SCHOOL OF HEALTH SCIENCES

Radiography Program

Policies, Practices, & Procedures Handbook

TCC Metro Campus | 909 S. Boston Ave., Tulsa, OK 74119

TULSA COMMUNITY COLLEGE
You Can. We'll Help.

Revised Spring 2026

Radiography Program

Policies, Practices, & Procedures Handbook

Table of Contents

Introduction

This handbook has been developed to aid students, faculty, clinical preceptors, and radiographers involved in the Tulsa Community College (TCC) radiography program. It should be used as a guide for all students during their Radiography training. Policies, rules, rights, and responsibilities are established in this handbook.

The students are also governed by the policies as stated in the TCC Student Handbook https://guides.library.tulsacc.edu/ld.php?content_id=78539055, Policies of the School of Health Sciences (SOHS) https://www.tulsacc.edu/about-tcc/policies-procedures/health-sciences, the policies, and procedures of the clinical education center where they are assigned, and the Code of Ethics established by the American Registry of Radiologic Technologists (ARRT) Ethics Information - ARRT: https://www.arrt.org/pages/resources/ethics-information.

The TCC Radiography Program faculty developed this Student Handbook on January 1, 1983, in compliance with the essentials of the Joint Review Committee on Education in Radiologic Technology (JRCERT). The Radiography Student Handbook is updated yearly to reflect current practice and compliance with the JRCERT Standards for a Program in Radiologic Technology. The Radiography Program faculty reserves the right to make necessary policy and procedure changes. Students will be apprised of any policy manual changes in writing.

The TCC Radiography Program welcomes recommendations for changes from all communities of interest.

Unless otherwise specified in this document, the Radiography Program adheres to the student policies outlined in the TCC Student Handbook and the SOHS Policies and Practices.

Program Mission Statement

The mission of the Radiography Program at Tulsa Community College is to provide an accredited two-year associate degree program that will prepare graduates for a career in the field of diagnostic medical imaging.

Program Learning Outcomes (PLO)

Goal # 1: Program graduates will pass the registry exam for Radiography administered by the American Registry of Radiologic Technologists (ARRT)

Goal #2: Program graduates will become successfully employed in medical imaging.

Goal # 3: Program graduates will possess the level of knowledge necessary for professional growth.

Student Learning Outcomes (SLO)

Goal # 1: Program graduates will be clinically competent.

Students will:

- Position patients for an exam.
- Deliver appropriate patient care.
- Operate radiographic equipment.
- Employ radiation protection practices.
- Understand radiation exposure guidelines.

Goal # 2: Program graduates will demonstrate critical thinking/problem-solving skills.

Students will:

- Evaluate radiographic images.
- Select exposure factors.
- Perform non-routine exams.

Goal # 3: Graduates will demonstrate effective communication skills.

Students will:

- Communicate with patients.
- Present an oral report.
- Make a presentation.
- Use professional terminology.

TCC Radiography Program Organizational Chart

- President/CEO
  - ➢ Chief Academic Officer
    - ➢ Associate Vice Presidents
      - ➢ Dean of Health Sciences
        - ➢ Radiography Program Director/Faculty
          - ➢ Hospital Clinical Preceptors
            - ➢ Staff Technologist
              - ➢ Radiography Students

Clinical Education Centers

- ❖ Claremore Outpatient & Emergency Health Center
- ❖ Harvard Family Medicine
- ❖ Muscogee Creek Nation – Okmulgee
- ❖ Tulsa Spine and Specialty Hospital**
- ❖ Saint Francis Hospital
- ❖ Saint Francis Hospital, South
- ❖ Saint Francis Warren Clinic Facilities**
- ❖ Council Oaks Hospital
- ❖ Hillcrest Hospital Center
- ❖ Hillcrest Hospital, Claremore
- ❖ Hillcrest Hospital, South
- ❖ OSU Medical Center
- ❖ St. Johns Medical Center
- ❖

**These locations are utilized for short-term rotations.

Selection of Clinical Education Center

Clinical selection and rotations will be assigned based on the student's skill level and the required competencies for each clinical course. TCC Radiography students will be assigned to clinical sites to ensure equitable clinical experiences across the curriculum and to provide students with opportunities to successfully fulfill their clinical objectives, competencies, and goals. Students will attend the same clinical site throughout their junior year, from fall to spring semesters, until spring break. The week after spring break, students will rotate to other clinical sites. The clinical selection poll submitted in semester one will be used to determine clinical

sites based on the contracts for these sites. If warranted, students may be randomly assigned a site by SoHS administrators.

Modifications to a student's assigned clinical site will be considered under the following conditions:

- A concern for the students' safety has been brought to the attention of the program faculty.
- The clinical preceptor or clinical manager has asked the program faculty to relocate the student.
- Extenuating circumstances will be taken into consideration at the faculty's discretion.

If a student is reassigned mid-semester, a meeting will be held with the student, the TCC clinical instructor, and the program director to outline the expectations and implications of the switch.

SEE Appendix J

Student Relatives

Students may attend a clinical site where their relative works; however, they must not be under their relative's direct supervision, and their relative cannot sign the student's competencies. Students who marry radiology personnel will be transferred to another Clinical Education Center when an opening becomes available. Students' children **WILL NOT** be permitted to attend any radiography classes or clinical.

Curriculum

The Radiography Program is a two-year (six-semester) program consisting of 48 credit hours of Radiography courses (didactic and clinical) and 22 hours of related general education courses. Lecture and clinical courses run concurrently throughout the two years. Upon completion of the program, graduates receive an Associate in Applied Science (AAS) degree. They are eligible to apply for examination by the American Registry of Radiologic Technologists (ARRT) in Radiography (R).

Each assigned day for clinical education classes will consist of a complete eight-hour shift in the assigned clinical education center.

Descriptions of courses in the Radiography curriculum may be found in the TCC catalog or website at https://catalog.tulsacc.edu/preview_program.php?catoid=24&poid=7009&returnto=10584.

The arrangement of classes and clinical education during the six semesters is as follows:

First Year – Summer Semester

RADT 1212	Introduction to Radiography	2 Credit hours
RADT 1211	Introduction to Radiography Lab	1 Credit hours
ALDH 1323**	Medical Terminology	3 Credit hours
		Total Hours: 6

First Year – Fall Semester

RADT 1313	Radiographic Anatomy & Pos. I	3 Credit hours
RADT 1372	Radiographic Technique	2 Credit hours
RADT 1324	Radiographic Clinical Education I	4 Credit hours
BIOL 1314**	Essentials of Anatomy & Physiology	4 Credit hours
ENGL 1113	Composition I	3 Credit hours
		Total Hours: 16

First Year – Spring Semester

RADT 1333	Radiographic Anatomy & Pos. II	3 Credit hours
RADT 1382	Advanced Radiographic Technique	2 Credit hours
RADT 1344*	Radiographic Clinical Education II	4 Credit hours
MATH 1473**	Quantitative Reasoning	3 Credit hours
	or Higher-Level Math	
ENGL 1213	Composition II	3 Credit hours
	or Higher-Level English, such as ENGL 2333 or 2343	
		Total Hours: 15

Second Year – Summer Semester

RADT 2301	Radiographic Seminar	1 Credit hours
RADT 2312*	Radiographic Clinical Education III	2 Credit hours
		Total Hours: 3

Second Year – Fall Semester

RADT 2343	Radiographic Biology & Pathology	3 Credit hours
RADT 2336*	Radiographic Clinical Education IV	6 Credit hours
RADT 2383	Radiographic Physics	3 Credit hours
HIST 1483	US History 1492-Civil War Era *or HIST 1493 - US History Civil War Era-Present*	3 Credit hours
		Total Hours: 15

Second Year – Spring Semester

RADT 2323	Radiographic Special Procedures	3 Credit hours
RADT 2356*	Radiographic Clinical Education V	6 Credit hours
POLS 1113	American Federal Government	3 Credit hours
		Total Hours: 12

** RADT 1344, 2312, 2336, and 2356 require a two-week 1:00 p.m.- 9:00 p.m. rotation each semester*

***It is recommended, but not required, that students take ALDH 1323, BIOL 1314, MATH 1473 before starting the Radiography program.*

Technical & Professional Standards

A student entering the radiography program at Tulsa Community College should be aware of the following performance requirements necessary to fulfill the job requirements of a registered medical radiographer (R) as certified by the American Registry of Radiologic Technologists (ARRT).

EDUCATION: Must be a graduate of an educational radiography program accredited by a mechanism acceptable to the American Registry of Radiologic Technologists. The Oklahoma State Regents accredit Tulsa Community College for Higher Education and the Higher Learning Commission (HLC). The radiography program is accredited through the Joint Review Committee on Education in Radiologic Technology (JRCERT).

SKILLS: Radiography graduates of Tulsa Community College are expected to exhibit cognitive, technical, and interpersonal skills and demonstrate the following competencies as adopted by the Tulsa Community College Radiography Advisory Committee.

- A physical form is required to be uploaded into the appropriate section of SurPath prior to fall clinical rotations.

The graduate will be able to:

1. Exhibit proficiency in routine radiology department procedures and maintain proper patient records and confidentiality, adhering to HIPAA regulations.
2. Operate automatic developing and digital imaging equipment, process radiographs, and maintain quality control of automatic processing and digital imaging equipment.
3. Demonstrate a professional appearance of themselves and their radiology department and demonstrate an ethical relationship with all personnel.
4. Select and operate the proper equipment and accessories to provide the patient with the best possible radiographic examination.
5. Select the proper technical factors scientifically to produce the highest quality radiographs with the lowest possible radiation exposure to the patient.
6. Transport and position patients for all routine radiographic procedures, including portable radiography, surgery, and selected special procedures, while maintaining the highest standards of radiation protection.
7. Administer or assist a physician in administering contrast media and other commonly used medications in radiography.
8. Assist in medical emergency situations, as necessary. Practice proper sterile techniques and isolation procedures to prevent contamination and promote disease control for the patients and all other personnel.
9. Perform in all areas of the radiology department with full responsibility in the performance of all routine and selected special procedures.
10. Assist in the instruction and evaluation of future radiographers.

11. Assume responsibility for other duties as delegated by their supervisor or physicians.
12. Demonstrate a basic knowledge of advanced imaging modalities.
13. Demonstrate college-level reading and writing skills.
14. Understand and apply knowledge of the history of the United States.
15. Understand and apply knowledge of the study of the American Federal Government.
16. Apply critical thinking skills to human relation problems with special emphasis on group dynamics, interpersonal communications, and decision making.
17. Demonstrate a general knowledge of the anatomy and physiology of the human body and its relationship to radiography.
18. Possess an understanding and demonstrate proper usage of Standard and Isolation Precautions when dealing with bloodborne pathogens.

Physical / Mental Working Conditions

Radiography graduates should possess the following physical and mental capabilities to perform adequately in this occupation. Any changes in a student's ability should be reported to the Program Director or faculty immediately.

