



SECTION II

CLINICAL INFORMATION

FOR

PRACTICUM I - VI

Revised Summer 2024



CLINICAL INFORMATION

INTRODUCTION

The Radiologic Technology Program at TJC is comprised of both Didactic learning and Clinical learning. Each Semester that students are enrolled in the Radiologic Technology Program, they will also be assigned a clinical rotation. The purpose of this rotation is so that students can observe, learn, and perform exams, with technologists, on actual patients. This is a critical part of a student's education, and each student must demonstrate clinical competence to meet the clinical expectations for each semester. This section will cover the clinical policies that have been developed to assist Radiologic Technology students in understanding the rules and regulations that will apply during their *practicum* (Commonly called "clinical education" or "Clinicals") assignments.

Professionalism first: In each and every clinical day, Success is anticipated, but professionalism is required. Purposefully do your best.

PROFESSIONAL BEHAVIOR STANDARDS

Throughout the program the student will:

1. Follow the behavior expectations of the clinical site with specific attention to:
 - No disruptive behavior
 - Rules concerning smoking
 - Campus/Hospital parking guidelines.
2. All students are expected to follow the Tyler Junior College "Student Code of Conduct" listed in Student Handbook Online. In addition, abide by "Classroom Etiquette and Civility" rules. Rules and guidelines for the most current edition of each of these publications will be followed.
3. Adhere to the program dress and hygiene code.
4. Maintain patient confidentiality at all times - **HIPAA**. Any non-compliance is grounds for dismissal from the program.
5. Complete all charting and related paperwork in an honest manner. Any non-compliance is grounds for dismissal.
6. Display the following behavior and attitudinal characteristics:
 - Willingness to learn
 - Regular Attendance
 - Punctuality
 - Respect for patient, staff, visitors, peers, instructors, etc.
 - Safety in all situations
 - Strict adherence to infection control policies and procedures
 - Effective communication skills through both writing and verbal communication
 - Carries out personal business (phone calls, conversation, etc.) during break time only
 - Effectively manages time to complete all assignments
 - Uses and cares for equipment in a careful manner
 - Demonstrates honesty
 - Exhibits dependability
 - Demonstrates flexibility
 - Demonstrates good interpersonal skills
 - Is self-motivated
 - Has positive outlook
 - Gives others a chance to participate in all learning experiences
 - Exhibits maturity
 - Demonstrates humanism
 - Is non-judgmental
 - Is a good role model

GUIDELINES FOR PROFESSIONAL PERSONAL APPEARANCE & UNIFORM DRESS CODE POLICY

A patient forms an impression of the radiology department upon first sight of the personnel. It is important that the student's appearance be appropriate and professional. Students are always to present themselves in the utmost professional manner when at clinicals. Professional dress and behavior at clinicals maintain an equity in evaluation and ensures that all evaluation is based on clinical performance. While in uniform you must be aware of your actions and language even if you are finished with clinicals for the day. If you go out to eat in uniform, you must remove any identifying clothing (scrub top) and ID badge if you choose to consume alcoholic beverages. If we are contacted that you were drinking in uniform the repercussions will reflect what was witnessed. Penalties will range from demerits to possible dismissal.

Official TJC Scrubs shall only be worn for TJC related events; they are not to be worn in public when students are not representing the school.

If you are in your uniform on or off campus for class/lab, at volunteer functions, field trips, class time at the hospital or any time you considered to be in "clinical time" you must be in uniform compliance (this includes - shoes, hair, undershirts, piercings, socks, etc.). Do not make a change during your shift that would cause your hair, shoes, make up, nails, socks, shirt, etc. to not comply with dress code policy.

Students employed at other health care facilities will wear the appropriate uniform of that agency. The uniform, lab coat / jacket, dosimetry device and emblem of the TJC Radiologic Technology Program will NOT be worn during private employment. Dosimetry devices, name tags, uniforms, lab coats, etc. from outside employers will not be allowed in clinicals.

Nursing and Allied Health Science Programs are assigned colors for their uniforms, ours is Royal Blue. No other program is Royal Blue. The following has been established in accordance with typical clinical affiliate policies

1. **Scrub Top** - Royal Blue V-Neck Scrub with 2 or more Front Pockets for both males. (Male students may wear the zip/button front collared scrub top. Females may wear the snap front scrub tops.) The scrub top should be slightly loose fitting to allow ease of movement and space in pockets. ****Tight fitted scrubs will not be permitted. To maintain compliance, you will be required to buy new scrubs if your scrubs become tight or stained.**
2. **Patch** - Tyler Junior College Radiologic Technology Program emblem must be worn at all times. A Radiology Technology patch must be displayed on the right front breast pocket area. This applies for tops and if you choose to wear a jacket. Patches may be purchased at the on-campus bookstore only. These patches are to be sewn on to the RIGHT SIDE of the chest just below shoulder level. This patch is black and white. Pay attention that you get the correct program patch from bookstore.
3. **Plain solid white undershirts** - T-shirt style/Crew neck shirts are always to be worn under the uniform top. No tank tops, camisoles, and no visible writing/colors/designs are allowed on the shirts. A long-sleeved solid white shirt may be worn under the uniform top. Undershirts must be tucked in at all times and must be adequate to cover the student's underclothes or exposed skin should their scrub top come up while positioning patients.
4. **Pants** - Royal Blue are to be worn to clinicals. These should be loose enough to allow freedom of movement. - these **may not** be stretch pants or have a knit cuff. Underwear patterns or styles may not be visible through the pants. Pants cannot drag the floor that will cause fraying. If your pants do become frayed you must repair your pants but still be at an appropriate length. **Female:** Royal Blue skirts are permitted. Skirts must come below the knee.

5. **Socks/Hose** - must be white and need to be clean and free from odor. No bare feet in shoes.
6. **Shoes** - must be solid White or Black, closed toed, clean athletic type tennis shoes or nursing type shoes. Closed toed solid front clogs may be worn if an ankle strap is present and used at all times. Dirty shoes will not be tolerated. It is recommended that shoes be impermeable, wipeable, and not contain mesh. No Canvas - "Keds" or "Toms" style. No "Converse" style shoes. No other colors are acceptable. Students with unapproved colored shoes will be asked to leave clinicals, and marked absent.
7. **Jacket** - must have a 95-100% polyester outer shell and nothing heavier than the microfleece inner lining. The color must match uniform color: Royal Blue and have a patch sewn on to the RIGHT SIDE of the chest just below shoulder level.
8. **Clinical ID Badge** - ID Badges are to be worn at all times (including surgery rotations). Students will not be allowed to enter the clinical area without proper identification. The name badge will be purchased through TJC and secured at Campus Safety. Badges are purchased from the Cashier's office located in the White's administrative building. Badges are made at the Campus Safety office located on the corner of Lake and Baxter. You must bring your receipt showing you have paid at the cashier's office. We recommend you purchase 2 in the event one is lost.
9. **Dosimetry Badge** - The dosimetry device will be worn at all times when a student is exposed to ionizing radiation. (This includes in the lab on campus.)
10. A Watch, a Pen, Markers, and Positioning Flip Book/Notebook are necessary for clinicals also.

NOTE: Clinical badge and Dosimetry Badge must be surrendered to the Clinical Coordinator in the event the student leaves the program for any reason.

Dress Code Policies Regarding Electronic devices -

Students are not allowed to wear any type of device (example Smart Watch or Fitness devices that speak or light up) on their wrist or anywhere on their body that would allow them to text, answer calls, check email or etc. You may wear a basic watch. Other electronic devices such as Laptops and tablets are not permitted at clinicals.

Personal belongings will be placed in lockers (if available), not the classroom. Neither Tyler Junior College nor the clinical affiliates will be responsible for lost items.

NON-COMPLIANCE OF THE UNIFORM DRESS CODE

In order to ensure high standards of professionalism, trendy modes of dress (as determined to be "trendy" by the program faculty at its' sole discretion) are prohibited. All parts of a students' uniform are to be clean, free of stains and neatly cared for or pressed. Students will be sent away from the clinical education, and marked absent if they report to the area in dirty or wrinkled uniforms. Scrubs that are not in good condition or that do not fit properly must be replaced. Tight fitting scrubs will not be permitted. To maintain compliance, you will be required to buy new scrubs if your scrubs become tight or stained.

1. Demerits will be given for non-compliance with the dress code policy.
2. 2 incidences of ANY non-compliance with the items listed above will result in a failing grade (0) in the "Personal Appearance" on the clinical evaluation, placing the student on probation. Continued breach of dress code in the same semester will result in dismissal from the program.

CLINICAL HYGIENE

1. The entire body must be clean and free from objectionable odors.
2. Perfumes or After Shave lotion (with scent) should be eliminated while in uniform. Fragrance is not pleasant to the patient and may tend to cause nausea (or worse).
3. Fingernails must be clean and neatly trimmed. If used, nail polish must be clear or very light pink. Artificial nails, nail tips, nail extensions, acrylic, shellac, or wraps are not allowed. When the hand is facing up (looking at the palm) nails must not extend past the ends of the fingers.
4. Hair must be clean and neat.
No rollers, scarves, bows, bright ribbons, hair wraps, feathers, or hair accessories/decorations of multiples that are not functional are allowed.
The hair length should be short enough or the hair should be secured in such a manner that it does not fall forward while the technologist is bending forward over a patient. If your hair is long, it must be pinned back away from the face. No pigtails or trendy or messy, unpolished hair styles.
Color must be natural birth color (i.e. black, brown, blonde or red). No burgundy, green, blue, purple, pink, etc. This includes highlights, low lights, ombre etc. Subtle highlights in natural colors is acceptable.
Headbands and clips, if worn, must be professional and not include letters or words.
Scrub caps are allowed if they are a solid royal blue only. They are required during Surgery rotation.
***IF YOU ARE QUESTIONING MAKING A CHANGE - PLEASE ASK TJC FACULTY FIRST.**
Drastic changes will fail you in the Dress Code Category. Again, please consult with faculty before making dramatic changes.
5. No excessive amount of any make-up or overly dramatic false eyelashes will be allowed. Students will remove excessive make-up before entering the clinical area.
Males: No make Up
6. Male students - it is preferred students be clean shaven with zero facial hair in the area of a mask so it does not interfere with the effectiveness of personal protective equipment. Facial hair if present must be neatly groomed, cleaned, and trimmed.
7. Jewelry - no extravagant jewelry, no excessive amount of bracelets
Females: Wedding rings, engagement rings, basic watch, and **ONE SET** of small gold or silver pierced earrings may be worn while in uniform. No other visible piercings or gauges are permitted (including tongue, lip, eyebrow rings, nose, cheek, etc.).
Necklaces must fit inside uniform top and not interfere with patient care and are not a safety factor.
Males: Wedding ring and watch may be worn while in uniform. Necklaces should fit inside the uniform top. Earrings (or other piercings) will not be worn while in uniform. No other visible piercings or gauges are permitted (including tongue, lip, eyebrow rings, nose, cheek, etc.).
8. "Hickies" or any other inappropriate, artificially induced marks must be covered, or otherwise undetectable.
9. Visible tattoos must be covered with a lab coat and/or long sleeves. They must be covered before you come to Clinicals. Do not expect to use hospital materials such as coban/band aids etc. to cover tattoos. White or flesh colored arm sleeves or bandage wrap is acceptable. Flesh color covering must match your flesh color.
10. Teeth and Breath - proper oral hygiene is essential. Take precautions to prevent halitosis. Gum chewing is not allowed at any time during clinicals. Loud chewing noises are unprofessional. No gum smacking, smoking or electronic tobacco or non-tobacco vapor device, electronic devices (phones, eReaders, tablets, etc.), eating or ice chewing is allowed while during clinical time, class time during clinical time, or when with a patient.
11. Students must not carry the smell of cigarette/tobacco in clothing or hair when working in clinicals. Most patients find the smell offensive and in some cases a health hazard. Students will be sent home with time deducted from their ATO.

