Assessment Record

Program: Radiologic Technology

Assessment period: 19-20

Program or Department Mission:

The mission of the Radiologic Technology Program at Jefferson State Community College is to prepare graduates for entry-level employment as a radiologic technologist in the healthcare community.

This program mission is consistent with the colleges Statement of Philosophy and Purpose in the Jefferson State Community College Catalog and Student Handbook.

Instructional Program Student Learning Outcomes & Assessment Plan

Student Learning Outcomes are assessed by the following:

1. Students will apply positioning skills.
2. Student will select appropriate technical factors
3. Students will practice radiation protection.
4. Students will use effective oral communication skills.
5. Students will practice written communication skills.
6. Students will manipulate technical factors for non-routine examinations.
7. Students will develop a professional resume
8. Students will exhibit professional behaviors such as punctuality in the clinical setting.

Intended Outcomes	Means of Assessment	Criteria for Success	Summary & Analysis of Assessment Evidence	Use of Results
SLO 1: Students will apply positioning skills.	Laboratory Simulation Repeat Analysis Form Clinical Competency A repeat analysis form will be developed Follow- Up Graduate Survey (Question 10) Portable radiography section Survey is sent via e-mail	There will be an increase in the pass rate of lab comps in Procedures II as compared to Procedures I in radiographic positioning. There will be an increase in the pass rate of clinical comps in Clinical Education III as compared to Procedures II due to radiographic positioning Score of 2.5 or higher Scale (1-3)	**96 % Pass rate Procedures I** 29 students enrolled 1567 / 1624 procedures completed **97% Pass Rate Procedures II** 30 students enrolled 1224/1260 procedures completed **97 % Pass rate Procedures II** 22 students enrolled in Clinical Ed III 13 comps each student 377 total comps 0 repeat failed comps **22/22 or 100% pass rate** 2.8 score 23 surveys sent 23 returned	**Observations / Changes:** **Benchmark met** The Danielus Miller competency was added in this assessment period. Course syllabi for RAD 112 and RAD 122 document this. All students completed the competency without repeat. The repeat analysis form used to document this item. **Benchmark met** The criteria for success will be changed in the next assessment cycle to 90% of students will pass clinical competencies without a repeat of positioning skills. In addition, a repeat analysis form will be developed to document the means of assessment. Additional practice time was assigned to this cohort of students as indicated from Faculty meeting minutes Summer 2020. **Benchmark met** The Program Continues to meet the established benchmark for this item. The students have several Portable competencies in a lab that evaluates the ability for students to perform portable radiography via competency. The syllabus for RAD 122 lab demonstrates this. This information is also covered didactyly and may be found in the syllabus for RAD 122.
SLO 2: Student will select appropriate technical factors.	1. Laboratory Simulation	1. Average score of 80% or higher	Average score of 100% 27/27 or 100% of students completed the assessment.	**Benchmark met** This assessment will be changed in the next cycle to Average of technique selection score on

	Positioning section, technique selection of the Laboratory Competency Form in Procedures II Average of completion of technique selection score of all comps in Procedures II 2. Clinical Competency Positioning section, technique selection of the Clinical Competency Form Average of technique selection score of all comps in Clinical Education for Program	2. There are a total of 56 mandatory competencies for each enrolled student which has a grading section for the technique selection.	2. All competencies required a technique to be completed on the comp form. All students completed the technique section on the comp form.	Breathing Technique comps. Lab comp form sample 2**. Benchmark met** This item was not changed in this assessment cycle due to the COVID crisis. It will be changed in the next cycle.