Frequently Required Work Activities:

- Standing
- Walking
- Lifting
- Carrying
- Pushing / Pulling
- Balancing
- Squatting / Crouching
- Stooping/Bending

Continuously Required Work Activities:

- Reaching
- Handling / Feeling
- Talking
- Hearing
- Seeing

Occasionally Required Work Activities:

- Sitting
- Climbing
- Crawling

Continuously Required Mental Demands:

- Judgement
- Imagination
- Memory
- Creativity
- Initiative
- Patience
- Alertness
- Precision
- Analytical Ability
- Problem Solving
- Concentration
- Communication with People

Hand Activities:

- Grasping / Turning
- Fine Manipulation
- Grasping

Strength Rating:

On the job a Radiographer must be able to lift / assist

- Up to 20 pounds (Light) Continuously
- 21 to 50 pounds (Medium) Frequently
- 50 to 100+ pounds (Heavy) Frequently

Admissions Guidelines

The following guidelines have been adopted for selecting students for the Radiography Program.

I. Students must meet all the following criteria before admission will be considered:
   1. Applicants must be 18 years old by June 1 of the applicant year to enter the Radiography Program.
   2. Must be a high school graduate or have a G.E.D. equivalent.
   3. Application to the college and the program must be submitted by January 5th.
   4. Must have a minimum cumulative GPA of 2.5 or better.
   5. Top-ranking applicants attend orientation meetings and submit video interviews to be considered. Faculty may request in-person interviews if needed for final selection.
   6. Must attend a mandatory Bootcamp for the program on the date assigned (to be determined).

II. Selection will be made according to the following criteria: *
   1. Overall Grade Point Average. NOTE: If a student has fewer than 12 college hours, the average of the applicant's high school and college GPA will be used.
   2. ACT Scores are required. There is no minimum required ACT score for this program.
   3. Applicants must successfully complete a national background check, physical examination, and have a negative drug screen.

III. Applicants will be ranked according to the following formula: *

1. Overall college GPA >2.5 points will be awarded accordingly, with a max value of 20 Points (37.7 % of calculation)
2. ACT composite score, 1-36, for a maximum value of 10 points (18.9% of the calculation).
3. ACT Science score 1-36 for a maximum point value of 20 points (37.7% of calculation)
4. Applicants with a medical certification or degree will receive an additional point for each level of achievement. Healthcare certification = 1 point, associate degree = 2 points, and bachelor's degree or higher = 3 points.
5. A video interview submission is required; a 25-point rubric will evaluate each submission. Once their points are tallied, some applicants may be asked to attend an additional in-person interview to facilitate a final selection.

Students with the highest ranking will be selected first. Since the Radiography program has limited enrollment based on the number of clinical spots available, only the top-ranking applicants will be chosen.

Students with a grade point average (GPA) below 2.5 and/or on academic probation WILL NOT be considered for admission to the program until the GPA is raised or academic probation is discontinued.

NOTE: Admission to the Radiography program, or any TCC Health Sciences Program, is contingent upon students completing and passing a national background check, including a sex offender and fraud registry check, and passing a drug screen before beginning the program. Students must also submit current CPR certification for American Heart BLS Healthcare Provider, a physical form, and immunization records to satisfy clinical contract requirements. Please refer to the School of Health Sciences Policies and Procedures at https://www.tulsacc.edu/about-tcc/policies-procedures/health-sciences.

SEE APPENDIX A

Academic Progression Policies

A. Academic Probation

- A cumulative grade point average of 2.0 (C) or higher must be maintained on all academic work. At the end of any academic term in which a student's cumulative grade point average falls below 2.0, the student will be placed on Academic Probation. https://www.tulsacc.edu/admission/criteria/transfer
- When radiography students are placed on academic probation, they have one semester to achieve satisfactory academic standing to continue in the radiography program. A radiography student on academic probation for the second consecutive semester cannot continue in the radiography program.
- The student can apply for admission the following year and must meet the application criteria.

B. Incomplete Grades

- Faculty may assign incomplete ("I") grades as outlined in the Tulsa Community College catalog. A grade of "I" in a radiography course must be changed to a grade of C or better for the student to progress to the next radiography course.
- If a student receives an “I” grade in the last semester of the Radiography Program, they have six months to complete the final courses with a “C” or better grade.

C. Criteria for Completion of the Radiography Program

- A student must complete all Radiography courses within three years of being accepted into the Radiography program. This allows for the repetition of only one semester of radiography courses.
- If a student withdraws from or fails a Radiography course, readmission to the program the following year is not guaranteed and depends on clinical availability. The student cannot be admitted to the program if no clinical spots are available. In this event, the student may reapply for admission to the program the following year and will be ranked according to the previously outlined criteria.

- If there are clinical site placements available, those students wishing to be considered for re-admission will be placed on a waiting list, and the ranking criteria for the waiting list are as follows:
    - No incidents of unprofessional conduct.
    - Successful completion of the radiography courses.
    - Ranking for re-admission will be based on the GPA for all completed radiography courses.
- If a re-admitted student who previously failed a radiography course fails again, the student will not be eligible for re-admission to the program for a period of at least 2 years and must complete the admission requirements. The student will be ranked according to the previously outlined criteria.

Clinical Site Removal – Single Occurrence

- If a student is formally requested to be removed from a clinical education center, the program will attempt to secure an alternative clinical site. If no alternative site can be secured, the student must withdraw from the program.

Clinical Site Removal - Multiple Occurrence

- Any student who is formally requested to be removed from two clinical sites is ineligible to continue in the program and ineligible to apply for future admission. The student will receive a failing grade for the course.
- Students may be ADMINISTRATIVELY WITHDRAWN FROM THE PROGRAM BY THE PROGRAM DIRECTOR at any time due to a student's unethical or unprofessional conduct, uncleanness, use of profanity, poor attendance, violation of clinical education center or Tulsa Community College policies, falsifying records, HIPAA violations, etc.

Grading Policy

Attendance is a critical component of the Radiography Program, as it directly impacts student learning, clinical competency, and professional responsibility.

Classroom attendance policy:

- Students are permitted two (2) absences per semester without academic penalty.
- Beginning with the third absence, a five (5) point deduction will be applied to the student's final course grade for each additional absence.
- Excused absences (e.g., doctor's note, medical emergencies, jury duty) may be considered case-by-case, provided appropriate documentation is submitted.

The following grading scale is used in all RADT courses*:

93 - 100%	=	A
85 - 92%	=	B
75 - 84%	=	C
Below 75%	=	F

To continue in the program, students must receive a minimum grade of C in any RADT course.

- Students must accrue 75% of the total points possible on exam scores alone before other scores are included in the final average. Earning less than 75% of the total possible exam points results in failure of the course. Earning less than 75% of the total possible points for the semester will also result in failure of the course.

*The RADT course grading scale is implemented to ensure that the national registry score, which is based on a 75% passing score, can be achieved to achieve registered technologist status.

- Clinical grades will be based on competencies, assessments, unassisted procedures, attendance, daily, mid-term, and final exams. STUDENTS MUST PASS MID-TERM AND FINAL CLINICAL EXAMS TO CONTINUE IN THE PROGRAM.
- If a clinical exam is failed, the failing grade will be the grade recorded, and students are given one chance to re-take the exam to achieve a passing score. If a passing

score cannot be achieved, the student must withdraw or will be administratively withdrawn from the program.

Required competencies will be stated in the semester syllabus, in accordance with the listed objectives.

The final clinical evaluation grade for each semester will be the average of the assessments from the TCC faculty member, clinical preceptor, and registered technologist.

Any student with an average below 75% at Mid-term will be placed on program probation for the remainder of the semester. Program probation will inform a student of the possibility of failing the course. If performance does not improve, the student should withdraw from the course.

Use of AI in Radiography Courses

AI tools are not required; you may choose to use them as learning aids (e.g., to understand complex concepts or organize study materials).

However, be aware of these important limitations:

- AI tools can generate incorrect information about radiographic techniques, positioning, and technical factors. Always verify information against your textbook, course materials, and clinical guidelines.
- All submitted work must reflect your own understanding. You are responsible for the accuracy of any work you submit, regardless of how it was prepared.
- AI cannot replace the hands-on skills, clinical judgment, and critical thinking essential to radiography practice.
- Use of AI tools to complete assessments without genuine learning undermines your preparation for clinical practice and ARRT certification.
- In clinical settings, patient safety depends on your knowledge and skills—not AI-generated responses.

If you have doubts about the appropriate AI use for any assignment, please ask before submitting your work.

Academic Integrity / Testing Policies

Academic Integrity policies will be handled in accordance with the TCC Student Handbook. Academic Policies are addressed in SH.02 of the handbook. Any student violating the academic integrity or testing policies of the institution may be dismissed from the program.

Students may appeal the alleged violations and/or sanctions applied. The appeal must be filed by the student within five (5) business days following the meeting between the instructor and student where the violations and sanctions are discussed using the Appeal of Academic Integrity Violation form.

All RADT classes will utilize the TCC testing center for exams to better prepare students for their ARRT registry. Testing time is built into the classroom and lab time.

Vacations, Holidays, & Personal Days

Student vacation periods and holidays coincide with those identified on the TCC Academic Calendar. Students will be allowed six (6) personal days during clinical education throughout the two-year program.

Weather Policy

During hazardous weather conditions that result in the closing of Tulsa Community College, Radiography students are not required to attend class or clinical for that day. https://www.tulsacc.edu/experience/campus-safety/emergency/closures.

Students should not put their safety at risk at any time due to hazardous weather conditions. If hazardous weather conditions occur, students must decide whether attending class or clinical would put them at risk.

Phones & Other Electronic Devices

Students should show respect for faculty and other students by turning off cell phones or other electronic devices during classroom, laboratory, and clinical activities. Digital or tape

voice recorders may be used to record lectures, but permission must be obtained from the faculty in advance. Laptop or notebook computers may be used to take notes during class. **Personal laptops and notebooks are not allowed at clinical education sites.**

CELL PHONES ARE NOT ALLOWED IN THE EXAM AREAS AT CLINICAL. Cell phone calls or text messages made or received during clinical time must be of an emergency nature. They must be completed as quickly as possible in a location away from exam areas. A student who brings a phone or other electronic device into the clinical work area will be asked to leave the clinical site and contact their instructor before returning to clinical. They will receive no credit for clinical time missed.

Personal Safety, Bullying/Cyberbullying

According to the TCC Student Handbook, the following policy is strictly enforced in the Radiography Program.

> **SH.11.D.11 Personal Safety:**
> Bullying/Cyberbullying: any written, verbal, or physical act, or any electronic communication, directed toward a person that is intended to cause or that a reasonable person would know is likely to cause, and that actually causes, physical harm or substantial emotional distress and thereby adversely affects the ability of another person to participate in or benefit from the college's educational programs or activities. Bullying does not include constitutionally protected activity or conduct that serves a legitimate purpose

Social Medica Use

Students should be aware of the public availability of information present on social networking sites and other electronic devices. Any information that violates patient privacy laws or discloses a patient's or a clinical education center's identity is strictly prohibited and may result in counseling and/or dismissal of a student from the Radiography program. Due to the broad nature of HIPAA law interpretation, great discretion should be exercised when posting information about your student experiences on a website or any online platform. A

violation of HIPAA laws can result in civil or potentially criminal litigation, as well as immediate termination from the program.

Academic & Clinical Performance Counseling Policy

The three major counseling areas are behavioral, academic, and clinical performance.

An instructor defines counseling as an interaction resulting from a student's observed behaviors and academic or clinical performance. A counseling conference provides an opportunity for the student and instructor to discuss the area of concern privately, and either party may initiate a conference at any time.

A record of the conference will be provided at the time of the conference, detailing the documentation of performance expectations. The counseling record will become part of the student's permanent file.