RADIOGRAPHIC LEAD MARKERS

Students will supply and use their own initialed right and left markers to properly identify the radiographic procedures they perform. TJC recommends that students always keep a second (full set) of markers in case one or both in a set is lost. A student without markers in clinical education is out of dress code. The use of another person's film identification markers is forbidden. There should be 3 initials on your markers (initials should represent the name/s you go by). Markers should be colored Red and Blue but no other decorations. **Right marker should be red and Left should be blue. Special designed markers can't be worn until program is complete.**

Markers are your identification source for films. If your markers appear on the radiograph, you are responsible for the examination. This also applies when you become a technologist. Do not remove or hide unacceptable radiographs. Disciplinary action will result from this behavior. This would constitute a dishonest act and dismissal from the program may result.



RADIATION MONITORING OR DOSIMETRY DEVICE

The program uses Thermoluminescent Dosimeters (TLD's) to monitor radiation exposure to students. Students will **ALWAYS** wear the radiation monitoring badge while in Practicum at collar level and outside apron at collar level during fluoroscopy procedures. Failure to wear the TJC name tag and dosimeter badge is a breach of the dress code. TLD's are included in tuition per long semester.

They must be for the current monitoring period or the student will be removed from the clinical setting until they have the badge for the current monitoring period.

Tampering with another person's TLD will result in dismissal from the program.

The Dosimeter procured through Tyler Junior College will NOT be worn during outside employment hours. The TLD's are to be worn only while in clinical education and lab. If the student is employed in a radiation area, that employer must supply an additional badge to be worn during employment hours. Employers, by law, are to furnish a radiation-monitoring device to all employees working in ionizing radiation areas. By law, (TRCR-21) the student will inform the RSO of any employment in which ionizing radiation exposure is part of the job. Dates of employment and termination are to be reported immediately using the Radiation Area Employment Form.

It is the students' responsibility to make themselves aware of the report. The RSO will monitor the report of excessive dosage and counsel any student who receives such a dose. Quarterly and Cumulated dosage information may be accessed through Global Dosimetry website at www.mirion.com. Instructions are also enclosed at the end of this Handbook. If you do not have an online account, contact your sales representative or Customer Support for more details at: **800-251-3331**. **Dose records are also kept in the Clinical Coordinator's office. Students may request to view their dose report.** It will be the students' responsibility to maintain their own cumulated dosage sources.

The student will exchange the last quarter's badge as announced by Clinical Coordinator. Failure to exchange the badge (regardless of it being lost or forgotten) when informed by Clinical Coordinator will result in a lowering of the Practicum grade by one full letter grade at the end of the semester.

****If your badge is washed or has been saturated with liquid please report this to your RSO/Clinical Coordinator**

3 incidences of a replaced TLD will result in dismissal from the program.

A "C" grade will not be reduced to an F as a result of lack of TLD exchange, **but** the grade reduction will be carried forward to the next semester. If the badge is lost or damaged, a written explanation must be furnished to the RSO at the appropriate time. This will be maintained in the student's folder. The grade reduction will occur any time the badge is not turned in on time, lost or delayed.

EXCEEDING THRESHOLD DOSE

If the radiation report for a student exceeds 125 mR in a monitoring period, the student will be counseled to determine the cause. If the report continues to show an increase in exposure, the student will be placed in a low radiation work area until the problem is resolved.

****Should the student withdraw or be dismissed for any reason no longer continue the program that student needs to turn in their TLD in to the Clinical Coordinator.**

25 Texas Administrative Code 289.231

The 25 TAC 289.231 administered by the Texas Department of Health requires that:

1. A separate radiation monitoring device will be worn for each and every site/location while engaging in duties of employment in which exposure to ionizing radiation is possible.
2. The Tyler Junior College TLD must be worn **only** when conducting oneself as a TJC student, **AND** a different badge (supplied by the employer) is to be worn when working around ionizing radiation while **not functioning** in the capacity of a TJC student.
3. Each student is required to inform the Department Chair or RSO **in writing** when employment in a radiation area begins and ends.
4. The employer is supplied with each student's radiation dosimetry reports. The employer will supply TJC with radiation dosimetry reports from that place of employment.
5. Cumulative records will be kept by both parties and supplied to the student at the end of affiliation with either party.

CLINICAL GUIDELINES

CLINICAL SITE ASSIGNMENTS:

Radiologic Technology students will be assigned to one of our Affiliate Clinical Sites. When possible, we do take in to consideration the student's residence, but students should be prepared to be able to attend any of the Affiliate sites should that be necessary. Students will have a "home" site where they will do clinicals for 5 of the 6 semesters in the program, but they will rotate to an Affiliate site for one semester in their sophomore year. In order to ensure fairness and equity, students need to make the program aware of family members, close friends, roommate, or a significant other that are employed in any position at a Tyler Junior College Radiologic Technology clinical site, and understand that a student will not knowingly be assigned to the same clinical site, regardless of driving inconvenience. In the event that it becomes known to the program that a relationship of any kind exists between a student and a hospital employee, the student will be removed from the clinical site and reassigned to another site. If there is not an opening at another site, the student will be dismissed from the program. In the event that it appears that the relationship was intentionally hidden the student will be dismissed for fraud.

ROTATION TO SPECIALTY AREAS

Students will be allowed to rotate through a maximum of four special modalities of their choice, or four weeks beginning the Fall semester of the sophomore year.

These modalities may include - CT, MRI, Nuclear Medicine, PET Scan, Radiation Therapy, Cardiac Cath Lab, Special Procedures Lab and Mammography.

All students have the opportunity to rotate through mammography if they choose. Males students may go to Hunt Regional Memorial in Greenville or Trinity Mother Frances in Jacksonville.

No more than 2 weeks may be spent in any specialty. This will be allowed **ONLY** if the student has completed all competencies to date and has never failed a section of the clinical evaluation, nor been placed on probation or involved in any disciplinary measures. The student may volunteer for these rotations, but is not required to. Placement will be made as clinical space is available. Students will wear their approved uniforms and TJC name badge, and will be expected to conduct themselves in the same professional manner as required in clinical education. Any problems in these areas are to be addressed to the clinical instructor, clinical coordinator or department chair.

VISITING CLINICAL AFFILIATES WHEN NOT ASSIGNED TO CLINICAL EDUCATION

Students will not be allowed in the radiology department of any clinical affiliate when not assigned to clinical education, except:

- (a) by special permission of the department chair, clinical coordinator, or clinical instructor.
 - (b) when actually employed by the clinical affiliate's radiology department. Practicum credit may not be applied nor may competencies be earned, proven or documented while employed.
- Students will not visit with patients except with members of their own family or close personal friends; someone already known on a personal basis may be visited. Persons known on a student-patient relationship may not be visited except in a professional capacity.

FRATERNIZATION

Fraternization between students and hospital employees/doctors is strongly discouraged. If a personal relationship (of any kind) between a student and another party working at the hospital develops and results in the unequal treatment of students (real or perceived), the offending student will be removed from the clinical site and reassigned to another site, providing a space is available. Unequal treatment may include but is not limited to: favor shown to one student over another, discrimination towards other students, and unequal access to radiographic procedures. Formation of "clicks" between students that result in exclusionary, hostile or otherwise unprofessional behaviors will be dealt with similarly.

SOCIAL NETWORKING

This includes, but is not limited to: wiki, any form of online publishing or discussion blogs, discussion forums, newsgroups, email distribution lists and social networking sites, such as Twitter, Facebook, Snapchat, YouTube and Instagram, among others. Do not try to connect with technologists or instructors while in the program. We have asked technologists and/or instructors to do the same. It is not equitable to have students, technologists, instructors engage in social media or outside curricular activities while students are in the program. If you are approached by technologists or instructors to participate in such activities politely say no and contact the clinical coordinator. If you are caught in such participation you will be counseled as well as the clinical site involved.

ELECTRONIC DEVICES USE DURING CLINICALS

Students are not allowed to bring any type of electronic device to be used during clinical time except for lunch. Students may not bring lap tops, tablets, eReaders, iPads, etc. This includes charging any of the above-mentioned devices during clinical time.

Use of personal electronic devices without the advanced, temporary permission from the student's clinical instructor is strictly prohibited. No visible evidence should exist that a student is in possession of or in use of a personal communication device of any kind without permission. If the student is found to be in possession through use or observation, the use of clinical demerits will result. Continued use of the device after being awarded a demerit will result in the student being sent home for the day with forfeiture of ATO.

CELL PHONE POLICY DURING CLINICALS

Cell phone use in clinicals is absolutely prohibited. That includes recording, videoing or taking pictures without the permission of the hospital department, supervisor or administrator. There will be no evidence of possession of a cell phone at all. CIs are instructed to award demerits if there is any evidence of possession or connectivity at all during clocked in clinical time. If you have one strapped to your ankle because you were afraid to lock it up or leave it in your car, and you never touch or use it and we can't see it printing on your clothing, and it never makes a sound (vibration, ringing or text tone), that's fine (if it falls off of your ankle, you're responsible). For our observation, it should be as if you do not have one with you. Neither Tyler Junior College nor the clinical affiliates will be responsible for lost or stolen items.

A student will be allowed to check for calls only while on designated breaks in areas approved for cell phone use (cafeterias, break rooms). The time required to check and return calls will not exceed normal break/lunch times. Student's Cell phones or electronic devices (iPads, tablets) should not be visible in light rooms/tech work areas.

This includes charging any of the above-mentioned devices during clinical time.

A student who uses a cell phone while in Practicum other than when at a designated break will be suspended for the remainder of the day and marked absent for the day (regardless of the time spent in Practicum that day). If the absence places the student over the maximum allowed absences for the semester, the student will be marked as having failed the attendance category for that semester.