SLO 3: Students will practice radiation protection.	1. Laboratory Simulation 2. Clinical Competency Positioning section, radiation protection section, of the Clinical Competency Form Average of radiation protection section score for all students for all competencies in clinical education for the program. This measurement tool was changed in this assessment cycle to the Repeat Analysis form.	1. 90% or higher of enrolled students in RAD 122 will meet the established criteria for radiation protection 2. 90% of students will not have a repeat due to radiation protection.	1. Of the lab competency 26/27 or 96% of students met the established criteria for radiation protection 2. 29 students enrolled 29/29 or 100% passed the radiation protection section for all clinical comps.	**Observations / Changes** **1. <u>Benchmark met</u>** This is a critical skill for clinical education. It will continue to be monitored for effectiveness. The Lab Repeat Analysis form for Spring 2020 may be found here. **2. <u>Benchmark met</u>** The means of assessment and criteria for success wording was changed for this assessment period. Once a student reaches the clinical environment, The Radiologic Technology Clinical Competency Book may be used to demonstrate this item. A sample of a comp form indicating this assessment may be found here. This item is reviewed annually and revised as needed.
SLO 4: Students will use effective oral communication skills.	Presentation in RAD 212 Radiographic	Average Score of 85% or higher on presentation.	Average score 90% 23 Students enrolled	**<u>Benchmark met</u>** The in-class presentation in RAD 136 was eliminated from this assessment. Now students only demonstrate this skill in RAD 212. The

	Pathology component			syllabus from RAD 212 demonstrates the presence of this competency requirement.
SLO 5: Students will practice written communication skills.	Writing of an article review in RAD 136, Radiation Protection	Average Score of 85% or higher on presentation.	Average score 92% 28 students enrolled	**Benchmark met** The means of assessment wording was changed in this assessment cycle from writing a paper regarding radiation protection to writing an article review to reflect the measurement tool more accurately. The syllabus from RAD 136 reflects this change.
SLO 6: Students will manipulate technical factors for non-routine examinations.	RAD 135 Exposure Lab Technique Exercise Clinical Competency form, positioning section	Average score of 80% or higher Average score of 80% or higher	Average score 88% 23 students enrolled 22/22 students or 100% of students scored 80% or higher on this section. (22 students enrolled)	**Benchmark met** The program has used this assessment for several cycles but feel it is still relative to the intended outcome. Course syllabi for RAD 135 demonstrates this assessment. **Benchmark met** Each clinical comp form has this information assessed. The repeat analysis form for the program did not indicate that any student failed the positioning section of the clinical competency.
SLO 7: Students will develop a professional resume.	Writing a Professional Resume	85% or higher on 100% scale	23/23 or 100% of students wrote a professional resume with 85% or higher	**Benchmark met** This item has been used for several years to analysis communication skills in writing. Faculty feel that it is still relevant in the importance of professionalism.
SLO 8: Students will exhibit professional behaviors such as punctuality in the clinical setting.	Timecard	90% of students enrolled in the final semester will have less than 3 tardies per semester	22/23 or 96% of students had less than 3 tardies per semester	**Benchmark met** The single student who had multiple tardies was counselled each semester and eventually failed the clinical course due to tardies. Reinforcing policies in each clinical education course by the clinical coordinator sending out a

				Fast Fact sheet to each student and clinical coordinator has reinforced policies and procedures in the Student Handbook.
Plan submission date: 8/3/2020			**Submitted by: Christie W. Bolton**	

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SLO 1

Faculty Meeting Minutes

Summer 2020

Date: 6-1-2020

Attendance:

Annette Ferguson

Christie Bolton

Ami Poe

To abide with the Safer at home order, all Summer courses for JSCC will be completed online. Courses which have a lab requirement may have students on campus provided they abide by some social distancing guidelines as provided by ACCS.

The JRCERT has given programs some flexibility with substantive changes in program curriculum by allowing programs to offer virtual learning through the pandemic.

All 2020 cohort students were able to complete the program requirements for graduation.

Students enrolled in RAD 122 have been assigned a demonstration, practice and competency time to complete the requirements for the course. The lab instructor will be evaluating breathing techniques in the lab portion of RAD 122 for this cohort of students.

The radiography program deadline has been moved from June 1 to July 1 to accommodate ACT testing site closures.

Plans for Fall include teaching all didactic course components online and scheduling on campus labs in small groups and abiding by social distancing. The college will also require the student's temperature to be checked and a college generated questionnaire be completed by each student before entering the building.

All clinicals will resume on July 15 for radiologic technology students.

3 new clinical sites have been requested for approval by the JRCERT. The VA in Birmingham, Ortho Alabama and Southlake Orthopaedics. Plans are also being made to add Children's South as a clinical site.