Guidelines for Counseling Record

1. Any evaluation of the student's academic or clinical performance will be documented and witnessed by a third party.
2. The counseling record will describe the less-than-satisfactory performance.
3. The observed student performance (incident) will be described objectively.
4. The time, place, and factors influencing the students' performance will be included.
5. The instructor will provide recommendations to help the student improve their performance.
6. The instructor, witness, and student will sign and date the counseling record whenever possible.
7. If a student refuses to sign the counseling record, the witness's signature will validate the conference between the instructor and the student.
8. The original counseling record will be placed in the student's permanent file.

See APPENDIX B

Accidents

All clinical accidents involving patients, hospital personnel, students, or damage to equipment must be reported immediately to the Clinical Preceptor and TCC Faculty or the technologist to whom you are assigned. All incidents should be documented on a Radiography Program Incident Report Form and, if necessary, an incident report form of the clinical education center. Incident reports will be filed in the student's permanent file.

Incidents on campus must be reported to the Program Director or security personnel and will be handled in accordance with the procedures outlined in the Tulsa Community College Handbook.

See APPENDIX C

Standard / Universal Precautions

Since medical history and examination cannot reliably identify all patients infected with HIV, MRSA, Hepatitis, or other blood-borne pathogens, standard precautions should be consistently used for all patients. This approach, previously recommended by the CDC and referred to as "universal, or standard, precautions," should be used in the care of all patients, especially those in emergency care settings in which the risk of blood exposure is increased and the infection status of the patient is usually unknown.

- All health care workers must routinely use appropriate barrier precautions to prevent skin and mucous membrane exposure when contact with blood or other body fluids of any patient is anticipated.
- Gloves must be worn for touching blood and body fluids, mucous membranes or non-intact skin of all patients.
- Gloves must be worn for handling items or surfaces soiled with blood or body fluids.
- Gloves must be worn for performing venipuncture and other vascular access procedures.
- Gloves should be available in all patient rooms, exam rooms, and on crash carts.
- Gloves must be changed, and hands washed after contact with each patient.

- Masks and protective eyewear or face shields should be worn during procedures that are likely to generate droplets of blood or other body fluids to prevent exposure of the mucous membranes of the mouth, nose, and eyes.
- Gowns or aprons must be worn during procedures that are likely to generate splashes of blood or other body fluids.

Comment: Routine patient care that does not involve contact with blood or other body fluids, mucous membranes, or non-intact skin does not require the use of gowns or aprons. However, clinical policy should be followed. Routine, careful hand washing is required before and after any patient contact.

Examples of procedures requiring "mask and protective eyewear or face shields" are specific dental procedures, major operative procedures, endoscopy, and suctioning of the oral cavity or a tracheostomy, which is likely to produce splashes.

I. Hand and other skin surfaces must be washed immediately and thoroughly if contaminated with blood or other body fluids. Hands should be washed immediately after removing gloves.

Comment: Use of these barrier methods in no way eliminates the need for appropriate handwashing before and after patient contact.

II. All health-care workers must take precautions to prevent injuries caused by needles, scalpels, and other sharp instruments or devices during the disposal of used needles and when handling sharp instruments after procedures.
    1. To prevent needle stick injuries, needles must not be recapped, purposely bent, or broken by hand, removed from disposable syringes, or otherwise manipulated by hand.
    2. After they are used, disposable syringes and needles, scalpel blades, and other sharp items must be placed in puncture-resistant containers for disposal; the puncture-resistant containers must be located as close as practical to the use area. Large-bore reusable needles must be placed in a puncture-resistant container for transport to the reprocessing area.

III. To minimize the risk during emergency mouth-to-mouth resuscitation, mouthpieces, resuscitation bags, or other ventilation devices must be readily available for use in areas where the need for resuscitation is possible.

IV. Health-care workers who have exudative lesions or weeping dermatitis should refrain from all direct patient care and from handling patient-care equipment until the condition resolves.

V. Pregnant health-care workers are not known to be at greater risk of contracting blood-borne infections than health-care workers who are not pregnant; however, if a health-care worker develops a blood-borne infection during pregnancy, the infant is at risk of infection resulting from perinatal transmission. Due to this risk, pregnant healthcare workers should be particularly aware of and strictly adhere to precautions to minimize the transmission of bloodborne pathogens.

Comment: No data suggests an increased risk of other infections (herpes simplex, cryptosporidiosis, or others) from HIV-infected patients to health-care workers. Careful adherence to these precautions should adequately protect all healthcare workers, including women who are pregnant or of childbearing age.

VI. Invasive Procedures:
For this document, an invasive procedure is defined as:

1. Surgical entry into tissues, cavities or organs or repair of major traumatic injuries in an operating or delivery room, emergency department, or outpatient setting, including both physicians' and dentists' offices.
2. Cardiac catheterization and angiographic procedures.
3. A vaginal or caesarean delivery or other invasive obstetric procedure during which bleeding may occur.
4. The manipulation, cutting, or removal of any oral or perioral tissues, including tooth structure, during which bleeding occurs or the potential for bleeding exists.

Standard (blood and body fluid) precautions combined with the following shall be the minimum precautions for all such invasive procedures.

1. All health care workers who participate in invasive procedures must routinely use appropriate barrier precautions to prevent skin and mucous membrane contact with blood and other body fluids of all patients.
    a. Gloves and surgical masks must be worn for all invasive procedures.
    b. Protective eyewear of faces shields must be worn for procedures that commonly result in generation of droplets, splashing/spraying of blood or other body fluids or the generation of bone chips.
    c. Gowns or aprons (made of material that provides an effective barrier) must be worn during invasive procedures likely to result in splashing of blood or other body fluids.
2. If a glove is torn or a needle stick or other injury occurs, the glove must be removed, and a new glove donned as promptly as patient safety permits.
3. Students will promptly report any accidental needle sticks to the clinical preceptor and complete an accident report.

VII. Patient or Specimen Labeling:

The implementation of universal blood and body fluid precautions for all patients eliminates the need for the use of the isolation category "Blood and Body Fluid Precautions' previously recommended by the CDC for patients known or suspected to be infected with bloodborne pathogens. Isolation precautions (e.g., respiratory) should be used as necessary if associated conditions, such as tuberculosis, are diagnosed or suspected.

Likewise, implementation of universal blood and body fluid precautions for all patients eliminates the need for warning labels on specimens since blood and other body fluids from all patients should be considered infectious.

Hazard Exposure Information

As a SOHS student, you will participate in laboratory and clinical settings, which may expose you to environmental and physical hazards. These hazards include, but are not limited to, needle sticks, inhalation of microorganisms, and contact with infected body fluids. In the laboratory and clinical setting, you will learn how to minimize this risk using universal

precautions and other infection control measures. Every SOHS student is responsible for further protecting themselves by maintaining safe practices and providing their own health care insurance. The college recommends that you be vaccinated against Hepatitis B before enrollment in the SOHS program you have chosen. Please read the following information regarding this disease and the vaccine. If you choose not to receive the Hepatitis B vaccine, a signed waiver will be required before admission.

Note: Many clinics and hospitals require students from Tulsa Community College to have received the Hepatitis B vaccination before participating in clinical settings. Therefore, vaccinations may be required to enter the program.

TULSA COMMUNITY COLLEGE ASSUMES NO RESPONSIBILITY for any expenses you may incur associated with personal insurance premiums, Hepatitis B vaccinations, personal protective equipment, or other medical expenses related to testing associated with your exposure to environmental or physical hazards in conjunction with your enrollment in one of its Allied Health programs.

Insurance

Liability (Malpractice) insurance is required due to direct patient contact. The student purchases this through the college as part of a group policy during program entrance.

As stated in the contractual agreements with the Clinical Education Centers, if necessary, TCC SoHS students will receive emergency care and treatment from the institution until they can be transferred to the care of a personal physician. Such care provided to the SOHS programs students is to be charged to the student as determined by the Clinical Education Center.

Students are encouraged to carry their own personal medical insurance.

Radiography Uniform Requirements

Students may wear any brand of scrubs they choose, and they must be navy blue.

The left front pocket area of uniforms or lab jackets will have a "Tulsa Community College" logo and "Radiography Student" embroidered, which must always be visible during clinical education.

Students will ALWAYS wear a college-issued ID badge and assigned dosimeter while at clinical.

1. Uniforms will conform to the requirements of the Tulsa Community College Radiography Program. This code will be strictly enforced.
2. Neatness, clean shoes, and good grooming are essential in a proper uniform. Good personal hygiene is always expected.
3. The dress code must be met in its entirety, or students may be sent home.
4. Uniform shoes or athletic shoes that are clean and in good condition are acceptable footwear for clinical.
5. Sweaters, hoodies, or fleece jackets are not permitted.
6. Minimal jewelry is permitted.
7. Long hair and/or unusual hairstyles may need to be tied back or modified to meet clinical education center standards.
8. The use of heavy perfume or cologne is not permitted.
9. Beards or mustaches are at the discretion of the clinical education center.
10. The clinical center may not permit visible body piercings and/or tattoos. Students with piercings and/or tattoos may be required to remove or cover them during clinical.
11. White or navy-blue lab jackets are permitted. Lab jackets should be long-sleeved, waist-length, and have the TCC embroidered logo.
12. Radiation badges are ordered, and Tulsa Community College maintains a record of them. A replacement for a lost or damaged badge must be reported to the faculty immediately.
13. When students are not engaged in a Tulsa Community College clinical activity at the clinical site, they may not represent themselves as Tulsa Community College radiology students by wearing any identifiable part of the radiography student uniform.

Monitoring Personnel Radiation/MRI Safety

All students will wear an assigned radiation monitoring device, also known as a TLD (thermoluminescent dosimeter), during clinical education and all on-campus laboratory activities.

TLDs will be ordered by the college and cared for by the students throughout their retention in the program. Students will be asked to present their TLD dosimeter quarterly. If a student leaves the program for any reason, their dosimeter and TCC student badge must be returned to the school administrator or instructor.

A quarterly radiation report is posted in the Student Communication Center, organized by cohort, for students to review. All students have access to view their records at any time. The radiation report is available for discussion with the Radiation Safety Officer or Clinical Coordinator whenever the student has a question. A report indicating a dose above the recommended threshold in any given quarter is immediately discussed with the student by the Radiation Safety Officer and the clinical preceptor. The threshold recommendations are set forth by the NRC (Nuclear Regulatory Commission) and are available on the last page of every dosimeter report. The cause of the exposure will be investigated, and appropriate action will be taken to correct the situation.

Rules to be observed while wearing the radiation monitoring device (TLD) are:

1. TLD's shall be worn at the collar level facing the radiation source.
2. TLDs shall be worn outside of a protective apron or thyroid collar protection.
3. TLDs shall be worn for all lab activities under the appropriate supervision of a faculty member.
4. TLDs should not be placed on or near TV sets or heat-producing appliances.
5. TLD's should not be left in the sun or in automobiles.
6. TLD's should not be allowed to get wet.
7. TLDs are not to be worn while the student is working as an employee at the clinical center.
8. TLD's are not to be worn when receiving personal imaging services.

Students **must** understand basic radiation safety practices before being assigned to clinical settings. Radiation safety practices are covered in the Introduction to Radiography course in the first semester and subsequent courses throughout the program.