If a student returning calls causes the student to be late returning from a break, the student will be counseled, marked tardy for the day, and receive no greater than a 75% in "Dependability" for the semester.

A second incident of a student using their cell phone while not on a designated break or late from a designated cell phone break will result in the student being suspended for the remainder of the day, marked absent, and the student will receive a 0% in dependability for the semester. If the absence places the student over the maximum allowed absences for the semester, the student will be marked as having failed the attendance category for that semester.

Students with children may provide schools, daycares or childcare providers with the clinical instructor or light room phone numbers for emergencies.

For extenuating circumstances, the student may obtain permission, valid only for the day authorized and at the discretion of the clinical instructor, clinical coordinator and/or hospital shift supervisor.

LUNCH DURING CLINICALS

Students must be allowed to have a 30-minute lunch during their clinical shift. The time is at the discretion of the CI, which may vary due to work flow. Students must check with their Clinical Instructor or technologist in charge before they leave for lunch. Lunches are not a set time every day and do not expect to go with your fellow student. Lunches are typically staggered as normal radiology departments. Students must complete assigned exams/patients before going to lunch unless excused by the Clinical Instructor.

Students are not allowed to skip lunch and leave 30 minutes before their clinical shift ends. Students are responsible for their own lunches.

ROOM AND BOARD

Each student must provide his/her own lodging, self-sustaining responsibilities (laundry, finances, daily living activities) and meals. Some of the hospitals have a cafeteria which is open to the student and meals may be purchased. All facilities have a break room that students are able to use during lunches.

TRANSPORTATION/PARKING

Transportation to and from assigned clinical sites and classes is the student's responsibility.

The Radiologic Technology Program does not assume any responsibility associated with the costs from the use of personal transportation and/or parking. Any incurred expenses or damages as a result of the student's use of personal transportation to and from any clinical site and/or college is regarded as the student's liability. Student's must comply with parking rules at each clinical facility. Non-Compliance can result in demerits. The program is not responsible for parking tickets incurred by student from the city, on campus police, or facility where they are performing practicums

CLASSROOM CONDUCT AT CLINICALS

Classes held at the clinical sites will be conducted in an orderly manner. The same etiquette and behavior for didactic classes and dress code for clinicals will be enforced.

CLINICAL DISMISSAL FOR UNSAFE BEHAVIORS

If possible, two people will make the observation (and verification) of a student's unusual behavior*. The observation will be agreed upon by both and documented by stating specific acts of abnormal behavior of the student in question.

*May include listed behaviors. List is not inclusive of all observations: slurred or loud speech, impaired gate, repeated poor judgment, alcohol on breath, negligent patient care. **A behavior which poses a risk to a student, patient or co-workers. Danger to the patient will be rigidly interpreted.**

A confidential conference, including a witness, will be held to discuss with the student the documented conduct and advise the student that a decision has been made to dismiss the student for the remainder of the day. The conference will be documented.

The hours missed will be documented as an unexcused absence and will be cumulative for the semester.

STUDENTS IN PATIENT CARE AREAS

SUPERVISION OF STUDENTS

Until students achieve the program's required competency in a given procedure, all clinical assignments should be carried out under the direct supervision of qualified radiographers. Students may not be supervised by an NCT or LMRT. If a student finds him/herself supervised by a person who is not registered, without a registered technologist available, the student should call the clinical coordinator or program director immediately.

A qualified radiographer is defined: A radiographer possessing American Registry of Radiologic Technologists certification or equivalent and active registration in the pertinent discipline with practice responsibilities in areas such as patient care, quality assurance or administration. Such practice responsibilities take place primarily in clinical education settings.

Direct supervision is defined: Student supervision under the following parameters:

- (1) A qualified radiographer reviews the procedure in relation to the student's achievement.
- (2) A qualified radiographer evaluates the condition of the patient in relation to the student's knowledge.
- (3) A qualified radiographer is present during the conduct of the procedure.
- (4) A qualified radiographer reviews and approves the procedure.
- (5) A qualified radiographer is present during student performance of any repeat of any unsatisfactory radiograph.

Indirect supervision is defined: as that supervision provided by a qualified radiographer immediately available to assist students regardless of the level of student achievement. Immediately available is interpreted as the 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.

DIRECT/INDIRECT and REPEAT EXAMINATION

Policy Verification In support of professional responsibility for provision of quality patient care and radiation safety, unsatisfactory radiographs shall be repeated only in the presence of a qualified radiographer, regardless of the student's level of competency. Failure to comply with this policy may be grounds for non-compliance and students may be removed.

JRCERT requires all programs to ensure that medical imaging procedures are performed under the direct supervision of a qualified radiographer until a student achieves competency, that medical imaging procedures are performed under the indirect supervision of a qualified radiographer after a student achieves competency, and that students are directly supervised by a qualified radiographer when repeating unsatisfactory images.

AIRBORNE PRECAUTION PATIENTS

Our students are not Fit Tested for N-95, PAPR, or any other NIOSH-certified respirators PPE to use on patients for airborne isolation precautions. Therefore, students are not allowed to perform exams on patients that require airborne isolation precautions. If a facility is willing to Fit test students and document the training students may then be permissible to perform exams on patients with airborne isolation precautions.

ACCIDENT OR INJURY TO THE STUDENT

If the student is injured while at the clinical affiliate, the clinical instructor and/or assigned supervisor and Clinical Coordinator **MUST** be notified immediately. Accident insurance is automatically added to school charges when the student registers for clinical education classes. Appropriate forms are located in Forms Section of Handbook. The student will need obtain copies accident report from hospital. The student must file a copy of the accident report with TJC's purchasing department in order for the claim to be processed. Students who have accidents away from clinicals that result in the student being unable to complete/perform clinical assignments (including moving patients) will be required to drop from the program, and reapply the following year. Students who return to clinicals following an accident must be able to perform at 100% capacity. A doctor's permission slip may be required. Orthopedic devices cannot interfere with clinical duties.

Nursing and Health Sciences student procedures to follow when accidents occur in the hospital:

1. Follow hospital procedures
 - A. Inform supervisor of accident
 - B. If needed fill out accident report
2. Inform instructor at Tyler Junior College
 - A. Report accident to instructor
 - B. Let instructor know the severity of the accident
3. Inform the Tyler Junior College Campus Services
 - A. Contact 510-2666 or 510-3313
 - B. They will provide insurance information and claim forms
4. If needed, contact College Insurance carrier.

LIABILITY INSURANCE

PROFESSIONAL LIABILITY INSURANCE IS AUTOMATICALLY ADDED TO SCHOOL CHARGES WHEN THE STUDENT REGISTERS FOR CLINICAL EDUCATION CLASS.

The student will purchase the mandatory student liability insurance annually at the beginning of school. The student liability insurance policy may contain provision for limited medical payments if the student is injured

during clinicals; however, this is a matter between the insurance carrier and the student. ***Tyler Junior College is not an insurer of any student and will not be responsible for any injury to the student or for the cost of any medical care. Emergency medical care shall not be billed to Tyler Junior College.***

All injuries during clinicals must be reported to the clinical professor in person. Insurance claim forms may be obtained from the office of the Director of Purchasing and Central Services. In no event will a student represent to any health care provider that he/she is employed by Tyler Junior College, covered by Tyler Junior College health insurance, or that a bill for medical services should be sent to Tyler Junior College. ***The student assumes all risks involved with training and shall hold Tyler Junior College harmless from any costs, payments or liability resulting from injury to the student***

PROTOCOL FOR BLOOD OR BODY FLUIDS EXPOSURE

In the event the student, faculty/staff member or other supervising person punctures himself or herself with a sharp (instrument, needle, etc.) contaminated with blood, saliva or other body fluid, or is splashed in the eye with a body fluid, the following protocol will be followed:

1. **Immediately stop working and stop procedure.**
 2. Check for puncture mark in skin or splash to the eye.
 3. If a puncture mark exists or splash has occurred, thoroughly wash area with antiseptic soap or eye wash.
 4. While washing hands, compress wound, if any, for 30-60 seconds.
 5. **Immediately notify supervisor/professor** on duty in the on-campus dental clinic, hospital, lab, or clinical site, and notify your TJC Program Director/Professor.
 - (a) **In hospital setting:** Follow the appropriate protocol within that facility (Consult your Clinical Instructor). Appropriate paperwork (see below) needs to be filled out for TJC.
 - (b) **Outside of a hospital setting:** If at a clinical site, follow the appropriate protocol within that facility. If labs are not ordered by the facility, within two hours report to the TJC Health Services Clinic in Rogers Student Center for evaluation by the physician and referral to a lab.
 - (c) **At the on-campus dental clinic:** Exposed individual should be sent to the Rogers Student Center for evaluation by the physician and referral to a lab.
- DRL Lab Tyler Collection Sites
 - 1100 East Lake, Suite 270; 903-593-059
 - 1720 South Beckham, Suite 107; 903-533-8796
 - 700 Olympic Plaza; 903-596-3294
 - 3910 Brookside Drive, Suite 200; 903-266-7965
 - If after hours, go to a hospital emergency room for evaluation and labs.

The supervisor/professor will:

6. Make sure the source patient is advised of the necessary testing to be completed. Clinical site, hospital, or on-campus dental clinic protocol will be followed.
7. Within 72 hours notify TJC Campus Police so an incident report can be completed.
8. Complete an injury report and any other necessary documentation, and make sure the exposed individual (student or faculty) has the necessary insurance forms for documentation and submittal to TJC.

Other important information:

- The TJC Health Services Clinic, from 8:00 a.m. - 5:00 p.m., will refer the exposed individual to the appropriate contracted lab and treat the exposed individual accordingly. Lab tests will include syphilis, Hepatitis B, Hepatitis C, and HIV.
- The exposed individual will be responsible for transportation to the lab or emergency room.

- Student expense is covered by TJC insurance as a secondary claim to any primary insurance available. The department chair or designated person should forward all paperwork to Campus Services (Dana Ballard) for submittal to the insurance company. The student is responsible for filling out and submitting the claim forms to the college.
- Source patient testing should be ordered and done at the expense of the clinical site per their protocol.
- If the exposure happens at the on-campus dental clinic, source patient testing will be done at the expense of the college if the patient goes to the referral site (TJC Health Services Clinic and DRL Lab). But if the patient chooses another physician and/or lab, all fees will be at the expense of the source patient.

Questions and information: Dana Ballard, Assistant Director, Campus Services 903-510-3313

PATIENT CARE INCIDENT REPORTS

Should any patient care incident occur involving a student the clinical instructor, assigned supervisor, clinical coordinator or the department chair must be notified immediately. The standard risk management (incident) report must be made and submitted to the clinical instructor and/or supervisor immediately. An incident report must be made and submitted to the clinical coordinator and department chair for review. Reports must be made in accordance with the policies of the affiliating clinical site. Existing clinical affiliate policy may be complied with regarding terminations (if the incident would normally lead to employee termination, it is possible that the clinical site would request that the student involved not return to that facility for clinical education assignments).

