be added next year regarding venipuncture competency evaluation and image analysis at the IR.
Category III: Problem Solving and Critical Thinking	6 out of 9 benchmarks reflecting 7 outcomes measured for Category III: Problem Solving and Critical Thinking were met. Students are demonstrating knowledge and competency in solving problems in patient care, radiation protection, and radiographic anatomy and positioning. Students are thinking and acting creatively in the clinical setting and being flexible.

	They are taking initiative, anticipating, thinking through to completion and getting desired end results. They adjust to deviations from the norm. They are thinking outside the box to achieve desired imaging results. However, students need some improvement in being able to solve multiple x-ray exposure problems, equipment and quality control problems, and image production and evaluation problems. We will continue to simplify difficult subject matter in rad science, imaging equipment, imaging and processing, and image analysis to improve student comprehension, application and analysis.
Amendments to Category III: Problem Solving and Critical Thinking	None
Summary	6 out od 9 benchmarks were met for Category III: problem Solving and Critical Thinking. Students are demonstrating their knowledge and competence in problem solving. However, difficult subject matter in courses need greater simplification to improve student comprehension, application and analysis.
Category IV: Communication Skills	Both of 2 benchmarks reflecting 2 outcomes were met for Category IV: Communication Skills. Students listen. They are courteous. They are responsive to constructive criticism. They communicate effectively orally and in writing.
Amendments to Category IV: Communication Skills	Another tool will be added to assess the student's ability to make an oral presentation about the radiologic technology profession and the CSI radiography program before a secondary school health occupation class for next year's Class of 2019.
Summary	Both of 2 benchmarks were met for Category IV: Communication Skills. Students are communicating effectively orally and in writing. Another tool will be used next year to assess the student's ability to make an oral presentation
Category V: Professional Growth and Development	i out of 2 benchmarks assessed for Category V: Professional Growth and Development was met. Benchmark 5.5.1. regarding the outcome that students will apply the employability skills of a radiographer (safety, flexibility, creative thinking, communications, professional-ethical conduct, following policies and procedures, and continued competence) at ≥ 90% combined satisfactory rating was not met at 89%. Benchmark 5.5.3., regarding students will develop a 5-year career development plan at ≥ 90% combined satisfactory rating was met at 94.6%. Benchmark V.V.2. regarding students will apply soft-personal employability skills of an RT (R) will be determined at the end of the fall 2018 semester.
Amendments to Category V: Professional Growth and Development	Recommend that all three Category V: Professional growth and Development benchmarks be lowered to a more realistic level of %85 combined satisfactory rating.
Summary	I out of 2 benchmarks assessed was met. The 3 rd benchmark will be determined at the end of fall 2018 semester. Recommendation is for all three benchmarks be at a lower more realistic level of 85% combined satisfactory rating.
	Assessment Plan Review
Summary	46 out of 50 benchmarks (92%) reflecting 23 measured outcomes were met. Benchmarks 2.2.4., 2.2.9, and 4.4.2.B. will be measured for next Class of 2019. 5.5.2 will be determined at the end of fall semester 2018.
Mission Statement	No recommended changes to the program mission statement: 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.
Goals	No recommended changes to the program goals. The goals established to achieve this mission include: Measuring program effectiveness on an ongoing basis. Producing clinically competent students.

	Producing students with problem solving and critical thinking skills. Producing students who can effectively communicate and interact with patients and staff. Producing students and graduates who behave ethically.
Recommended changes to	Recommend that all 3 Category V: Professional Growth and Development benchmarks be lowered to a more realistic level of
the assessment plan.	≥85% combined satisfactory rating.
Final Thoughts	