Students **must not** hold image receptors during any radiographic procedure.

Students **must not** hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care.

As students progress through the program, they **must** become increasingly proficient in applying radiation safety practices.

MRI Policy

Students may be assigned to an MRI environment. Before clinical rotations, students will adhere to the following procedures.

1. Students have completed the MRI safety class and quiz in RADT 1211_Introduction to Radiography in the first semester.
2. Students will complete an MRI safety checklist form, which the TCC faculty will review.
3. If the form contains any "yes" answers to the safety criteria, the student will discuss the responses with the TCC clinical coordinator, and the form will be reviewed by MRI supervisors or managers at the clinical site.
4. Students with any changes to their MRI screening form should complete a new form as soon as possible and discuss it with the TCC clinical coordinator.
5. Students will undergo secondary screening at the assigned clinical site before entering the MRI department.

See APPENDIX I

Pregnancy Policy

Radiation protection is an essential aspect of Radiologic Technology. If a female student becomes pregnant, it is recommended (not required) that she notify the Program Director immediately in writing. A counseling session will be arranged to instruct the student on the regulations for this condition.

The Program Director, Clinical Preceptor, and Clinical instructor will discuss the proper procedure to follow during clinical time to avoid excessive radiation. The student will be permitted to continue clinical training with acknowledgment of the hazards involved.

A form is signed, signifying that the student has received adequate instruction in radiation safety and discussed all aspects of continuing in the program.

When the faculty is informed of pregnancy, a second badge will be ordered to be worn at waist level inside the apron. The original badge will be worn on the collar, as defined above.

Any missed time in class or clinical due to pregnancy will be handled in coordination with the TCC Title IX Coordinator. Students will schedule a time to meet with the Program Director to develop a plan for any missed time due to pregnancy.

To comply fully with the Joint Review Committee on Education in Radiologic Technology Standards for an Accredited Educational Program in Radiologic Sciences for Standard 5.1.

1. All female students will have the option of whether to inform the program official of their pregnancy.
2. If the student chooses to voluntarily inform program officials of her pregnancy, it must be in writing.
3. In the absence of this voluntary, written disclosure, a student cannot be considered pregnant.
4. If the student declares pregnancy in writing, the student may continue clinical training without modification.
5. The program may offer clinical component options such as clinical reassignments and/or leave of absence in compliance with Title IX regulations.
6. The student has the option of withdrawing their declaration of pregnancy with written notification to program officials.

See APPENDIX D

Conduct

Students will be subject to hospital policies as outlined in employee handbooks. Any question as to the interpretation of policies should be referred to the clinical preceptor of that Clinical Education Center. For this information, refer to the organizational structure.

Students may not come to class or participate in clinical/fieldwork/ practicum or program activities impaired by alcohol or drugs, including marijuana. Your role as a student in the Radiography Program is considered a "safety-sensitive position."

Suspicion of a student violating the Code of Conduct will be sent for testing by the school upon discussion with the clinical instructor for that site.

1. The student is sent to the clinical preceptor, where applicable
2. The preceptor informs the TCC faculty assigned to the site and/or the Program Director.
3. SoHS will arrange for drug testing.
4. The student May Not drive themselves.
5. Escorted by TCC staff or a cab/Uber called for the student.
6. If a student refuses, the student will be automatically withdrawn from the program.

Faculty will review any non-professional conduct, and disciplinary action will be taken as explained in the TCC Student Handbook. This can be found in section SH.11 Student Code of Conduct.

The Department of Radiology at a clinical site reserves the right to terminate any student's clinical training when professional and/or ethical conduct is incompatible with the Clinical Education Center's accepted standards.

Clinical Compliance

Students may be placed on clinical noncompliance probation if they have not completed all clinical requirements by each semester's stated due date. They may not attend clinical, and time will be counted against their clinical attendance grade until they become compliant. The student will meet with the Clinical Coordinator and Program Director to create an action plan for compliance.

Clinical noncompliance probation will affect the student's eligibility for early clinical release/job out.

Professional Behavior

A professional attitude must always be maintained. Patients must be treated with kindness, empathy, and courtesy. The patient's privacy and safety must always be preserved. It is essential to remember that the care and welfare of the patient are the primary obligations of all healthcare workers.

General Rules of Conduct:

1. Introduce yourself to the patient. Always wear your TCC-issued clinical badge to identify yourself to patients and hospital personnel.
2. Close doors for privacy and cover patients during their stay in the radiography room.
3. Following HIPAA regulations, never discuss a patient's history or information on a chart with anyone other than the supervisor or Radiologist.
4. Avoid idle conversation within the patient's hearing.
5. Eating, drinking, and smoking will take place only in areas designated for such during clinical hours. NOTE: Smoking and vaping are prohibited on all hospital campuses.
6. The R.T. of the assigned room or the area supervisor will designate lunch and break times. Students should not be in the break area at other times without permission.
7. Students should refrain from chewing gum or consuming food in the presence of a patient.
8. Students are not permitted to receive or make personal telephone calls unless in an emergency.
9. Students are not permitted to receive visitors without the permission of a clinical instructor.
10. Strong or profane language is not permitted under any circumstances.
11. Students are not permitted in the department at any time other than during clinical.

Supervision of Clinical Activities

The designated clinical preceptor of the Clinical Education Center is the primary supervisor for students during clinical training activities. The clinical preceptor and the faculty of Tulsa Community College will schedule student activities to meet the clinical objectives each semester.

Direct Supervision: Direct supervision assures patient safety and proper educational practices. The JRCERT defines direct supervision as student supervision by a qualified radiographer who:

- Review the procedure in relation to the student's achievement.
- Evaluates the condition of the patient in relation to the student's knowledge.
- Is physically present during the conduct of the procedure.
- Reviews and approves the procedure and/or image.

Students must be directly supervised until competency is achieved; the student may be indirectly supervised based on the following guidelines.

Indirect Supervision: Indirect supervision promotes patient safety and proper educational practices. The JRCERT defines indirect supervision as supervision provided by a qualified radiographer who is immediately available to assist students regardless of their level of achievement. "Immediately available" is interpreted as the physical presence of a qualified radiographer adjacent to the room or location where a radiographic procedure is being performed. This availability applies to all areas where ionizing radiation equipment is in use on patients.

General Policies of Supervision:

1. A student radiographer MAY NOT begin an exam without direct or indirect supervision based on the student's proficiency level.
2. A student radiographer MAY NOT repeat an exam or image without direct supervision available.
3. A student radiographer MAY NOT do portable or surgical radiography without the direct supervision of a qualified technologist.
4. Any student performing an imaging procedure without the appropriate level of supervision will be counseled, and any repeated violations will result in dismissal from the Radiography program.
5. A student radiographer cannot be assigned to work as the sole responsible individual under any circumstances.
6. During clinical hours, the R.T. of the student's assigned area oversees the student's activities, and no student is to be out of the assigned area without the R.T.'s knowledge and permission and the clinical preceptor's permission.

7. Students must report to assigned rooms at 7:00 a.m. (or the applicable starting time) to prepare the room for the day's work. Students are expected to participate in all activities taking place in the assigned room or area. This may be by observation, assisting, or unassisted exam performance.
8. Room assignments and rotations will be developed by TCC faculty and clinical preceptor each semester. This schedule will be posted in the department within the first week of the semester.
9. Room assignments and rotations should not be changed without the permission of the clinical preceptor. Students are responsible for reporting to the clinical preceptor or Program Director any schedule changes that result in excessive time missed in scheduled areas.

Student Clinical Area Responsibilities

Responsibilities of all students while in their assigned clinical area:

1. Students are expected to clean and restock supplies in their assigned room or any room they use during the day.
2. Students may be asked to assist patients by observing and helping them with clothing changes.
3. Students may be requested to escort or transport a patient to or from the department.
4. Students may be requested to complete documentation on patients or assist with departmental office tasks.
5. Students may be requested to assist in quality control activities.
6. Students may be asked to participate in any departmental function to promote the smooth operation of activities.
7. Students should never perform any Radiographic exam without the proper level of supervision.
8. Students may not take doctors' orders. A Registered Technologist must verify any doctor's orders given to a student.
9. TCC recognizes the importance of students learning on the job. Senior students who have student tech jobs may leave no earlier than 3 p.m. to go to their job site.

Clinical Attendance & Punctuality

1. Students are expected to attend all clinical days. It is the STUDENT'S responsibility to notify their clinical instructor and clinical preceptor, before the start of a clinical day, if they are going to be absent or late. Failure to call in on a clinical day will result in additional points deducted from your clinical grade.
2. No scheduled appointments are to be made during clinical hours. If a student has a scheduled appointment, they must use a personal day or incur a point deduction.
3. Students must clock in and out using the Trajecsys program and always enable location services. Failure to clock in or out, or to allow location services, will be considered an absence.
4. Students must report any clock-in errors through the communication center within 24 hours of the occurrence. Errors not reported within this timeframe cannot be corrected, and the original clock-in time will be used for attendance records.
5. Students may not clock in and out for another student. Clocking in or out for another student is considered record falsification, and both students will be dismissed from the program.
6. Students are NOT permitted to work as a hospital employee during required clinical and/or class hours. Students cannot receive any compensation (pay) for clinical hours required by the Radiography program.
7. If required, students who accept Student Technologist positions may attend orientation sessions as an excused absence from clinical if the orientation occurs on a scheduled clinical day and the student is not receiving compensation for their time spent at orientation.
   If the student is receiving compensation for attending the orientation, they may choose to either:
   - Use one of their six personal days
   - Take the day as an unexcused absence, resulting in a deduction of attendance points for that day.
8. Students not on duty are NOT permitted in the department without the permission of the clinical instructor and/or department supervisor.
9. Modifications to a student's assigned clinical site will be considered under the following conditions:

- A concern for the students' safety has been brought to the attention of the program faculty.
- The clinical preceptor or clinical site manager has asked the program faculty to change the student clinical rotation assignment.
- Extenuating circumstances will be taken into consideration at the faculty's discretion.

Clinical Hours:

(30 min. lunch unless otherwise noted)

Semesters	Times	Days
Semester 2 & 3	7:00 AM - 3:30 PM	T Th
Semester 4	7:00 AM - 3:30 PM	M W F
Semester 5 & 6	7:00 AM - 3:30 PM	M W F
Night Rotation: - 2 Weeks / Semester		
Semester 3	1:00 PM - 9:00 PM	T TH
Semester 4	1:00 PM - 9:00 PM	M W F
Semester 5 & 6	1:00 PM - 9:00 PM	M W F
Hillcrest Hospital, Claremore	*7:30 AM - 4:00 PM*	

Clinical Attendance Policy

Beginning the students' fall semester of their senior year, students may either attend their clinical site on Fridays for their normally scheduled hours, or spend the equivalent of classroom-to-clinical hours (4 hours) on campus for supervised study time.*

Students attending clinical will clock in and out at their site, just as they do every other scheduled clinical day.

Students who attend supervised study time will clock in and out at the Metro campus. They are required to spend the allotted amount of time in the classroom. A TCC Radiography instructor will be on-site to confirm attendance, appropriate time use, and offer instructional guidance as needed. Attendance points will be deducted for time misuse.

Students must complete all competencies and unassisted examinations for the semester in which this policy is in effect. If the student falls behind at midterm, the Friday option will be removed.