If a clinical facility asks that a student be removed from that site, the program **will try** to place that student at another facility **if possible and only if deemed appropriate**. Being barred from a clinical site can be grounds for dismissal. **Being barred from a clinical site for patient safety issues or poor ethics or being barred from a second clinical site for any reason WILL result in dismissal from the program.**

ACTING AS WITNESS

A student is not to sign his/her name as a witness to a patient's signing of a will, power of attorney, advanced directive, consent for medical treatment, or any medical legal document.

Students acting as witnesses for departmental issues need to contact the Clinical Coordinator before written documentation is submitted.

CONFIDENTIAL INFORMATION

All clinical affiliate patient records are confidential in nature. Requests for information concerning a patient should be referred to the clinical instructor or designate. The students are expected to maintain absolute confidentiality of all data involving the patient and the practicum affiliate. Use of confidential information for personal (student) gain or defamation (patient) purposes will result in dismissal from the program. Breach of patient confidentiality may (and probably will) result in dismissal from the program. All students will attend HIPAA training prior to starting clinical rotations. Students may have to complete formal HIPAA at assigned clinical facility in addition to training we gave student.

STUDENTS INTERACTING IN CLINICALS

1. Student is required to introduce themselves to the patient (and the Radiologist, when appropriate).
2. Patients should never be left alone on the radiographic table.
3. Students should never discuss positioning, etc., in front of patients. If there are questions, the student should call the technologists aside or wait until the patient has left the room.
4. The student shall NEVER take practice images and expose on any patient or other personnel.
5. The personal life of the student or his/her peers should never be discussed in front of a patient.
6. It is recommended students do not remove personal articles (such as jewelry) from patient.

7. Every effort should be made to make the patient as comfortable as possible at all times.
8. Patient privacy should be provided for the duration of the examination.
9. The student-patient relationship should remain professional at all times.
10. Proper facility procedures should always be followed when physical restraints must be used on a patient
11. Students should NOT accept any type of gratuity or "tip" from a patient or patient's family.
12. Students should NOT have visitors or their children visit with them during clinical hours.
13. Students should NOT "flirt" or behave in an inappropriate manner with patients.

Any violations of these behaviors will result in a range of actions, from warnings and/or being sent home (with attendance and point deductions), to dismissal from the program.

If a patient is assigned to you or your room, you are responsible for that patient until that patient has left the department or until you are given another patient for whom you are responsible. However, you must be certain that responsibility for your previous patient has been accepted by another person.

IDENTIFICATION OF PATIENTS

Students are to always verify that they have the correct patient before bringing the patient into an exam room. Students are to use two patient identifiers: Patient name and date of birth. If possible, the patient should verbally state this information and the student should read the information off of the patient's arm band. If an armband is not present, the student should follow hospital protocol for patient identification.

If the student fails to correctly identify a patient in Practicum that results in the wrong exam being done on the wrong patient the policy below applies:

1st incident - demerit - 2 points off final clinical grade

2nd incident - drop a clinical letter grade

3rd incident - Dismissal from the program with Non-Reentry

There is a zero-tolerance policy for this behavior within our clinical facilities. This policy is very similar to the policy that radiologic technologists must follow.

STUDENTS HOLDING PATIENTS POLICY

To ensure the health and safety of the student and to demonstrate compliance with JRCERT Standards, the program ensures that students employ proper radiation safety practices. Students must not hold image receptors during any radiographic procedure. Students should not hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care. If a mechanical patient immobilizer is impossible, a non-pregnant parent, friend, or relative accompanying the patient should hold the patient. If such person is not available, a nurse or radiology staff member may be asked to help. Those persons assisting in holding the patient shall be provided with protective aprons and be positioned so that they are not in the path of the primary beam. If all other options have been exhausted a student may be asked to hold following institutional policy for radiation safety.

STUDENT EXPECTATIONS: Semester 1 - Freshman

Student Should Function as Follows:

**Grading for the first 8 weeks will be done using exclusively the Affective Domain portion in Practicum I.

Within 1st few weeks....

Student will

- know basic hospital layout for areas observed.
- be familiar with exam rooms and basic stock.
- be able to run films for routine exams.
- show initiative to be in every exam possible.
- have a beginning knowledge of CR equipment.
- be able to do textbook pts. For CXR & KUB.
- be able to assist in transferring patients.
- be able to assist in transporting patients.
- show initiative to learn about new rooms/exams.

By Mid-Semester....

Student will

- know hospital layout for most frequented areas.
- know primary exam rooms and be familiar with stock.
- be able to run films and annotate basic exams.
- show initiative to/knowledge how to assist in routine exams.
- be able to perform basic functions on CR system.
- do CXR, ABD, UPPER EXTREMITIES on textbook pts.
- be able/willing to transfer mobile patients to and from equipment.
- be able/willing to transport stable patients.
- show initiative to learn new rooms/exams for personal use.
- have working knowledge of basic paperwork/histories.
- recognize atypical patients and help with alternative views.
- be able to adjust to changing environments effectively.

By End of Semester...

Student will

- be able to get to and from most frequented locations in hospital.
- be able to set up rooms for most exams and restock rooms.
- be able to run films for patients with multiple exams.
- show independence in attempting routine exams.
- have working knowledge of CR/DR system.
- do CXR, ABD, UPPER EXT, LWR EXT, SPINE for textbook pts.
- be able to transfer most patients/assist with immobile transfers.
- be able to transport most patients/assist with critical pts.
- show ability to critique routine films.
- be able to set up rooms, get histories for routine fluoro exams.
- be willing to attempt using fluoro equipment w/supervision.
- recognize atypical patients, attempt some non-routine exams.
- show first steps of developing critical thinking skills.
- be able to adjust quickly to changing environments and perform.

STUDENT EXPECTATIONS: Semester 2 - Freshman

Student Should Function as Follows:

Within 1st few weeks....

Student will

refamiliarize self with hospital exams rooms, & routine exams.
attempt routine exams with minimal mistakes/assistance.
be able to perform basic functions on DR system.
be able/willing to transfer mobile patients to and from equipment.
be able/willing to transport stable patients.
have working knowledge of basic paperwork/histories.
recognize atypical patients and help with alternative views.
do CXR, ABD, UPPER EXT, LWR EXT, SPINE for textbook pts.
be able to run films for patients with multiple exams.
show independence in attempting routine exams.

By Mid-Semester....

Student will

be able to get to and from most frequented locations in hospital.
be able to set up rooms for most exams and restock rooms.
be able to run films for patients with multiple exams.
show independence in attempting routine exams.
have working knowledge of CR/DR system.
be able to transfer most patients/assist with immobile transfers.
be able to transport most patients/assist with critical pts.
show interest in learning all exams to do independently.
be able to set up rooms, get histories for routine fluoro exams.
be willing to attempt using fluoro equipment w/supervision.
recognize atypical patients, attempt some non-routine exams.
show first steps of developing critical thinking skills.
be able to adjust quickly to changing environments and perform.

By End of Semester...

Student will

be familiar with all frequented areas of facility.
be able to set up, stock, and use equipment in all exam rooms.
have a working knowledge of all hospital computers systems
be able to proficiently use CR/DR system.
be able to transfer most patients/assist with immobile transfers.
be able to transport most patients/assist with critical pts.
show independence in attempting all exams.
be able to do basic fluoro exams with minimal assistance.
be able to do some atypical patients for routine exams.
know/be willing to attempt some alternative views on atypical pts.
be able to give histories for exams/show films to Radiologist.
be able to do routine CXR, ABD, UPPER EXT, LWR EXT, SPINE,
independently and proficiently on most patients.
complete routine exams start to finish w/little assistance.

CLINICAL DEMERITS

Demerits are a numerical documentation of unsatisfactory performance. Demerits will be issued by the Clinical Instructor or Clinical Coordinator. One demerit is equivalent to 2% of the overall clinical grade, and are assigned by clinical instructors. The number of demerits given will depend on the seriousness and the frequency of the infraction. Below is a partial list. Other demerits may be given at the discretion of the Clinical Instructor or Clinical Coordinator.

Demerit List:

- Improper phone call when absent from or late to clinicals.
- Absences or tardiness in excess of the maximum allowable absences (as described in the attendance policy)
- Not completing clinical paperwork on time.
- Violation of the dress code.
- Leaving clinicals early
- Reporting to clinicals without required equipment (TLD, Markers, etc.)
- Not using markers or mis-marking image
- Using someone else's marker
- Mislabeling images
- Not introducing self to the patient
- Not explaining the exam to the patient
- Failure to choose correct patient
- Not following department protocol
- Not finishing exam (including paperwork)
- Passing poor quality image
- Inconsistent performance in clinicals (inability to perform an exam when documented competent)
- Not cleaning assigned room
- Not stocking x-ray room
- Unavailable in assigned area
- Refusal to perform an exam
- Poor attitude as evidenced by being argumentative
- Poor attitude as evidenced by unwarranted complaining
- Poor attitude as evidenced by being rude
- Poor attitude as evidenced by being unmotivated or showing no interest
- Demonstration of overconfidence
- Unable to follow instructions from technologist/clinical instructor
- Unable to use knowledge learned in class for clinical practice
- Ineffective patient care
- Unable to use alternative positioning projections for atypical patients
- Not providing for the patient's modesty/comfort needs
- Not following student folder policy
- Constant reminder to not have personal items in Tech work areas

The following list applies to second year (Sophomore) students, and count 4% of the overall grade.

- Not properly identifying patients
- Not checking the chart for inpatient orders before putting the patient on the table.
- Not assisting the patient on to and off of the table into the wheelchair/stretchers.
- Leaving an unstable patient alone with the rails down/on the table alone
- Not finishing the paperwork/entering into the computer.
- Not setting technique for manual technique procedures.
- Not providing a clean sheet on the table prior to the exam.
- Mis-marking or not marking an image
- Not checking an image to make sure patient name and information are correct before sending
- Not practicing universal precautions
- Not practicing personal radiation protection
- Discussing the patient's diagnosis
- Improperly discarding/capping of needles
- Not checking contrast/medications for content and expiration date
- Not checking oxygen levels/checking for oxygen in tank
- Not performing repeats under direct supervision.

CLINICAL COMPETENCY/CHECKOFFS

Purpose of Competency

The purpose of the clinical competency requirements is to verify that individuals certified and registered by the ARRT have demonstrated competency performing the clinical activities fundamental to a particular discipline. Competent performance of these fundamental activities, in conjunction with mastery of the cognitive knowledge and skills covered by the radiography examination, provides the basis for the acquisition of the full range of procedures typically required in a variety of settings. Demonstration of clinical competence means that the candidate has performed the procedure independently, consistently, and effectively during the course of his or her formal education.