Currently with the COVID-19 restrictions, clinical sites are reducing the number of RAD students that will be allowed on campus at a time. This could possibly reduce the numbers for new admission. This number will be determined after the application period has ended.

SLO 1

Class Schedule is online with on campus procedures lab on Mondays & Wednesdays

January

Week of 6th Syllabus, & Uniform Inspection & Clinical Instruction

Week of 11th Pediatric Radiography, Trauma, Mobile & Surgical Radiography

18th NO CLASS – **HOLIDAY (MLK Day)**

20th

Week of 25th Cervical, Thoracic & Lumbar Spine, Sacrum & Coccyx

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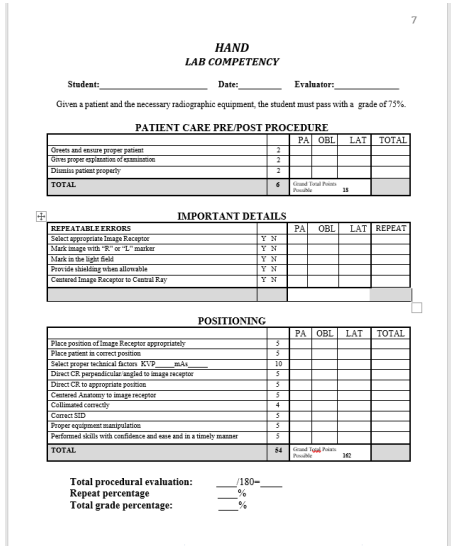
SLO 2



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HAND
LAB COMPETENCY

Student:_____ **Date:**_____ **Evaluator:**_____

Given a patient and the necessary radiographic equipment, the student must pass with a grade of 75%.

PATIENT CARE PRE/POST PROCEDURE

		PA	OBL	LAT	TOTAL
Greets and ensure proper patient	2				
Gives proper explanation of examination	2				
Dismiss patient properly	2				
TOTAL	**6**	Grand Total Points Possible		**18**	

IMPORTANT DETAILS

REPEATABLE ERRORS		PA	OBL	LAT	REPEAT
Select appropriate Image Receptor	Y N				
Mark image with "R" or "L" marker	Y N				
Mark in the light field	Y N				
Provide shielding when allowable	Y N				
Centered Image Receptor to Central Ray	Y N				

POSITIONING

		PA	OBL	LAT	TOTAL
Place position of Image Receptor appropriately	5				
Place patient in correct position	5				
Select proper technical factors KVP_____mAs_____	10				
Direct CR perpendicular/angled to image receptor	5				
Direct CR to appropriate position	5				
Centered Anatomy to image receptor	5				
Collimated correctly	4				
Correct SID	5				
Proper equipment manipulation	5				
Performed skills with confidence and ease and in a timely manner	5				
TOTAL	**54**	Grand Total Points Possible		**162**	

Total procedural evaluation: ____/180=____
Repeat percentage ____%
Total grade percentage: ____%

SLO 3

:-Spring-2020¶

Repeat-Analysis-Lab¤	¤
2/4/2020¤	C-Spine/-no-show¤
2/10/2020¤	Phantom-C-spine-x-table/-clipped-anatomy¤
2/24/2020¤	T-Spine-lateral/Clipped-anatomy¤
3/2/2020¤	AP-L--Spine/CR-not-aligned-to-IR.¤
3/16/2020¤	Lateral-Skull/clipped-anatomy¤
2/4/2020¤	C-Spine/-grade-average-below-75%¤
¤	¤
3/16/2020¤	Skull/did-not-mark-inside-light-field¤
1/29/2020¤	Phantom-Chest/-used-wrong-marker¤
1/29/2020¤	Phantom-Abdomen/-incorrect-IR-and-CR-not-aligned-with-IR¤
2/19/2020¤	Phantom-Abdomen/-clipped-anatomy¤
¤	C-Spine-RPO/-clipped-anatomy¤
9/23/2020¤	AP-Barium-enema/did-not-center-image-to-CR¤
2/4/2020¤	C-Spine/no-show¤
1/29/2020¤	Phantom-Chest/no-marker¤
1/29/2020¤	Phantom-abdomen/Clipped-anatomy¤
6/16/2020¤	Skull/clipped-anatomy¤
1/29/2020¤	Phantom-Chest/incorrect-IR¤
2/19/2020¤	Phantom-chest/-not-marked-in-light-field¤
1/29/2020¤	Phantom-abdomen/Clipped-anatomy¤

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SLO 3

C-SPINE
LAB COMPETENCY

Student: _____ **Date:** 21 Oct 20 **Evaluator:** Ami Pol

Given a patient and the necessary radiographic equipment, the student must pass with a grade of 75%.