Communication is essential to participate and make this study time possible. Students choosing to attend campus will be REQUIRED to send an email through the Radiography student communication center AND inform their clinical site personnel. No exceptions or alternate forms of communication will be accepted.

Attendance will be counted as a regular clinical day, outlined in the Policy Manual.

**Students who are absent for one or more of the clinical days during the week have the Friday option removed. If the student fails to follow this policy and comes to campus, they will be counted as an unexcused absence for the day.*

Clinical Attendance Points

Attendance Status	Points Earned
On time or within 5 minutes of start time	15 points
Late (6-59 minutes) OR Leave Early (less than 1 hour)	5 points
Personal Day used (with proper notification)	15 points
Absent WITH proper notification	-15 Points
Absent WITHOUT proper notification	-30 points

Clinical Grade Policy

1. Students earn 15 points per day for attendance.
2. There is an 85% attendance policy required for each clinical semester.
    a. Attendance issues will be evaluated throughout the semester. Excessive absences or tardiness will be addressed with the student. Any student who falls below 85% on their attendance grade will be placed on probation. Students placed on probation for poor attendance in two consecutive semesters during the program may be dismissed, unless Title IX accommodations apply.
3. The total number of attendance points is based on the total number of clinical days scheduled and varies each semester.

4. Students who are absent from clinical practice, have contacted their clinical preceptors and emailed the radiography student communication center, will NOT receive their initial 15 points for the day, but will receive -15 points for that day.
5. Students who are absent, have not called into the clinical site, and have not emailed the radiography student communication center will receive -30 points for attendance for that day. This must be done before the assigned clinical start time, or it will count as an absence.
6. Absolutely NO text messages, phone calls, or instructor emails will be accepted to let the instructors know the student will be missing clinical. Violating this standard will result in a loss of attendance points.
7. Students receive 6 personal days throughout the two-year program. If the student chooses to utilize one of their personal days when absent, that should be noted in the communication center email (as stated in #2). The student will receive full credit for the day (15 points).
    a. Students are advised that a clinical grade based on attendance alone could result in course failure.
    b. Students are expected to inform TCC faculty of the intended use of a missed day or personal day through the Radiography Communication Center email process.
    c. Students are expected to keep track of the personal days they use and how many remain throughout the program
8. Students who arrive on time or within 5 minutes of the starting time will receive 15 points for that day.
9. Students who arrive more than 5 minutes late but less than 1 hour late or leave less than 1 hour early will receive 5 points for that day.
10. Students must remain at their clinical site for the duration of their scheduled clinical time to receive full credit for the day. There are no Half-day exceptions to this policy. If you are not attending the entire clinical shift, no points are awarded for the day. Students must communicate this as if they were absent for the whole day.
11. Students attending clinical in an improper uniform may have 5 points deducted from that day's attendance points or may be sent home and lose all points for that day.
12. Any missed time is a missed opportunity; NO clinical hours can be made up to fulfill requirements, unless accommodations under Title IX apply.

CLINICAL MID-TERM AND FINAL EXAMS MUST BE PASSED WITH A SCORE OF 75% OR HIGHER IN ORDER TO CONTINUE IN THE PROGRAM.

Students who fail the mid-term or final clinical exam will be given one opportunity to repeat the exam as described above in the grading policy.

Clinical Records

Students are required to keep a current record in Trajecys of all examinations conducted during the clinical experience.

EXAM RECORDS: Trajecys

1. **ALL** exams should be marked - Observed, assisted, or performed.
2. **A REGISTERED RADIOGRAPHER must approve all unassisted examinations and competencies in Trajecys.**
3. ALL examinations **MUST** include the date and type of exam. Students should keep track of the competency Accession number separately for review with the clinical instructor upon site visit.
4. **ALL** exams observed, assisted, or performed **should** be logged in Trajecys.
5. Repeated exams should be entered into Trajecys and a registered technologist must be in direct supervision when repeated images are performed.
6. The faculty will periodically check ALL logs during each semester, including any repeat images that will be discussed with the student.
7. **Any falsification of any records will result in dismissal from the Radiography program. No Exceptions.**

STUDENT PROCEDURE NOTEBOOK:

1. A mini Bontrager (spiral-bound) will be acquired upon entry into the program. (Sold in Tulsa Community College Bookstore).
2. The student will carry and utilize this book in clinical every day.

Clinical Evaluations

The syllabus states students will be evaluated using mid-term and final evaluations in Trajecsys each semester.

The grade of final evaluations completed during a period is averaged with the other assessments to determine an overall evaluation grade of 100 points (100%).

The evaluation is discussed with the student and becomes part of the clinical grade for that semester.

Students will evaluate the Clinical Education Center at the end of the fall semester of their junior and senior years.

See APPENDIX E

Competency Evaluation

1. The purpose of clinical competency is to evaluate the actual performance of skills following classroom theory, laboratory simulation, and clinical practice.

2. To measure a student's ability to perform at a satisfactory level of competency, the American Society of Radiologic Technologists (ASRT) has established a method of evaluation that has been accepted by the Joint Review Committee on Education in Radiologic Technology. This method has been revised to meet the needs of this program.

3. The goal is to graduate competent Radiographers for prospective employers. To ensure adequate clinical participation, students must have successfully demonstrated competencies in specific categories related to RADT courses for each semester.

Competencies **MAY NOT BE PERFORMED** until after the student completes classroom theory, laboratory simulation and the classroom exam has been successfully completed. After these requirements are met, the student will be allowed to attempt competency.

The student will participate by observation, assisted and performance of exams in the clinical education center at the same time.

4. The competency form and criteria will be explained to the student in the first semester of clinical training. Before a competency may be attempted, the student must have performed the examination unassisted twice under DIRECT supervision. The student, TCC faculty, or the clinical instructor may initiate the competency evaluation. Successful completion of the competency indicates the student's proficiency in that examination.

5. The competency evaluation may be completed by Tulsa Community College faculty, clinical preceptors, or a registered technologist (R.T.) designated by the clinical preceptor to serve as an evaluator. Once a student has successfully passed a competency on any one examination, they must continue working to complete all the mandatory and 15 elective competencies from other examinations on the competency list. The student is required to achieve a minimum grade of 85% on any competency or the competency is failed.

6. Any competency score below 85% will not be counted toward the required competencies for the semester or program completion. If a competency is failed, students must demonstrate competency in the lab with an instructor before being allowed to retake the competency. A failed competency should be recorded in Trajecys for record-keeping and evaluation of student progress.

7. All competency exams will be performed according to the clinical site's routine projections and positions. Fluoroscopic and surgical competencies will also be performed according to the clinical site's routine.

8. Students will be given a competency checklist, which is a list of ARRT mandatory and elective exams required for graduation. In addition to the 6 General Patient Care competencies, students must demonstrate competency in all 37 of the mandatory Radiologic Procedures, and at least 15 of the 35 elective Radiologic Procedures. One elective procedure from the head section, and 2 elective imaging procedures from the fluoroscopy studies section, one of which must be either an Upper GI or a Barium Enema.

Clinical Competency Sequence

Area:	Activity:
Classroom	Theory
Laboratory	Demonstration and practice
Classroom Examination	Classroom exam completed
Clinical Participation	Observe, assist and perform
Category Competencies	Upon successful completion of Competency, students may perform an exam without direct supervision, but always indirect supervision.
Final Competency	Upon successful completion of the Final Competency, students will perform without direct supervision, but always indirect supervision.

LABORATORY:

Competency evaluations are introduced in the laboratory setting. This will enhance the students' comprehension of the multitude of subtopics that encompass each major area of the evaluation sheet.

Laboratory competency does not and should not enter into the Category and Final Competency Evaluation system.

CLASSROOM EXAMINATION:

Competencies **MAY NOT BE PERFORMED** until after the student completes classroom theory, laboratory simulation, and the classroom exam has been successfully completed.

CLINICAL PARTICIPATION:

Clinical participation consists of the observation, assistance, and performance phases of clinical education. The student perfects and expands clinical performance. Student performance will be evaluated based on a required number of unassisted examinations, competencies, a midterm evaluation, and the final evaluation.

In the event a student refuses to do an exam or report to a specific area (i.e., surgery, fluoroscopy, or specialty areas), or if a student refuses to perform an exam stating to the technologist, they have already comped on an exam, the student may be asked to clock out for the day, losing that day's attendance points. The clinical preceptor should be advised at this juncture, and the student is expected to reach out to their clinical instructor upon leaving the clinical site.

Professionalism:

TCC students are expected to exhibit professionalism in all areas. The program desires to graduate students who demonstrate professional behavior in the radiology field and beyond.

Students are required to maintain their immunization records promptly each semester. Students who fail to keep accurate records may be placed on probation.

CATEGORY COMPETENCIES:

Once the student has completed the laboratory and clinical participation components of the required objectives, they are eligible to request one of several available category competencies.

FINAL COMPETENCY:

Completion of required competencies for graduation. If competency examinations are unavailable, additional clinical hours may be required. Simulations will be considered as a last resort.

Competency Categories

Category 1 (Chest & Abdomen)	
Chest, routine	Upper airway (soft tissue neck)
Chest, pediatric 6 or under	Abdomen, supine (KUB)
Chest AP, wheelchair or stretcher	Abdomen, upright (two views)
Chest, lateral decubitus	Abdomen, lateral decubitus (two views)

Chest, Geriatric 65 or older	Abdomen, Pediatric 6 or under
Category 2 (Upper Extremity)	
Finger or thumb	Trauma Shoulder
Hand	Trauma Upper Extremity (Non-Shoulder) *
Wrist	Clavicle
Forearm	Scapula
Elbow	AC Joints
Humerus	Upper or lower Extremity Pediatric 6 or under
Shoulder	Upper or lower Extremity Geriatric 65 or older
Category 3 (Lower Extremity)	
Toes	Femur
Foot	Hip
Ankle	Trauma Hip (x-table lateral) *
Os Calcis	Pelvis
Tibia-Fibula	Trauma Lower Extremity
Knee	Lower or upper Extremity Pediatric 6 or under
Patella	Lower or upper Extremity Geriatric 65 or older
Category 4 (Thorax, Spine)	
Cervical spine	Scoliosis Series
Thoracic Spine	Sacroiliac joints
Lumbar Spine	Ribs
AP & Cross-Table lateral spine	Sternum
Sacrum & or Coccyx	

Category 5 (Head Studies)	
Skull	Orbits
Paranasal sinuses	Mandible
Facial bones	Temporomandibular Joints
Nasal bones	
Category 6 (Contrast Studies)	
Esophagus (not dysphagiagram, swallowing dysfunction study)	Cystogram or Cystourethrography
Upper G.I. Series	Myelogram
Small Bowel Series	Arthrogram
Contrast enema (BE)	Hysterosalpingogram
ERCP	
Category 7 (Mobile Studies/Portables)	
Chest Portable	Upper or lower extremity
Abdomen	Mobile study pediatric 6 or under
Category 8 (Mobil C-Arm Studies)	
C-Arm Manipulation	Surgical C-Arm

** Trauma is considered a serious injury or shock to the body. Modifications may include variations in positioning, minimal movement of the body part, etc.*

Requirements By Semester

RADT 1324 **8 competencies are required, with a maximum of 12 total.**

General Patent Care Competencies: patient transfer and care of patient medical equipment.