Demonstration of competence should include variations in patient characteristics such as age, gender, and medical condition.

ROAD MAP TO COMPETENCY
ROAD MAP TO COMPETENCY BASED EXAMINATIONS
CHECK OFFS

1. Lecture on Anatomy and Positioning of the anatomical part.
2. Lab Practice - pass/fail grade on radiographs taken in lab. A lab sheet will be sent with the student once the lab practicum and Lecture test has been passed. This sheet must be placed in the student's clinical folder.
3. Examination
 - 3 a. The student will document to the clinical instructor, by using the *Assignment of Examinations that May be Done By Students* form, that this has been accomplished and that he/she may begin check-off procedures in the clinical setting.
 - 3 b. The lab instructor will inform the clinical coordinator if a student fails to complete the assigned laboratory radiographs or pass the examination within the time limit. The coordinator will inform the student's clinical instructor that the student needs additional instruction and a re-evaluation will be conducted before those check off's may be attempted.

Students will not be able to attempt a check-off until after they have passed all sections of the lab, even if the student has performed under direct or indirect supervision the procedure in clinicals previously. Students WILL NOT be allowed to have a check-off signed by a technologist and date it later to coincide with lab tests. **RECEIVING A CHECK-OFF PRIOR TO LAB TESTS, AND DATING IT LATER (postdating) CONSTITUTES FRAUD, AND FALSIFYING DOCUMENTATION, AND WILL RESULT IN DISMISSAL FROM THE PROGRAM. A STUDENT ATTEMPTING A CHECK-OFF MUST ANNOUNCE INTENSIONS BEFORE ATTEMPTING.** If a student is discovered asking for a check-off following the procedure, that student will be subject to a comprehensive evaluation of all check-offs, and any examinations that the student cannot perform accurately will be subject to the Rescinding a Check-off policy. The student's evaluation will reflect the incompetence in Quality of work, and Quantity of work.
4. Clinical education instruction.
5. Participation - students will document by their monthly procedure records that they have assisted, under direct supervision, in this particular examination before submitting a check-off.
6. Student will perform the examination 100% by himself or herself, under direct supervision, but with no assistance unless patient safety is involved. The technologist will sign for competency.
7. At regular intervals, the students must document that they have demonstrated continued competency on each anatomical part. This is documented on a COMPETENCY DOCUMENTATION form. Records of this are kept in the students' clinical education folders. **The final competency must be performed using MANUAL TECHNIQUES - the kVp and mAs must be documented on the check off form**
8. By the student's last clinical education class (Practicum VI), final competency will be documented on the COMPETENCY DOCUMENTATION FORM.
See *Competency Quantity Guidelines* chart for numbers of required examinations.

AFTER DEMONSTRATING COMPETENCY AND DOCUMENTING IT, STUDENTS MAY PERFORM THOSE PROCEDURES WITH INDIRECT SUPERVISION.

REVIEW OF A COMPETENCY MAY BE PERFORMED BY THE CLINICAL INSTRUCTOR OR CLINICAL COORDINATOR. IF THE STUDENT PROVES LESS THAN COMPETENT, A CHECK-OFF MAY BE REMOVED FROM THE COMPLETED COMPETENCY LIST.

The *Standards for an Accredited Educational Program in Radiologic Sciences* defines direct and indirect supervision.

COMPETENCY QUANTITY GUIDELINES

Using the Examination Record Form as a guide, the student will complete the following examinations as outlined in each graded period:

TIME	GRADE	EXAMS IN CATEGORY	QUANTITY OF CHECK-OFF'S	QUANTITY OF CHECK-OFF'S	FINAL COMPS
1 ST FALL	100	RADR 1311	15	NONE	NONE
	75	EXAMS	10		
	0		<10		
1 ST SPRING	100	RADR 1311	30	15	NONE
	75	RADR 2301	20	10	
	0	EXAMS	<20	<10	
1 ST SUMMER	100	ALL EXAMS	45	25	NONE
	75		30	20	
	0		<30	<20	
2 ND FALL	100	ALL EXAMS	60	40	25
	75		50	35	20
	0		<50	<35	<20
2 ND SPRING	100	ALL EXAMS	75	50	50
	75		65	45	45
	0		<65	<45	<45
2 ND SUMMER	100	ALL EXAMS	80	60	60
	75		75	55	55
	0		<70	<55	<55

ALL ARRT MANDATORY COMPETENCIES ARE REQUIRED TO GRADUATE!

NOTE:

1. Only specific Exams are allowed to be simulated as stated by ARRT will be accepted.
2. All set-up competencies and general patient care competencies should be completed by the end of the 1st year spring semester with the exception of Venipuncture.
3. Any specific exams common to your clinical site may be placed under miscellaneous exams with the approval of your Clinical Instructor. Miscellaneous exams will count as elective exams. But for an exam to qualify as miscellaneous, it must be possible achieve the competency three times.
4. ARRT Mandatory exams are tagged by **
5. Some exams that are common protocol may be required at your native clinical facility. Those exams will be BOLD.
6. Trauma is considered a serious injury or shock to the body. Modifications may include variations in positioning, minimal movement of the body part, etc.
7. Geriatric exams are patients 65 years old or older and require critical thinking skills or alternative positioning methods.
8. Pediatric patients are those 6 years of age or younger

GRADING:

100%- No suggestions for improvement. Performance far exceeded expectations

87%- Performance above what most students at the same level achieve. Little improvement needed.

75%- Average performance. Meets the minimum standard.

50%- Below average. Did not meet the minimum standard.

0%- Unacceptable. Student should consider career options.

- The last competency must be done in the student's sophomore year AND manual technique noted on sheet
- Continued Competencies begin in the student's second semester of the freshman year. Not before.
- Competencies MAY NOT be awarded if done during hours of employment

The student must declare an intention to attempt a competency check-off BEFORE the exam is attempted and a check-off is awarded. A check-off will not be awarded if the student doesn't announce intentions before attempting

**General competencies including oxygen administration, equipment /IV pump usage, transportation, venipuncture, computed/digital radiography, basic vital signs and CPR are competencies that must be completed, but do NOT count towards the semester total when calculating number of competencies completed for grading.

CLARIFICATION OF COMPETENCIES PROCEDURE

In addition to the published Road Map to Competency Based Examinations, let it be known:

- A. In reference to the evaluation, 75% is the minimum standard, in which the student complies with all standards (average). Any rating above 75% *exceeds standards*. 100% is no room for improvement, 87% performed well above standard. Any rating below 75% does not meet standard, and will result in lowering of the clinical grade by 1 letter grade. The student must complete the maximum number of examinations on the guidelines to receive a 100% in the "Quantity of work (check-offs)" category. The student will earn a 75% (meeting but not exceeding standards) if the number of examinations does not reach the maximum amount. Missing one examination less than the maximum amount will still earn a 75%. The category on the evaluation directly above the one mentioned above ("Quantity of Work") addresses how busy the student was overall. A student who receives the maximum number of check-offs, but has to be continually asked to participate in their clinical education may receive a 100 in "Quantity...check-offs", and still fail the "Quantity..." section.
- B. Continued competency (second) EACH SEGMENT OF THE GRADE EVALUATION CATEGORIES MUST BE PASSED WITH A 75% RATING (or better) OR AN AUTOMATIC LETTER GRADE REDUCTION WILL RESULT. FOR EXAMPLE, A SECOND SEMESTER FRESHMAN STUDENT WILL NOT RECEIVE AN "A" IN PRACTICUM II WHILE MAKING A 75% RATING FOR THE INITIATIVE (OR THE ATTITUDE) PORTION EVEN IF ALL OTHER SEGMENTS WERE RATED 100%. ALL SEGMENTS ARE IMPORTANT. **2 ratings below 75% in different categories in one semester, or below 75% in the same category for 2 semesters WILL RESULT IN DISMISSAL FROM THE PROGRAM**
- C. The final competency (third) must be documented during the sophomore year. The final competency must be performed using **manual technique**.
- D. The student will declare his/her intention of attempting a competency (check-off) **BEFORE** doing the examination. The student is to tell the technologist or clinical instructor

of his/her plan. If the examination is documented as having been done competently, the proper paper work will be generated and the competency recorded in the student's folder. Failure to declare intentions was previously discussed.

For a student to earn a check-off, the examination must be done 100% by the student. The resulting films must be diagnostic and within the clinical setting's standards. If a student needs to repeat a film and independently identifies the mistake, the clinical instructor may use his/her judgment as to whether or not the student is competent in that examination.

DOCUMENTATION OF CHECKOFFS

Completion of competencies will be documented in the student's chart and the colored check-off sheets will be returned to the student. Students are required to keep and maintain their documentation of competency (check-off sheets) until graduation. In the event that the integrity of the documentation is called into question, the student must provide the check-off sheets. Failure to produce the check-off sheets will result in forfeiture of the competencies, and may result in a failing grade in clinical education.

The student may not ask for a check-off if the intent was not made clear prior to the attempt.

Guidelines from ARRT for demonstration of competence for check offs must include:

- Requisition evaluation
- Patient assessment
- Room preparation
- Patient management
- Equipment operation
- Technique selection
- Patient positioning
- Radiation safety
- Imaging processing
- Image evaluation

QUANTITY OF WORK DONE BY SIMULATION

Discretionary latitude will be given to the clinical instructor for substitution(s) of competencies of similar skills that have been demonstrated when *infrequently available* examinations do not readily permit access by the student to document competency. Exams may be simulated using phantoms or mock patients without actually exposing the patient. No simulated check-offs will be accepted in the final 3 weeks of any semester unless approved by Clinical Coordinator. A student cannot simulate all three levels in one day. Each Level for the simulations must be done on separate days.

The ARRT requirements specify that certain clinical procedures may be simulated as designated in the specific requirements below. Simulations must meet the following criteria:

- The candidate must competently demonstrate skills as similar as circumstances permit to the cognitive, psychomotor, and affective skills required for performing the procedures on patients;
- The program director must be confident that the skills required to competently perform the simulated task will generalize or transfer to the clinical setting, and, if applicable, the candidate must evaluate related images.

Procedures should be performed on patients whenever possible, but exams listed on the ARRT Competency specifications may be simulated.

RESCINDING A "CHECK OFF"

Students will be held accountable for being able to perform an exam for which that student has a "check-off". The clinical instructor or Clinical Coordinator may test the student for cause or at random. The exam must be performed independently in a reasonably accurate manner or the "check-off" may be rescinded or "taken-away". The student will wait for the next exam of that type to come to the department and try again for a "check-off".

2 students may NOT receive a check-off on the same patient, for the same exam, at the same time. If documentation is submitted for a check-off on the same patient at the same time, neither student will receive the check-off.