PATIENT CARE PRE/POST PROCEDURE

		AP	LAT	OBL	OBL	DENS	TOTAL
Greets and ensure proper patient	2	2	2	2	2	2	10
Gives proper explanation of examination	2	2	2	2	2	2	10
Dismiss patient properly	2	2	2	2	2	2	10
TOTAL	6	Grand Total Points Possible 30					30

IMPORTANT DETAILS

REPEATABLE ERRORS		AP	LAT	OBL	OBL	DENS	REPEAT
Select appropriate Image Receptor	Y N	Y	Y	Y	Y	Y	
Mark image with "R" or "L" marker	Y N	Y	Y	Y	Y	Y	
Mark in the light field	Y N	Y	Y	Y	Y	Y	
Provide shielding when allowable	Y N	Y	Y	Y	Y	Y	
Centered image receptor to Central Ray	Y N	Y	Y	Y	Y	Y	
All anatomy included on the image	Y N	Y	Y	Y	Y	Y	
							N

POSITIONING

		AP	LAT	OBL	OBL	DENS	TOTAL
Place position of Image Receptor appropriately	5	5	5	5	5	5	25
Place patient in correct position	5	5	5	5	5	5	25
Select proper technical factors KVP 66 mAs 10 10cm	10	10	10	10	10	10	50
Direct CR perpendicular/angled to image receptor	5	5	5	5	5	5	25
Direct CR to appropriate position	5	5	5	5	5	5	25
Centered Anatomy to image receptor	5	5	5	5	5	5	25
Collimated correctly	4	4	4	4	4	4	20
Correct SID	5	5	5	5	5	5	25
Proper equipment manipulation	5	5	5	5	5	5	25
Performed skills with confidence and ease and in a timely manner	5	5	5	5	5	5	25
TOTAL	54	Grand Total Points Possible 270					270

Total procedural evaluation: 300/300=100
Repeat percentage %
Total grade percentage: 100%

SLO 4

Oct 27th **Exam # 4** (Lower Extremity, Hip & Pelvis)

Nov 3rd Skeletal System & Various Pathological Systems

Nov 10th **Exam # 5** (All Spines, Sacrum & Coccyx)

Nov 17th Presentations Due

Nov 23rd - 27th College Closed – Thanksgiving Holidays

Dec 1st **FINAL EXAM**

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SLO 5

Dates are tentative and may be changed with instructor's discretion.

May 26	Class Introduction with article review guidelines Introduction to Radiation Protection Ch 1 and
May 29	Radiation: Types, Sources, and Doses Received Ch 2 Interaction of X-Radiation with Matter Ch 3
June 2	Radiation Quantities and units Ch 4 Radiation Monitoring Ch 5
June 4	***Exam 1, Ch 1, 2, 3, 4, and 5***
June 9	Overview of Cell Biology 6
June 11	Molecular and Cellular Radiation Biology Ch 7
June 16	***Exam 2, Ch 6 and 7***
June 18	*Early Tissue Reactions and their* Effects on Organ Systems Ch 8
	Article Review Due

SLO 6

Course Number: RAD 135 (Summer 2020)

Course Title: Exposure Principles

Textbooks: Stewart C. Bushong, Radiologic Science for Technologist,
Bontrager, Radiographic Positioning and Related Anatomy
Mosby Publishing, Latest Edition.

Instructor: *Annette Ferguson MSRS, RT(R)*
Office: 983-5217 *E-mail: awilliam@jeffersonstate.edu*

Course Overview: This course provides the student with the production of radiographic images. Topics include factors that influence density, contrast, and radiographic quality, as well as quality assurance and control techniques. Upon completion, the student will identify and explain factors that influence the production of radiographic images.