Required Unassisted Exams: 40

Required Clinical Area Rotations: routine procedures, fluoro procedures, portables, and emergency room

RADT 1344 **10 competencies are required, with a maximum of 14 total**

General Patient Care Competencies: none

Required Unassisted Exams: 50

Required Clinical Area Rotations: routine procedures, fluoro procedures, portables, and emergency room and 2 weeks of evenings.

RADT 2312 **8 total. No maximum number of competencies. A category 8 competency, C-Arm, must be completed by the end of the fall semester.**

General Patient Care Competencies: Sterile technique.

Required Unassisted Exams: 70

Required Clinical Area Rotations: routine procedures, fluoro procedures, portables, emergency room, surgery and 2 weeks of evenings.

RADT 2336 **Students should work towards completing the remaining competency requirements. No maximum number of competencies.**

General Patient Care Competencies: none

Required Unassisted Exams: 120

Required Clinical Area Rotations: routine procedures, fluoroscopy procedures, portables, emergency room, 2 weeks of evening shifts, surgery, and CT.

RADT 2356 *All mandatory and elective competencies required for graduation should be obtained.*

General Patient Care Competencies: venipuncture and any that have not been completed.

Required Unassisted Exams: 50 if the student takes advantage of the "job out" option(see policy), or 75 for the entire semester.

Required Clinical Area Rotations: Students should be scheduled into areas where they feel they need improvement and still require development of competencies. There will be two weeks of evenings, surgery, CT scans, and optional external rotations, if the student requests them.

Unassisted Exams:

- Two chest exams and two kub exams in each category (e.g., Abdomen, Chest and Thorax, Geriatric, Mobile studies, and Pediatric) will count as unassisted exams each semester. All other unassisted X-ray exams performed during the semester will also count.
- The number of required unassisted exams are for each semester. Only unassisted exams performed during the enrolled semester will be counted

See APPENDIX F

See APPENDIX H

Clinical Competency Criteria

PERFORMANCE EVALUATION OF STUDENT BY REGISTERED TECHNOLOGIST

I. ROOM PREPARATION

Student was able to:

1. Evaluate requisition and identify procedure(s) to perform.
2. Recall and pronounce the patient's name and dob.
3. Identify and assess the mode of patient transportation to the clinical area.
4. Provide a clean and orderly exam room.
5. Prepare the exam table with clean linens and patient gown.
6. Find and prepare all necessary equipment and supplies to perform exam.
7. Make preliminary settings to control panel for exam to be performed.
8. Prepare tube/fluoroscopy equipment for exam.

II. PATIENT/STUDENT RELATIONSHIP

Student was able to:

1. Find and identify the correct patient.

2. Assist the patient to the radiographic room.
3. Give proper instructions to patients to prepare for exams.
4. Assist the patient, if necessary, with clothing and gown.
5. Communicate with patients in a professional manner.
6. Give proper instructions to the patient during the exam.
7. Follow proper universal precautions or isolation procedure.

III. POSITIONING SKILLS

Student was able to:

1. Position the patient correctly on the table.
2. Align and center anatomy to be demonstrated to IR.
3. Center central ray to anatomy or IR.
4. Place patient in the correct position (i.e., oblique, lateral, decubitus, etc.)
5. Correctly angle the central ray if necessary.
6. Prevent unnecessary anatomy from showing on the image.

IV. EQUIPMENT MANIPULATION

Student was able to:

1. Turn the X-ray tube to the correct orientation, utilize tube locks.
2. Move the bucky tray, or detectors, and lock in position.
3. Insert and remove cassettes, if applicable, from bucky tray or spot film device.
4. Use a technique chart and select technical factors at control panel.
5. Measure the patient if necessary.
6. Utilize any positioning aids or special equipment necessary for the exam.
7. Identify the image with anatomic markers and any other necessary markers.
8. Fill syringes using sterile technique, if applicable.
9. Select correct IR size.
10. Adapt equipment used to any unique circumstance that arises during exam.

V. EFFICIENCY OF PROCEDURE

Student was able to:

1. Perform procedure in an orderly manner.
2. Complete procedure in a normal amount of time.

3. Organize actions for efficiency.

IMAGE EVALUATION BY STUDENT WITH REGISTERED TECHNOLOGIST

I. ANATOMICAL PARTS
   1. Evaluate image for correct anatomy to be shown.
   2. Determine if anatomy is shown in proper perspective.
   3. Determine if motion is present.
   4. Students should be able to decide if image needs repeating.

II. PROPER ALIGNMENT
   1. Determine if part, film, and tube were centered correctly.
   2. Evaluate image for correct patient positioning.
   3. Evaluate image for any distortion due to incorrect alignment.
   4. Students should be able to decide if image needs repeating.

III. TECHNIQUE MANIPULATION
   1. Use a technique chart and select the proper technical factors.
   2. Compensate for pathology, if necessary.
   3. Modify technique to achieve a better result.
   4. Students should be able to decide if image needs repeating.

IV. FILM IDENTIFICATION
   1. Determine if all required film markers are visible.
   2. Evaluate images for all vital patient identification.
   3. Correct or modify image to include necessary ID.

V. RADIATION PROTECTION
   1. Collimation is visible.
   2. No repeats.
   3. All appropriate shielding was used, where applicable.
   4. Central ray is collimated to anatomy of interest.
   5. ALARA was practiced throughout the exam.

See APPENDIX G

Clinical Release – Job Out

Students who demonstrate **outstanding performance** during the Radiography program are eligible to participate in a "job-out" opportunity. Early completion of clinical training is optional. Taking advantage of the early release will exempt the student from the final clinical exam. A final clinical evaluation will be performed at the time of clinical completion. The student will be responsible for communicating the four-week early release and, if applicable, any personal days used to release earlier than the four-week period. This should be written communication through the Radiography Student Communication Center.

Four weeks before graduation:

If students have personal days, they may use them then; however, the "job out" policy remains in effect.

Students are expected to document their work as student radiographers for a minimum of 1 day per week.

Students who complete clinical early are **required to attend all didactic classes** and class activities until graduation.

The following criteria must be met to be considered eligible.

1. A final grade of A or higher in all previous clinical classes, and a final grade of B or higher in all didactic courses of the Radiography program.
2. No failed clinical mid-term or final exams during the program.
3. There should be no excessive absences or tardiness during clinical rotations. Excessive may be defined as three or more per clinical semester, depending on the length of the semester, e.g., summer clinical.
   NOTE: 4 absences will affect the student's attendance grade, which will prevent them from being eligible according to the early release criteria.
4. Students must not have been placed on academic or clinical probation throughout the program.
5. Ethical issues: Refusal to perform an exam when asked by a technologist is considered an ethical issue. Students are serving the patient's best interest in the clinical scenario and are expected to participate in any exams offered to them. This may be a cause for exemption from the early clinical release process.

6. Any student who receives a grade of less than 85% on a clinical evaluation in any clinical semester will be exempt from the early-out process.
7. Students must have completed at least 50 unassisted exams in the final Spring semester.
8. Students must have completed all mandatory and elective competencies needed for graduation.
9. Extenuating circumstances may be considered at the faculty's discretion.

TCC Grievance Policy & Procedures

The Radiography Program follows all Tulsa Community College Grievance Policies and Procedures, which can be found at https://www.tulsacc.edu/experience/report-concern and in the TCC Student Handbook, which can be found at https://guides.library.tulsacc.edu/policiesandprocedures/student-handbook.

- Any student concerns or complaints should be reported via "Report It" which can be found under the Report a Concern link above or in the link provided in the student's myTCC account.
- From "Report It" complaints are sent to the appropriate specialist for consideration and review.
- All attempts will be made to address and/or resolve student concerns and complaints.

JRCERT Standards

Standards for an Accredited Educational Program in Radiography.

A complete explanation of the standards can be found at:
https://www.jrcert.org/jrcert-standards/

Standard One: Accountability, Fair Practices, and Public Information

The sponsoring institution and program promote accountability and fair practices in relation to students, faculty, and the public. Policies and procedures of the sponsoring institution and program must support the rights of students and faculty, be well-defined, written, and readily available.

Standard Two: Institutional Commitment and Resources

The sponsoring institution demonstrates a sound financial commitment to the program by assuring sufficient academic, fiscal, personnel, and physical resources to achieve the program's mission.

Standard Three: Faculty and Staff

The sponsoring institution provides the program with adequate and qualified faculty that enable the program to meet its mission and promote student learning.

Standard Four: Curriculum and Academic Practices

The program's curriculum and academic practices prepare students for professional practice.

Standard Five: Health and Safety

The sponsoring institution and program have policies and procedures that promote the health, safety, and optimal use of radiation for students, patients, and the public.

Standard Six: Programmatic Effectiveness and Assessment: Using Data for Sustained Improvement

The extent of a program's effectiveness is linked to the ability to meet its mission, goals, and student learning outcomes. A systematic, ongoing assessment process provides credible evidence that enables analysis and critical discussions to foster ongoing program improvement.

NON-COMPLIANCE WITH JRCERT STANDARD(S) RESOLUTION PLAN

The student should first follow the College's and the SOHS due process to its final appeal at Report a Concern | TCC: Tulsa Community College (tulsacc.edu)If the individual is unable to resolve the complaint with program/institution officials or believes that the concerns have not been properly addressed, he or she may submit allegations of non-compliance to the JRCERT Chief Executive Officer at:

Joint Review Committee on Education in Radiologic Technology
20 North Wacker Drive, Suite 2850
Chicago, IL 60606-3182
Phone: (312) 704-5300
Email: mail@jrcert.org

APPENDIX A: Admissions Criteria Rubric

ACADEMIC POINTS

Overall College GPA	Max points: 20

**If less than 12 college credit hours have been earned, High School GPA is used to calculate average GPA.*

GPA < 2.49	-	Not Eligible	3.30-3.49	-	12 points
2.50-2.69	-	2 points	3.50-3.69	-	14 points
2.70-2.89	-	4 points	3.70-3.89	-	16 points
2.90-3.09	-	8 points	3.90-3.99	-	18 points
3.10-3.29	-	10 points	4.00	-	20 points

ACT Composite Score	Max points: 10

**ACT scores are required for all applications, no set minimum score. ACT SuperScores are not accepted. Expired ACT scores are accepted.*

1-15	-	1 point	21-22	-	7 points
16-18	-	3 points	23-25	-	9 points
19-20	-	5 points	26-36	-	10 points

ACT Science Score	Max points: 20

**ACT scores are required for all applications, no set minimum score. ACT SuperScores are not accepted. Expired ACT scores are accepted.*

1-15	-	1 point	22-23	-	14 points
16-17	-	4 points	24-25	-	16 points
18-19	-	8 points	26-27	-	18 points
20-21	-	12 points	28-36	-	20 points

Highest Degree Completed	Max points: 3

**Not required for a complete application. Applicants are responsible for providing documentation to confirm.*

Certification in Healthcare Field	-	1 point
Associates	-	2 points
Bachelor or Higher	-	3 points

ACADEMIC POINTS **Maximum Points Available: 53**

INTERVIEW POINTS

Interview with Program Faculty	Max points: 25

The top applicants, up to 60, will be invited to attend an in-person Radiography Qualifying Applicant Orientation. Top applicants are determined solely by the total Academic Points earned, with no consideration given to resumes or letters of recommendation.