LEVEL 1

Know Protocol

Film Size and Orientation

Position patient

Use equipment correctly

Correct markers

Communicate correctly

Begin to understand kVp and mAs and that relates to the exam being done, patient size, SID, grid or no grid, table top, pathology, etc.

Begin to understand the importance of the Exposure Indicator number or "S" number

REPEATS ALLOWED FOR ATYPICAL BODY HABITUS OR PATIENT COOPERATION

LEVEL 2

Know Protocol

Film Size and Orientation

Position patient

Use equipment correctly

Correct markers

Communicate correctly

kVp must be documented on form

Understand kVp and mAs and that relates to the exam being done, patient size, SID, grid or no grid, table top, pathology, etc.

Understand the importance of the Exposure Indicator number or "S" number

REPEATS ALLOWED FOR PATIENT COOPERATION

LEVEL 3

Know Protocol

Film Size and Orientation

Position patient

Use equipment correctly

Correct markers

Communicate correctly

Document kVp and mAs

Document Exposure Indicator Number or "S" Number

NO REPEATS ALLOWED - MUST USE MANUAL TECHNIQUE!

NEW GRADUATES AND NEW HIRES GIVING CHECK OFFS

New graduates must complete a 90-day probationary period before they can sign check offs for students, regardless if they did their clinical assignment at the same facility or graduates from TJC Radiologic Technology program. If the new technologist has worked at the facility and is not subject to a probationary period, they will still need to wait 90 days after becoming a certified technologist before awarding check offs to students.

NEW HIRE TECHNOLOGISTS

For a certified Radiologic Technologist that is a new hire at a facility they must complete their new hire probationary period (90 days and/or according to director of that facility) and be familiar with TJC Check off criteria, policies and understand direct and indirect supervision as

defined by JRCERT before they can award students check offs. Regardless, if they did their clinical assignment at the same facility or graduates from TJC Radiologic Technology program. It is recommended they complete the ASRT Supervision Quiz

CLINICAL EDUCATION HOURS (PRACTICUM)

Clinical education will be an eight-hour day two or three days a week depending on your semester in the program, as assigned by the clinical coordinator or instructor. STUDENTS ARE REQUIRED to make themselves aware of the assigned hours and adjust personal and work schedules to coincide with their clinical schedule, as posted at the clinical site. Any unavoidable, necessary personal appointments that must be made during assigned clinical education time will be subtracted from the student's ATO. No more than a total of forty hours of clinical and didactic education combined will be scheduled per week. Clinical days will vary according to the schedules. The clinical instructor will assign day shifts, evening shifts and weekend shift assignments each semester. The objective of the varying assignments is to give students an opportunity to work in all environments that resemble those new graduates will experience.

In evening and weekend clinicals, students will learn and practice positioning and how to professionally work in the department. They will:

1. Learn to handle messages in the light room and take actions from the messages.
2. Practice communication and cooperation skills with all professionals on the health care team.
3. Learn to work within different atmospheres, less stress levels, and different supervision styles.
4. Have greater access to trauma check offs and extremities.
5. Perform office procedures at a higher level by seeing more of the whole picture
6. Learn to manage work flow, maybe make decisions
7. Get different technologists' ideas and tricks

Allowable Time Off (ATO) Allowed time off (ATO) may be used for absences or unavoidable appointments. **No make-up time is available for absences or appointments in excess of the 16/24 hours, and any excesses will negatively affect the student's grade.**

If the student knows they will be late (tardy) or needs to unexpectedly use their ATO time, a phone call (made by the student and not a text) to the clinical instructor or shift supervisor is expected.

Voicemails may be left as notification if acceptable by Clinical Instructor. Phone calls will be made by 15 minutes prior to the start of the shift in the event of an absence.

ATO forms should be used for ATO scheduled in advance. It is the student's responsibility to make personal contact via phone prior to confirm the student is taking ATO time and/or ATO form was received by Clinical Instructor.

All 8-hour clinical shifts will be scheduled between the hours of 7am and 7pm. This includes weekend shifts.

ATTENDANCE POLICY

Full time attendance is required.

- Students in clinicals 2 days per week (Practicum I, II and VI) will be allowed 2 (two) days of absence (16 hours) per semester without negatively affecting the clinical grade. Absence in excess of the 16 hours will result in the lowering of the clinical grade by 1 (one) letter.
- Students enrolled in clinicals 3 (three) days per week (Practicum III, IV and V) will be allowed three days (24 hours) of absences per semester without negatively affecting the clinical grade. Absence in excess of the 24 hours will result in the lowering of the clinical grade by 1 (one) letter.

Practicum I, II, and VI

16 Hours ATO per semester

SCHEDULING ATO TIME

You may take ATO in smaller increments than 8 hours. It will be up to each individual Clinical Instructor on the smallest increment of ATO that you may take at a time. The student must submit an ATO form to the Clinical instructor when scheduling ATO in advance.

AWARDED ATO

At various times throughout the semesters you may have opportunities to earn ATO time by participating in events. This time will be announced by the Clinical Instructor as needed. Students participating in these events must be in clinical uniform and always display appropriate behavior, you are representing our program. ATO time will be given by the Clinical Coordinator. Lost certificates or ATO time not used within the semester will not be re-given. It is the student's responsibility to make aware to the Clinical Instructor ATO has been awarded and when it has been taken. Student must follow same parameters when scheduling or using ATO time.

UNUSED ATO TIME

A student with perfect attendance in the semester, may use their ATO absences during finals week. This will not affect the student's grade. If ATO's are exhausted and the student incurs absences during finals week, the student's clinical grade will be lowered by one letter grade.

ATO will not carry over to following semesters. ATO cannot be "made up."

Any absences in excess of those listed will result in the documented failure of the attendance category, and the lowering of the clinical grade by 1 letter. Continued absences will result in the accumulation of demerits and further lowering of the clinical grade.

Incidences of this in any 3 semesters WILL RESULT IN DISMISSAL from the program. If a student misses 5 days during Practicum 1, 2 or 6, OR 7 days during practicum 3, 4, OR 5, the student will receive a failing grade in clinicals and dismissal from the program.

Explanation of ATO Time Use

	Practicum I	Practicum II	Practicum III	Practicum IV	Practicum V	Practicum
1 st 8 hours missed	No Penalty	No Penalty	No Penalty	No Penalty	No Penalty	No Penalty
2 nd 8 hours missed	No Penalty	No Penalty	No Penalty	No Penalty	No Penalty	No Penalty
3 rd 8 hours missed	Drop letter grade. 2 pt demerit. Failure of Attendance Category	Drop letter grade. 2 pt demerit. Failure of Attendance Category	No Penalty	No Penalty	No Penalty	Drop letter grade. 2 pt demerit. Failure of Attendance Category
4 th 8 hours missed	4 more points demerit	4 more points demerit	Drop letter grade. 2 pt demerit. Failure of Attendance Category	Drop letter grade. 2 pt demerit. Failure of Attendance Category	Drop letter grade. 2 pt demerit. Failure of Attendance Category	4 more points demerit
5 th 8 hours missed	Dismissal from Program	Dismissal from Program	4 more points demerit	4 more points demerit	4 more points demerit	Dismissal from Program
6 th 8 hours missed			8 more points demerit	8 more points demerit	8 more points demerit	
7 th 8 hours missed			Dismissal from Program	Dismissal from Program	Dismissal from Program	

Note: If you have taken all your allowed time off (ATO), **ANY** additional time missed **WILL**

- a. Drop you a letter grade
- b. Result in a demerit which will take 2 pts from your final eval grade
- c. Fail you in the attendance category. **Even if you only miss one (1) hour over your ATO. It does not have to be a whole day (8 Hours) over.**

Failure of Attendance = Automatic drop of letter grad

FAILURE OF ATTENDANCE IN ANY THREE (3) SEMESTERS WILL RESULT IN DISSMISSAL FROM PROGRAM

TARDY

One tardy is allowed per semester. Any tardy incident after the one allowed for each semester will result in demerits as listed below. Late is any time past the time assigned (even 1 (one) minute) for clinical education, by whichever clock is designated by the clinical instructor. The student will be counted late, even if he/she elects to stay over the same amount of time that was missed at the beginning of the shift. Tardiness includes leaving practicum as early as 1(one) minute prior to scheduled time to leave, without being instructed by the clinical instructor, and returning late from breaks.

Tardy is considered up to one hour from your scheduled clinical start time. For Tardies exceeding one hour of time, a two-point demerit may be given for each additional hour. If a student is going to be late over 4 hours or any time exceeding 4 hours, it will no longer be considered a Tardy, but instead an Absence (or ½ day absence) and their ATO will be deducted.

grade	For all Semesters: 1 st Tardy = OK, no penalty
	2 nd Tardy = 1 demerit which is 2 points off total course grade
grade	3 rd Tardy = 2 demerits which is 4 more points off the total course
	4 th Tardy = 3 demerits which is 8 more points off the total course *You have now failed the attendance category with 4 tardies
	5 th Tardy = 4 demerits which is 16 more points off the total course grade **THIS WILL RESULT IN DISMISSAL FROM THE PROGRAM

****A student that has accumulated 5 tardies within one clinical semester will be automatically withdrawn from the program.**

*Each successive demerit has points doubled from the previous demerit's points that were assessed against the final grade.

If using ATO for a tardy causes the student to go over allowed absences the attendance policy will be implemented as stated in handbook.

For any ATO time or Tardy during the semester the ATO/Tardy form must filled out and given to clinical instructor.

Non-compliance with attendance standards in any 3 semesters will result in dismissal from the program. Failing the Attendance Category. This includes accumulation of tardies during semester and going over ATO time during semester

Explanation of Tardies

	Practicum I	Practicum II	Practicum III	Practicum IV	Practicum V	Practicum VI
1 st Tardy	No Penalty	No Penalty	No Penalty	No Penalty	No Penalty	No Penalty
2 nd Tardy	1 demerit = 2pts off Eval grade	1 demerit = 2pts off Eval grade	1 demerit = 2pts off Eval grade	1 demerit = 2pts off Eval grade	1 demerit = 2pts off Eval grade	1 demerit = 2pts off Eval grade
3 rd Tardy	2 nd demerit = 4 MORE pts off Eval grade	2 nd demerit = 4 MORE pts off Eval grade	2 nd demerit = 4 MORE pts off Eval grade	2 nd demerit = 4 MORE pts off Eval grade	2 nd demerit = 4 MORE pts off Eval grade	2 nd demerit = 4 MORE pts off Eval grade
4 th Tardy	Fail Attendance. 3 rd demerit = 8 MORE pts off Eval grade	Fail Attendance. 3 rd demerit = 8 MORE pts off Eval grade	Fail Attendance. 3 rd demerit = 8 MORE pts off Eval grade	Fail Attendance. 3 rd demerit = 8 MORE pts off Eval grade	Fail Attendance. 3 rd demerit = 8 MORE pts off Eval grade	Fail Attendance. 3 rd demerit = 8 MORE pts off Eval grade
5 th Tardy	Dismissal from Program	Dismissal from Program	Dismissal from Program	Dismissal from Program	Dismissal from Program	Dismissal from Program

Example: Susie's final eval grade was 95.