Instructional Format: Lectures, problem solving activities, demonstrations

Evaluation: Exams, Assignments & Quizzes 55%
Quality Management & Exposure Principles Lab 20%
Comprehensive Final 25%

Grading: A = 90 to 100 C = 75 to 79
B = 80 to 89 F = Below 75

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SLO 6

Class of 2021 Repeat Summary

Name	Semester comped	Competency	Repeatable Error	Semester used
	Spring 2020	Abdomen	Quiz	Summer 2020
	Spring 2020	Abdomen	Quiz	Summer 2020
	Summer 2020	Forearm	Clipped Anatomy	Summer 2020
	Summer 2020	UGI	Quiz	Summer 2020
	Summer 2020	Small Bowel	Quiz	Summer 2020
	Summer 2020	Tib/Fib	Quiz	Summer 2020
	Summer 2020	Lumbar Spine	Quiz	Summer 2020
	Fall 2020	Esophagus	Quiz	Fall 2020
	Fall 2020	Femur	Repeated Images due to positioning	Fall 2020

SLO 7

Feb 4 → ***Online Assessment due Image Production and Evaluation***

Feb 9 → Review the Lecture videos Writing a Resume and Interview Techniques.

Feb 11 → Complete all the assignments pertaining to the Professional Resume. Assignments must be turned in through the Blackboard assignment page.

There is a total of 2 assignments due. (1) Resume, (2) Cover letter

Read the chapter in the text on Interview Techniques and watch the lecture video on Writing a Resume and Interview Techniques.

Online Assessment due on Interview techniques

SLO 8

Spring Clinicals: Monday, Wednesdays & Fridays 7am to 3pm

Important Dates to Remember:
Jan 11th – First day back to clinic
Jan 18th - Holiday – No Clinic
Feb 15th - Holiday - No Clinic
Mar 22nd - Mar 26th – Spring Break
Apr 23rd – Last day – Grades due
May 7th - Graduation

Last Competency Requirements:
Graduation Total Comps Completion is:
42 of 43 Mandatory (BE has 2 choices)
15 of 30 Electives (1 under Cranium Comps)
* **Simulations can only be done on rare comps with permission in the last 2 weeks of clinic***

* Turn in Competency books as soon as you are complete for last check.

Repeats Reminder: If you fail a competency, you have to repeat the entire competency on another patient and average the two complete competencies scores for you total complete competency grade.

Direct & Indirect Supervision: Direct Supervision means a qualified radiographer is present in the rad room with the student performing exam and during any repeat exams. Indirect supervision is only permitted after the student has successfully completed a competency except for portables and surgery.

Proper Uniform: Your uniform in handbook includes; approved top and pants with sleeve patch, white undershirts, approved clinical white shoes, radiation badge, ID badge, markers, clinical competency book. If you show up to clinicals without any of these items, you will be sent home for an "unexcused absence" for the day resulting in 2 days of make-up time. Only lab jackets will be approved for coverage of uniform and has to have the sleeve patch required. Please readdress Dress Code in your handbook.

Attendance Reminders: Late is considered 7:01 to 7:05. Tardy is considered 7:06 and after. You will need to call your clinical Instructor prior to shift to alert them to a late, tardy or absence. Also, alert your Clinical Coordinator at same time. You are given one free day. After free day has been taken and you miss another day; Doctor's excuse is 1 day for 1 day, no doctor's excuse is 2 days for 1 day. If you miss a day and your free day has not been taken, then you must use your free day for that day. Excessive lates or more than 3 tardies in one semester will result in a deduction of total clinical grade. Please review the Clinical Education Attendance Regulations in your student Handbook. No days may be taken the last week of clinicals, you are finished one week before graduation.

Evaluations: You will have a mid and end monthly evaluations for January, February, March and April. You will be graded at your level in the program. You are about to graduate and become a technologist, therefore please be aware of your expectations that are set upon you. You have completed competencies and should be working independently on those competencies. It would benefit you to get all the experience and confidence this semester to be prepared for your career.

Clinical Education: Please review this in your handbook. Examples:
Student cell phones and Apple or Smart Watches must be placed in silent mode and placed in a student's locker during clinical hours.
Clinical quizzes must be taken alone, no notes, no books, no internet, helpful friend or technologist.

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