Qualifying applicants will receive detailed information about the program and instructions for submitting a Video Interview at the Radiography Qualifying Applicant Orientation.

INTERVIEW POINTS **Maximum Points Available: 25**

APPENDIX B: Radiography Counseling Form

Student's Name: _____

Instructor: _____ Class: _____

Date of Incident: _____

INSTRUCTOR'S COMMENTS:

_____

_____

_____

ACTION PLAN:

_____

_____

_____

_____
Instructor Signature

_____
Date and Time

STUDENT'S COMMENTS:

_____

_____

_____

_____
Student Signature

_____
Date and Time

_____
Witness Signature

APPENDIX C: TCC Student/Visitor Incident Form

Office of Risk Management
909 S. Boston Ave.
Tulsa, OK 74119
riskmanagement@tulsacc.edu
(918) 595-3400

Student/Visitor
INCIDENT FORM

1. Last Name, First Name, Middle Initial _____
2. Date of Birth: _____ CWID#_____
3. Address _____
4. Phone: Home _____ Cell _____ Work _____
5. Date, Time, and Place of Incident: _____

   _____
6. Description of Incident (including where on the body and the circumstances surrounding how it occurred) *be specific*:

   _____
   _____
   _____
   _____
   _____
7. Name(s) of witnesses to the incident: _____
8. Action taken following incident (include treatment received):

   _____
   _____
   _____
9. Last date of tetanus booster: _____
10. Was protective equipment available? _____YES _____NO
    What type of PPE was worn_____

If declining medical treatment, please complete the below statement:

I, hereby acknowledge my refusal of medical treatment and/or observation offered to me for the course-related injury I incurred on _____ (date), by signing here _____. I realize that by signing, I do not necessarily affect my later eligibility for medical treatment coverage.

_____ _____
Signature of Student Signature of Instructor

7/17

APPENDIX D: Pregnancy & Clinical Exposure to Radiation

Student Name: _____ TCC ID#: _____

You should know excessive exposure of your fetus to radiation may have a deleterious effect on your child. The two predominate effects of fetal irradiation are birth defects (principally small brain size and/or mental retardation) and an increase in the risk of getting childhood cancers.

The chance of either of these effects occurring is dependent upon the total dose received and the rate at which it is received. Large single exposures are more likely to have an effect than small exposures or exposures spread out over a longer time.

Single exposures of 5-10 rems to the fetus have been shown to produce in some children a small but measurable decrease in the size of the head (brain size). For this reason, the National Council on Radiation Protection and Measurements recommends that the fetus be exposed to no more than 500 m/rems of radiation during the term of the pregnancy. This is considered an acceptable level of exposure since it is a factor of 10 less than the lowest exposure known to have an effect and would be protracted exposure rather than a single exposure. A child exposed to radiation before birth may have a higher chance of getting one of the rare childhood cancers. The available data concerning this are confusing and contradictory. For an exposure of 500 mrems some investigators feel there will be no increased risk of childhood cancer while others feel that there could be a 50% increase in risk.

At Tulsa Community College we want to keep everybody's (including a fetus) exposure as low as possible, in many cases significantly below 500 mrems per year. For pregnant students working in diagnostic radiology, fetal exposure will only be about 2% of maternal film badge readings due to the absorption of radiation by the lead apron and the mother's body.

Your film badge exposure for the past _____months has been _____ mrems for an average of _____m/rems per month. Based upon this history and assuming you wear a leaded apron anytime you might be exposed to radiation we would estimate your fetus' exposure will be _____mrems for 9 months.

I, _____, have discussed the above information with my Clinical Coordinator and the Radiation Safety Officer. I understand all the information I have been given. I agree to wear a leaded apron at any time that I might be exposed to radiation and further understand that I will be terminated or put on a leave of absence if I fail to do so.

Student Signature: _____ Date: _____

Clinical Coordinator: _____ Date: _____

Radiation Safety Officer: _____ Date: _____

APPENDIX E: Radiography Clinical Evaluation

STUDENT:	DATE:	to:	GRADE:
Clinical Education Center:		Partial Days Attended:	
UNASSISTED:	COMPETENCIES:	ABSENCES:	PERSONAL DAYS:

	3 - POOR	3.5 - MARGINAL	4 - AVERAGE	4.5 - ABOVE AVERAGE	5 - EXCELLENT
Patient Care	No Communication Indifferent to patient needs.	Minimal communication, requires assistance meeting patient needs.	Acceptable communication, attends to basic patient needs.	Communicates well, usually attentive and compassionate to patient needs.	Superior communication, attention, & compassion to patient needs.
Quantity/ Initiative	Unacceptable amount of assigned work completed for students at this level.	Insufficient amount of assigned work expected of a student at this level.	Performs assigned work expected of a student at this level.	Performs more work and additional tasks than most students at this level.	Superior productivity for a student consistently does additional tasks.
Organizational Skills	Confused, requires constant supervision.	Occasional disorder, requires close supervision.	Basically prepared for a student at this level.	Good, work flows smoothly, needs minimal supervision.	Superior productivity for a student, consistently does additional tasks.
Quality of Work	Unacceptable performance, skills must be improved to acceptable level.	Frequent errors, work must often be corrected, needs improvement.	Satisfactory performance for a student at this level.	Good performance for a student at this level, rarely makes mistakes.	Superior performance for a student at this level, consistently accurate results.
Ability to Follow Directions	Instructions must be repeated frequently.	Hesitant to respond to instructions.	Follows directions in an acceptable manner.	Able to follow all directions with little difficultly.	Minimal explanation needed to complete new procedures or tasks accurately.
Self Confidence	Consistently unwilling to participate.	Lacks self-confidence, hesitant to participate.	Normal amount of self-confidence, usually participates with assistance.	Self-assured, sometimes asks for assistance.	Superior self-reliance in their ability to perform tasks with minimal supervision.
Cooperation Team Participation	Unacceptable, needs constant prodding to participate.	Passive attitude toward work and fellow workers, needs improvement.	Acceptable attitude towards work and fellow workers.	Very good, works well with a variety of people.	Excellent rapport, willingly assists with all department tasks.
Attitude Toward Criticism	Rejects and becomes defensive of all criticism.	Slightly defensive, does not view criticism in a positive or constructive manner.	Accepts but does not always utilize criticism.	Accepts and responds to criticism, utilizes it frequently to improve performance.	Accepts and responds to criticism in positive manner, uses it to improve performance.
Professional Appearance	Uniform and grooming is unacceptable.	Frequently not in uniform or well-groomed, needs improvement.	Occasionally not in uniform or well groomed.	Usually in proper uniform and well groomed.	Always in proper uniform and well groomed.
Current Progress	Inadequate development of skills.	Retention and application of skills needs improvement.	Satisfactory retention and application of skills.	Usually retains and applies skills well.	Superior retention and application of skills.

Evaluator Comments: _____

_____

Evaluator Signature: _____ Date: _____

Student Comments: _____

Student Signature: _____ Date: _____

APPENDIX F: Radiography Clinical Competency

A#_____

Class exam completion date: _____

Student: _____ Date: _____

Evaluator Signature: _____ Print Name: _____

Type of Examination: _____ Percentage: _____ Points: _____

Degree of Patient Difficulty: Average ___ Moderate ___ Extreme ___

Unassisted Dates: 1. _____ 2. _____

POSITION/PROJECTION ⇒	*A.*				*B.*				*C.*			
TECHNIQUE SET FOR EACH PROJECTION ⇨	kVp	mAs	Grid	Notes	kVp	mAs	Grid	Notes	kVp	mAs	Grid	Notes
PERFORMANCE EVALUATION OF STUDENT BY REGISTERED TECHNOLOGIST												
	A.				*B.*				*C.*			
RATING ⇒	0	1	2	3	0	1	2	3	0	1	2	3
1. Room Preparation												
2. Patient/Student Relationship												
3. Positioning Skills												
4. Equipment Manipulation												
5. Efficiency of Procedure												
IMAGE EVALUATION BY STUDENT WITH REGISTERED TECHNOLOGIST												
	A.				*B.*				*C.*			
6. Anatomical Part(s)												
7. Proper Alignment												
8. Technique Manipulation												
9. Film Identification												
10. Radiation Protection												
TOTAL												

COMMENTS: Please list comments by number and view. **Example: 2-A, 7-B, 4-C** _____

_____

Competency Grading

The Competency Evaluation has been designed for student technologist evaluation by a registered technologist. Each competency exam requires a separate competency evaluation form. Performance and image evaluation standards are on the back of the form.

0 = Unacceptable **1** = Requires major improvement **2** = Requires minor improvement **3** = Acceptable

NOTE: All completed competency forms must be turned in to Tulsa Community College

Revised 8/17/2021

APPENDIX G: Clinical Competency Criteria

PERFORMANCE EVALUATION OF STUDENT BY REGISTERED TECHNOLOGIST

ROOM PREPARATION

Student was able to:

1. Evaluate requisition and identify procedure(s) to perform.
2. Recall and pronounce the patient's name and age.
3. Identify the mode of patient transportation to the clinical area.
4. Provide a clean and orderly exam room.
5. Prepare the exam table with clean linens and patient gown.
6. Find and prepare all necessary equipment and supplies to perform exam.
7. Make preliminary settings to control panel for exam to be performed.
8. Prepare tube/fluoroscopy equipment for exam.

PATIENT/STUDENT RELATIONSHIP

Student was able to:

1. Find and identify the correct patient.
2. Assist the patient to the radiographic room.
3. Give proper instructions to patient to prepare for exam.
4. Assist the patient, if necessary, with clothing and gown.
5. Communicate with patient in a professional manner.
6. Give proper instructions to patient during the exam.
7. Follow proper universal precautions or isolation procedure.

POSITIONING SKILLS

Student was able to:

1. Position the patient correctly on the table.
2. Align and center anatomy to be demonstrated to IR.
3. Center central ray to anatomy or IR.
4. Place patient in the correct position (i.e. oblique, lateral, decubitus, etc.)
5. Correctly angle the central ray if necessary.
6. Prevent unnecessary anatomy from showing on the image.

EQUIPMENT MANIPULATION

Student was able to:

1. Turn the X-ray tube to the correct orientation, utilize tube locks
2. Move the bucky tray, or detectors, and lock in position
3. Insert and remove cassettes, if applicable, from bucky tray or spot film device.
4. Use a technique chart and select technical factors at control panel.
5. Measure the patient if necessary.
6. Utilize any positioning aids or special equipment necessary for the exam.
7. Identify the image with anatomic markers and any other necessary markers.
8. Fill syringes using sterile technique, if applicable.
9. Select correct IR size.
10. Adapt equipment use to any unique circumstance that arises during exam.

EFFICIENCY OF PROCEDURE

Student was able to:

1. Perform procedure in an orderly manner.
2. Complete procedure in a normal amount of time.
3. Organize actions for efficiency.

IMAGE EVALUATION BY STUDENT WITH REGISTERED TECHNOLOGIST

ANATOMICAL PARTS

1. Evaluate image for correct anatomy to be shown.
2. Determine if anatomy is shown in proper perspective.
3. Determine if motion is present.
4. Student should be able to decide if image needs repeating.

PROPER ALIGNMENT

1. Determine if part, film, and tube were centered correctly
2. Evaluate image for correct patient positioning.
3. Evaluate image for any distortion due to incorrect alignment.
4. Student should be able to decide if image needs repeating.