		Final Grade	
1 st tardy	0	95	
2 nd tardy	-2	93	
3 rd tardy	-4	89	
4 th tardy	-8	81	Failed Attendance
5 th Tardy	-16	65	Failed Clinicals Passing is 75 Dismissed from Program

Remember: If you receive a 4th tardy, in addition to receiving demerits (which means points deducted from final eval grade), you will be considered "Failing the Attendance Category" and therefore DROP a letter grade. This could potentially fail you in Clinicals and you will be dismissed from Program.

FAILURE OF ATTENDANCE IN ANY THREE (3) SEMESTERS WILL RESULT IN DISSMISSAL FROM PROGRAM

NOTIFICATION OF ABSENCE

HOSPITAL: If the student must be absent, a phone call (**made by the student himself or herself**) to the clinical instructor or shift supervisor is **MANDATORY**. Phone calls will be made by 15 minutes prior to the start of the shift. Calls by anyone other than the affected student, calls to unauthorized personnel, or late calls are improper phone calls (see demerit list). If the call is **not made within 2 hours** after the start of the shift, it is considered a no-call, no-show. ***IT IS THE STUDENT'S RESPONSIBILITY TO CALL.*** A phone call to the student by the clinical instructor, will not count as a valid phone call. If the clinical instructor is not available, the supervisor of the assigned shift is to be contacted or a message must be left on the instructor's/supervisor's voicemail.

NON-HOSPITAL BASED FACILITY: If you are scheduled at outside clinics other than your native hospital you must call the Clinical Instructor at the clinic and at your native facility to inform them of ATO time taken or tardy.

NO CALL/ NO SHOW One absence **not** preceded with a **valid** phone call within 2 hours of the start of the shift, (a no call-no show) will result in the lowering of the clinical grade for that semester by one letter grade and failure in the attendance category for the semester. A counseling session with the clinical instructor must be completed before that student may return to the clinical floor. **A 2nd incident of a no call/no show will result in dismissal from the program.**

NOTIFICATION OF TARDINESS

Students are encouraged to call if they expect to be late. If a student is late, it is the student's responsibility to ensure he/she is marked tardy, not absent or documented as a no-call no-show. If a student is expected to be over 1 hour late then the student must use their ATO time and attendance policy guidelines.

UNDER NO CIRCUMSTANCES WILL A STUDENT BE ALLOWED TO SIGN/CLOCK IN FOR ANOTHER STUDENT. Signing in for another student constitutes fraud and **both students** will be dismissed from the program for falsifying sign in sheets. **UNDER NO CIRCUMSTANCES WILL A STUDENT BE ALLOWED TO SIGN/CLOCK IN FOR WORK WHILE ON CLINICAL TIME.** Clocking or signing in on clinical time constitutes time theft, and fraud, and the student(s) involved will be dismissed for falsifying sign in sheets.

EXTENUATING CIRCUMSTANCES REQUIRING CLINICAL ABSENCE

BEREAVEMENT

A maximum of 2 Days off from clinicals will be allowed if a death in a student's immediate family occurs. This bereavement leave will not count against the student's absences (grading) or participation in perfect attendance. This will be extended **only to immediate family** including spouse, child, parent, sibling, mother or father in law, grandparent in law or grandparent. Documentation will need to be submitted to your Clinical Instructor to excuse time off. Absences due to any other funerals will be counted as normal absences.

If the bereavement time occurs during an approved TJC Holiday (Thanksgiving, Christmas, or Spring Break) or approved time off from the Radiology Department Chair the student will be expected to follow normal attendance policy and no extra bereavement time may be taken. You must submit an ATO form when you return from Clinicals.

HOLIDAYS AND VACATIONS

Students will be out of clinicals for all holidays listed in the Tyler Junior College calendar. There will be no weekend clinicals on the weekends of: Thanksgiving, Easter, those weekends which divide semesters, weekends before and after Spring Break, weekends before and after summer vacation, the weekend of holidays that are on Monday or Friday, and the weekend before finals week.

Students may be allowed to leave clinicals early as announced by the Clinical Coordinator or Department Faculty. During these times students will be allowed travel time from their site to TJC and their allotted 30-minute lunch. Students may be asked to provide proof of time and attendance to the Clinical Coordinator.

There will be no evening or weekend clinicals during finals week. Students have scheduled vacation times (announced by Department Chair) and will be required to adjust personal vacation schedules to correspond to program vacation times. No other vacation times will be permitted. Students who schedule vacation times other than those described above, and that do not follow the program calendar will be marked absent from clinicals on the days missed, and the absence policy will be followed, which could result in failure of practicum and dismissal from the program.

HAZARDOUS TRAVEL CONDITIONS

Occasionally, inclement or threatening weather may force delays or cancellation of classes or clinical. In such cases, the latest schedule information will be communicated to students using the following methods:

1. A notice will be recorded on the Weather Information Line, 903-510-3000.
2. A text message will be sent to all Apache Alerts subscribers. (To subscribe to this opt-in service, log into Apache Access at <http://apacheaccess.tjc.edu>).
3. Area news media will be notified.
4. An Announcement will be sent via Apache Access.
5. A news release will be posted on the TJC Web site, at www.tjc.edu/news

Students scheduled for clinical education during hazardous travel conditions (conditions which are officially designated by TJC as making travel hazardous) will not be expected to arrive at the clinical site.

Closure of Tyler Junior College due to hazardous travel conditions announced by public media will be considered as notice to the clinical instructor and affiliate that the students will not attend clinical education.

If students who attend clinical education and/or live in areas other than Tyler, the local school closure due to hazardous travel conditions (winter weather, hurricanes, etc.) will constitute a sanctioned day off from clinical education, but a call to the clinical site, in this instance, is required.

**Public School Closures or delay in opening due to maintenance, electrical issues, water issues, or anything non-emergent does constitute an excused absence from clinicals. Should the student decide they do not want to attend clinicals they may use ATO and the attendance policy will apply.

Early Release - If TJC cancels classes during the time the student is already at clinicals the student may also be released at that time and their ATO not affected. If public school districts have early closure for hazardous travel conditions the student must get approval from the Clinical Instructor or Clinical Coordinator BEFORE they leave clinicals.

Delay in opening - If the public schools or TJC has a delay in opening for hazardous travel conditions then the student is expected to be at clinicals when the schools/TJC opens and finish out their regularly scheduled shift.

For example: If the schools open at 10am then the student is not expected to be at clinicals until 10am and then stay until they were originally scheduled (3:30 or whatever).

Daycare or child care that closes or releases early due to weather - the student may choose to take ATO should the student leave clinicals.

Weekend Closure - If the hours are on a weekend, the weekend supervisor is to be notified (within 15 minutes of the expected time of arrival).

If the local school does not close, but the student deems it unsafe to drive, a call to the clinical site is necessary, and the student will be counted absent for that day and ATO deducted.

If the student is without electricity or water due to inclement weather this does not constitute an excused day off from class or clinicals. Should the student decide not to attend class or clinicals then the student may use ATO and the attendance policy will apply.

No time will be awarded to those students if it was your regularly scheduled day off.

SURGERY, EXTENDED ILLNESS OR TRAUMA

A student who has an unexpected but unavoidable medical condition that would cause them to exceed their allowed days off in clinicals, but can continue in didactic classes may be given the opportunity to make up the missed clinical hours. The maximum allowed absence/make up will not exceed 6 weeks and must be made up within 30 days from the start of the next long semester. In the event that the student knows that the absence is in the future, the student may make up the time prior to the absence ("bank time"). When the student returns from the absence, the student will be expected to function at 100%. Failure to do so will be recorded on evaluations and will negatively affect the student's grade in clinicals. A student who is unable to return and function at 100%, or who is unable to make up the hours in the required time can withdraw from all program courses and return at the beginning of the term in which he/she withdrew. A student on probation or other disciplinary actions will not be given the opportunity to make up the time but will be given the opportunity to re-enter the following year. Make up time cannot be completed on days that are designated as holidays according to the TJC calendar. <https://www.tjc.edu/calendar>

PREGNANCY

Due to the extended absence from clinicals for delivery and recovery following childbirth, a student who becomes pregnant is in jeopardy of exceeding absences in any semester. Refer to the policy regarding absenteeism. The absence policy, as written, applies to all students.

All female students will sign an agreement of understanding concerning this policy as it pertains to pregnancy and radiation protection prior to acceptance.

A pregnant student has the option of:

1. Continuing in the program without modification.
2. Declaring pregnancy, providing a written notice of voluntary declaration and following the pregnancy policy (see below).
3. Withdrawing the written notice of declaration.

A) Radiation. Students have the **option** of informing the program, in writing, of a pregnancy. Any declaration is voluntary. It is recommended that the student inform the **Department Chair** and/or the **Clinical Coordinator** (who is also the RSO-Radiation Safety Officer) immediately upon learning of the pregnancy so that the student may be counseled regarding her and her baby's radiation protection. The student will be given and is encouraged to read the U.S. *Nuclear Regulatory Commission Guide 8.3,* "Instructions Concerning Prenatal Radiation Exposure." Once declared, a monitoring badge will be ordered for the fetus and the student will be required to wear same at waist level under the lead apron.

The student may be removed from any rotation in which a heavy fluoroscopy load exists until after the first trimester. Pregnant students will receive no more than a 0.5 rem of radiation exposure during the entire gestation period. If the student does not inform the program of her pregnancy in writing, the student will be considered to **not** be pregnant regardless of overt signs and the above measures cannot be taken. These measures are all for the benefit of the student and the baby. Without voluntary acknowledgement of the pregnancy, the approved, usual and standard safety precautions cannot be implemented. Notwithstanding the foregoing, pregnant students are subject to any rules or requirements of a clinical setting.

B) Attendance. TJC's pregnancy accommodation policy related to students shall apply with respect to excused absences. If a student is absent for a medically necessary reason related to pregnancy, she must present a signed and dated physician's statement indicating same, including all dates missed due to pregnancy related medical necessity ("Statement"). If a Statement is not timely provided, then the attendance policy set forth herein shall apply. If a Statement is timely provided, then the attendance policy set forth herein will not be applied and the student's absences will be excused. If a Statement is timely provided, the student will be allowed extra time to complete work missed due to the medically necessary absence related to the pregnancy. If make up work is not possible or feasible due to the nature of the work (such as labs, clinicals, etc.), then faculty will work with the student to mutually agree to a plan to complete the work which may include:

1. Retaking the semester (at the student's cost);
2. Allowing additional time at the end of the semester to complete;
3. Retaking the course online;
4. Receiving an incomplete and extending or retaking the course; or
5. Any other reasonable option that can be agreed upon.