TECHNIQUE MANIPULATION

1. Use a technique chart and select the proper technical factors.
2. Compensate for pathology, if necessary.
3. Modify technique to achieve a better result.
4. Student should be able to decide if image needs repeating.

FILM IDENTIFICATION

1. Determine if all required film markers are visible.
2. Evaluate image for all vital patient identification.
3. Correct or modify image to include necessary ID.

RADIATION PROTECTION

1. Collimation is visible.
2. No repeats.
3. All appropriate shielding was used.
4. Central ray is collimated to anatomy of interest.
5. ALARA was practiced during the exam
6. Student followed the cardinal principles of radiation protection: time, distance, and shielding.

APPENDIX H: Clinical Competency Checklist

Student: _____

Chest & Thorax	M – Mandatory E - Elective	Unassisted #1 Date	Unassisted #2 Date	Comp Date
Chest Routine	**M**			
Chest AP **(wheelchair or stretcher)**	**M**			
Ribs	**M**			
Chest Lat. Decubitus	**E**			
Sternum	**E**			
Upper Airway (soft tissue neck)	**E**			
Sternoclavicular Joints	**E**			
Upper Extremity				
Thumb or Finger	**M**			
Hand	**M**			
Wrist	**M**			
Forearm	**M**			
Elbow	**M**			
Humerus	**M**			
Shoulder	**M**			
Trauma Shoulder * **(AP plus Scapular Y, Transthoracic or Axillary)**	**M**			
Trauma Upper Ext. * **(non-shoulder)**	**M**			
Clavicle	**M**			
Scapula	**E**			
AC Joints	**E**			
Lower Extremity				
Tibia-Fibula	**M**			
Foot	**M**			
Ankle	**M**			
Knee	**M**			
Femur	**M**			
Trauma Lower Ext. *	**M**			
Patella	**E**			
Calcaneus (Os Calcis)	**E**			
Toes	**E**			
*** Trauma requires modifications in positioning due to injury with monitoring of the patient's condition**				
Head				
Skull	**E**			
Paranasal Sinuses	**E**			
Facial Bones	**E**			
Orbits	**E**			
Nasal Bones	**E**			
Mandible	**E**			
Temporomandibular jts.	**E**			

SPINE & PELVIS	M – Mandatory E - Elective	Unassisted #1 Date	Unassisted #2 Date	Comp Date
Cervical Spine	**M**			
Thoracic Spine	**M**			
Lumbar Spine	**M**			
Cross Table (horizontal beam) **Lat. Spine** (patient recumbent)	**M**			
Pelvis	**M**			
Hip	**M**			
Cross Table (horizontal beam) **Lat. Hip** (patient recumbent)	**M**			
Sacrum and/or Coccyx	**E**			
Scoliosis Series	**E**			
Sacroiliac Joints	**E**			
Abdomen				
Abdomen Supine (KUB)	**M**			
Abdomen Upright	**M**			
Abdomen Decubitus	**E**			
Intravenous Urography	**E**			
Fluoroscopy Studies				
Upper GI Series	**E**			
Contrast Enema- BE	**E**			
Small Bowel Series	**E**			
Esophagus (NOT a swallowing dysfunction study)	**E**			
Cystography or Cystourethrography	**E**			
ERCP	**E**			
Myelography	**E**			
Arthrography	**E**			
Hysterosalpingography	**E**			
Mobile C-Arm Studies				
C-Arm Manipulation (Requiring Manipulation to obtain more than one projection)	**M**			
Surgical C-Arm (Requiring Manipulation around a sterile field)	**M**			
Mobile Studies				
Chest	**M**			
Abdomen	**M**			
Upper or Lower Extremity	**M**			
Pediatrics (age 6 or less)				
Chest (routine)	**M**			
Upper or Lower Extremity	**E**			
Abdomen	**E**			
Mobile Study	**E**			
Geriatrics (Age 65 or older physically or cognitively impaired as a result of aging)				
Chest (routine)	**M**			
Upper or Lower Extremity	**M**			
Hip or Spine	**M**			

General Patient Care Procedures

Candidates must be CPR/BLS certified and have demonstrated competence in the remaining nine patient care procedures listed below. The procedures should be performed on patients whenever possible, but simulation is acceptable if state regulations or institutional practice prohibits candidates from performing the procedures on patients.

General Patient Care Procedures	Date Completed	Date you can comp
CPR/BLS Certified		Required before you start clinicals: Surscan
Vital Signs – Blood Pressure		Done in second summer semester class/lab
Vital Signs – Temperature		
Vital Signs – Pulse		
Vital Signs – Respiration		
Vital Signs – Pulse Oximetry		
Sterile and Medical Aseptic Technique *		After sterile technique test in second summer semester: Done at Clincal site
Venipuncture*		Done in final spring semester class/lab
Assisted Patient Transfer (e.g., Slider Board, Mechanical Lift, Gait Belt) *		First semester of clinicals: Done at Clinical Site
Care of Patient Medical Equipment (e.g., Oxygen Tank, IV Tubing) *		

* These do not require 2 recorded unassisted but a technologist must observe your skills and believe you are competent to perform them before filling out the competency.

Updated 4/13/2023 per ARRT guidelines

APPENDIX I: MRI Screening Form

MRI Safety Questionnaire

The Magnetic Resonance Imaging (MRI) system has a very strong magnetic field that may be hazardous to individuals entering the MRI environment under certain conditions. Therefore, all individuals are required to fill out this form before entering the MRI environment.

Be advised, the MRI system magnet is <u>ALWAYS</u> on.

_____ Pacemaker or Loop Recorder
_____ Implanted Cardioverter Defibrillator
_____ Prosthetic Heart Valves
_____ Aneurysm or Vascular Clips, Stents or Coils, Graphs or Filters
_____ Prior Heart Surgery
_____ Swan Ganz Line
_____ Cartoid (Arterial) Clips or Stents
_____ Brain VP or Spinal Shunt
_____ Prior Brain Surgery
_____ Eye Surgery
_____ Surgical Clips
_____ Infusion, Insulin, Chemo, or Pain Pump
_____ Electrode Implants
_____ Neuro / Bio Stimulator
_____ Implanted Electronic Device
_____ Cochlear Implant or Sound Processor
_____ Middle Ear Prosthesis
_____ Magnetically Activated Implant or Device
_____ Artificial Limb, Joint, or Body Part
_____ Hearing Aid or Dentures
_____ Any metallic foreign body
_____ Metal Fragments, Shrapnel or Bullets
_____ Metal Plates, Pins, or Screws
_____ Injury involving a bullet, pellet, shrapnel
_____ Breast Tissue Expander(s)
_____ Transdermal Medication Patches (Nicotine, Nitroglycerine)
_____ Penile Implant
_____ NONE APPLY

By signing, I understand the risks of entering the MRI department. To the best of my knowledge, I do not have any of the above-mentioned conditions or implant devices. If there are any changes to my status involving anything on this checklist, I understand that it is my responsibility to notify my TCC Clinical Coordinator so that my safety in an MRI can be reassessed.

Student Name (please print): _____

Student Signature: _____ Date: _____

MRI Supervisor: _____ Date: _____

Clinical Coordinator: _____ Date: _____

Approved: _____ Not Approved: _____

If not approved Action Taken: _____

APPENDIX J: Student Clinical Site Change Document

Expectations when students are moved before scheduled rotation of clinical sites.

When students are moved to a different clinical site before a scheduled rotation, there are several key expectations for the students, the clinical faculty, and the educational institution. These expectations ensure that the learning experience remains meaningful and effective despite the change. Below are some of the most important aspects to consider:

1. **Clear Communication**
    - Students: Students should be informed as early as possible about the change, including the reasons for the move, what is expected of them, and any logistical details (e.g., new start date, location, orientation, etc.).
    - Faculty: Clinical preceptors should be promptly notified of the student's reassignment to prepare for the student's arrival and orient them to the new site.
    - Academic Institution: The school should communicate the change effectively to both the student and the clinical site to ensure that both parties are aligned on expectations and goals for the rotation.
2. **Adaptability and Flexibility**
    - Students: Students are expected to remain flexible and adapt to the new clinical environment, which may involve adjusting to new clinical teams, workflows, and patient populations. They should proactively integrate into the new site and build rapport with new preceptors and peers.
    - Clinical Site: The clinical site preceptor will work with the TCC clinical instructor to complete the student orientation and create a schedule in accordance with other students assigned to the site.
3. **Maintain Learning Objectives**
    - Clinical Experience: Even though the rotation location or setting may have changed, the core learning objectives for the clinical experience should still align with the overall curriculum goals. The student's clinical competencies should be evaluated based on these objectives, and the preceptor should help the student navigate the new environment to meet these goals.
    - Student Expectations: Students are expected to maintain a high level of engagement and professionalism, regardless of the change in their clinical site. Students should meet the same academic and clinical performance standards.

Professionalism and clinical conduct are described in the Radiography policy manual, pages 23-24, and the School of Health Sciences student handbook, page 64.

4. **Orientation and Support**
    - New Site Orientation: If a student is moved to a new clinical site, the site should provide a thorough orientation, including an overview of the facility, policies, and specific expectations related to patient care and safety protocols. This is important for ensuring that the student feels prepared and supported.
    - Preceptor Support: The student should be paired with a preceptor or mentor who can guide them in the new setting. The preceptor should review the student's goals, prior experience, and any specific learning needs to tailor the clinical experience accordingly.
5. **Maintaining Professionalism**
    - Students: Professionalism is always a priority, especially when transitioning to a new clinical site. Students should demonstrate respect, punctuality, teamwork, and a strong work ethic as they integrate into the new setting.
    - Clinical Site: The clinical team and preceptors should foster an environment of inclusivity and support, helping the student navigate any challenges that arise from the change.
6. **Documentation and Assessment**
    - Documentation of Change: TCC faculty will document the reason for the clinical site reassignment and changes to the student's rotation schedule. This ensures that the TCC faculty member can track the student's progression and ensure they meet all required competencies.
    - Assessment of Progress: The student's progress will be assessed in the same way as if they had been at the original site, using the same clinical evaluation tools and performance criteria.
7. **Documentation of the Transition**
    - If the move occurs mid-rotation, it is important for TCC faculty to document the transition, including the reasons for the change and how the reassignment impacts the student's clinical competencies and overall education plan.
    - Students may be assigned to stay at the changed clinical site to ensure appropriate experience is obtained at the site.

8. **Evaluation of Clinical Sites**
    - Following the reassignment, TCC faculty will gather feedback from the student and the clinical preceptor to assess the effectiveness of the new rotation experience. This feedback will be conducted according to the assessment currently in place of midterm and end-of-semester evaluations.

In summary, when students are moved before their scheduled clinical rotation, there must be clear communication, thoughtful planning, and support from all parties involved. The move should not detract from the student's learning experience. Instead, it should offer a smooth transition to ensure they continue meeting their educational goals and developing essential clinical competencies.

Student Signature: _____ Date: _____

TCC Faculty Signature: _____ Date: _____

Current competencies: _____

Competencies needed to complete semester requirements: _____

Total unassisted exams to date: _____

Total needed to complete semester requirements: _____

The Radiography Program reviews and revises this policy manual on an academic yearly basis at minimum. When changes to the manual are made students are advised in person and sign acknowledgement through the Student Radiography communication organizational page.