C) Status. A pregnant student who timely presents a Statement shall be returned to the same status she had before her absences due to pregnancy. Any such student who was on probation or subject to disciplinary action prior to the excused pregnancy-related absences will remain on probation and will remain subject to same disciplinary action.

D) Title IX. The Title IX office should be consulted related to the implementation of this policy.

The pregnant student has the option to withdraw her declaration of pregnancy at any time during the course of the pregnancy.

Clinical and classroom attendance policies will apply equally to all students.

Students will also be asked to follow hospital policy and protocols for pregnant technologists where the student is scheduled for clinicals.

BREAST FEEDING AT CLINICALS

Students will be allowed to pump every 3-4 hours while at clinicals, but an assigned time cannot be guaranteed due to the unpredictable work flow of the department. The student must also comply with facility's breast-feeding policy in regards to infection control.

The student must go to the designated area and inform the clinical instructor before leaving for their break. Student will be allowed 15 minutes once the student reaches the designated pumping area. Student will inform clinical instructor when they have returned from their break

CLINICAL GRADES AND EVALUATION

Our clinical grade is made up of both Affective Performance and the Clinical skill level of a student. The

clinical skill level is also evaluated by our positioning classes and lab. Our clinical evaluation consists primarily of the Affective Behaviors of Clinical Performance in that 10-11 of the 16 categories are evaluating a student's Affective Behavior and how that behavior demonstrates them as a professional. Affective Behavior is defined, in the context of assessing a professional person, as any behavior that reflects an individual's level of professionalism. These categories on the evaluation form are used to assess affective behavior are punctuality, initiative, respect for peers, judgment, response to direction and attention to detail.

The clinical (semester) grade will be based on the clinical evaluation from technologists and/or clinical instructors. Each category (listed in the left column) has potential 100 points. The evaluator will grade the student based on performance on each category. The grade will be based on the average of the grades in each category added together, then divided by the total number of categories to achieve the semester grade.

LETTER GRADE	EVALUATION AVERAGE
A	91-100
B	83-90
C	75-82
BELOW 75 IS A FAILING GRADE	

Input from multiple sources may be used to evaluate students, and the input (often in the form of multiple evaluations), an average of the received evaluations MAY be used to arrive at an overall semester grade (solely the clinical instructor's option).

Evaluations from technologists will be used as input for assessment and feedback of the student during final grade determination. Grade assignment will ultimately be the responsibility of the Clinical Coordinator who will work VERY closely with the clinical instructor during this process.

Each evaluation category must be passed with at least an average rating or an automatic letter grade reduction will result and the student will be put on probation. An average rating is required to meet the standards set by the program, and is equivalent to a 75% grade in a single category on the evaluation sheet. A second semester freshman student will not receive an A in Practicum II while making less than average rating on attendance, even if all other segments were rated at 100%. All segments are important.

A second 0% in any segment of the evaluation (scoring less than average on the same section in more than 1 semester) will result in dismissal from the program. Continued non-compliance with a policy after being placed on probation will result in failure of practicum and dismissal.

A less than 75% rating in any two segments in one grading period will result in a failing grade in the practicum course and dismissal from the program. Not meeting the minimum acceptable standard in any category in 2 semesters, or not meeting the minimum standard in any 2 sections of the evaluation will result in dismissal from the program. This policy will supersede any grading "points" that would allow the student to proceed to the next semester.

DISCUSSING GRADES WITH CLASSMATES

Students discussing their clinical grades with their classmates is prohibited. A student found discussing his/her clinical grade will receive a written warning and a reduction in clinical grade by 1 letter. If the student discusses another student's grade, all students involved will receive a written warning (those

discussing the grade and the owner of the grade), and a reduction in grade by 1 letter. A second incident of discussing grades will result in dismissal from the program.

MID TERM EVALUATIONS

Mid Term evaluations are often a time when Clinical Instructors can discuss with the student positive improvements in clinical performance and also concerns or behaviors that they feel are leading in a negative direction or could negatively affect your opportunities in this career field. The grades are to give you an idea of your clinical standing, but do not affect your transcript or indicate your final grade. The purpose is constructive to give you input on how your performance or skill level is at the time of the evaluation and to give you suggestions for improving the areas of concern. Midterm evaluations will be made for all clinical education classes and posted in Apache Access. Student conferences and evaluations may also be held as needed during any major grading period.

Mid-Terms in 11 weeks semesters will be graded as Unsatisfactory or Satisfactory and an evaluation form is not submitted.

NOTE: In accordance with FERPA laws initial conferences and evaluations are held between the student and the TJC faculty or TJC designated clinical instructor.

RADIOLOGY EVALUATION AND CLINICAL GRADE SHEET (INSTRUCTOR)

STUDENT NAME:

DATE:

	OUTSTANDING	100%	93%	ABOVE AVERAGE	87%	81%	AVERAGE	75%	62%	BELOW AVERAGE	50%	25%	UNSATISFACTORY	0%
INTERPERSONAL RELATIONSHIPS	Excellent team worker, professional, respected and respectful. Communicates effectively with other technologists	<input type="checkbox"/>	<input type="checkbox"/>	Almost always works well with others. Communication skills with technologists are good.	<input type="checkbox"/>	<input type="checkbox"/>	Average impression. Communication skills are OK with technologists but could use some improvement.	<input type="checkbox"/>	<input type="checkbox"/>	At times arrogant; rude; harsh; passive; prone to gossip or subversion; at times uses a hostile tone.	<input type="checkbox"/>	<input type="checkbox"/>	Subversive, creates problems, often rude and confrontational. Hostile.	<input type="checkbox"/>
PATIENT PERCEPTION	Always anticipates patient's wants and needs. Never has to be asked	<input type="checkbox"/>	<input type="checkbox"/>	Usually has everything immediately available for the patient	<input type="checkbox"/>	<input type="checkbox"/>	Provides for the patient promptly when asked	<input type="checkbox"/>	<input type="checkbox"/>	Often slow when providing for the patient	<input type="checkbox"/>	<input type="checkbox"/>	Frequently frustrates the situation in the room by misinterpreting the patient's needs.	<input type="checkbox"/>
INITIATIVE	Never idle. Always busy with productive work.	<input type="checkbox"/>	<input type="checkbox"/>	Occasionally has to be asked to perform procedures	<input type="checkbox"/>	<input type="checkbox"/>	Does what is asked	<input type="checkbox"/>	<input type="checkbox"/>	Has to be told what to do; has to be prodded to work.	<input type="checkbox"/>	<input type="checkbox"/>	Actively avoids work. Lazy	<input type="checkbox"/>
SELF CONFIDENCE	Eagerly attempts new procedures (with proper supervision), displays independence	<input type="checkbox"/>	<input type="checkbox"/>	Willingly performs new procedures when encouraged	<input type="checkbox"/>	<input type="checkbox"/>	Hesitant to attempt new procedures	<input type="checkbox"/>	<input type="checkbox"/>	Won't work independently or OVER confident	<input type="checkbox"/>	<input type="checkbox"/>	Actively avoids new procedures or extremely overconfident, possibly threat to patient	<input type="checkbox"/>
ATTITUDE AND FLEXIBILITY	Superior attitude towards others, facilities and learning. Readily adapts without complaining to changing environments and schedules	<input type="checkbox"/>	<input type="checkbox"/>	Good attitude. Adapts well. Readily accepts constructive criticism.	<input type="checkbox"/>	<input type="checkbox"/>	Usually has a good attitude. Adapts when changes are necessary. Occasionally questions constructive criticism.	<input type="checkbox"/>	<input type="checkbox"/>	Often displays an unprofessional attitude towards others. Adapts, but doesn't like it. Repeatedly questions constructive criticism.	<input type="checkbox"/>	<input type="checkbox"/>	Poor attitude, as displayed by behavior towards others; argumentative. Hesitant to work. Has to be made to accept changes. Ignores instruction. Refuses constructive criticism.	<input type="checkbox"/>
DEPENDIBILITY	Always available; completes exams efficiently; completes paperwork without reminder. Self-Reliant. Focused on tasks at hand.	<input type="checkbox"/>	<input type="checkbox"/>	Usually available; usually completes exams efficiently; usually submits paperwork on time.	<input type="checkbox"/>	<input type="checkbox"/>	Sometimes out of assigned area; often needs help completing assignments; turns in paperwork when asked	<input type="checkbox"/>	<input type="checkbox"/>	Often away from assigned areas; can only be left alone with simple tasks; turns in paperwork with multiple reminders	<input type="checkbox"/>	<input type="checkbox"/>	Usually has to be found and immediately supervised. Unable to perform alone with any task. Has to be reminded to focus on tasks	<input type="checkbox"/>
PROFESSIONAL DEMEANOR	Demonstrates leadership. Superior work ethic. Always uses appropriate, professional language and grammar.	<input type="checkbox"/>	<input type="checkbox"/>	Always truthful and honest, good work ethic. Always in compliance with policies including dress code. Almost always uses proper language and grammar.	<input type="checkbox"/>	<input type="checkbox"/>	Usually honest and truthful; usually in compliance; average work ethic. Usually uses proper language and grammar. Occasionally uses slang.	<input type="checkbox"/>	<input type="checkbox"/>	Often out of compliance with regulations; low work ethic. Often uses inappropriate and unprofessional language.	<input type="checkbox"/>	<input type="checkbox"/>	Cannot be trusted. Disregards regulations. Poor work ethic. Language and vocabulary does not fit a professional setting.	<input type="checkbox"/>
PERSONAL APPEARANCE	Always complies completely with the dress code, Alert, Awake, Ready to work, Clean, Tidy. Focused	<input type="checkbox"/>	<input type="checkbox"/>	Within dress code parameters but appearance still untidy.	<input type="checkbox"/>	<input type="checkbox"/>	Out of dress code ≤ 2 times in the semester or physically/emotionally doesn't appear	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Consistently out of dress code during the semester, physical/emotional state hindering	<input type="checkbox"/>

			ready to work		clinical performance	
QUALITY OF WORK	Uses proper film sizes, projections, markers, makes corrections, few repeats.	Makes few mistakes	Average; requires little help	Careless errors	Needs constant assistance; frequent repeated mistakes. Doesn't learn from mistakes	
ORGANIZATION OF WORK AND ADAPTABILITY	Prioritizes 1st things 1st All required equipment on hand before the exam; chart checked and routine researched prior to the exam. exam.		Above average; makes few mistakes	Average; normal mistakes	Below average; needs to be told when to do things; often has to leave the room to get supplies and instruction	
ABILITY TO FOLLOW INSTRUCTIONS	Assumes responsibility for all instructions, including implied; learns quickly; only needs to be told once		Above average; usually learns quickly	Average. Sometimes requires refresher instruction	Seldom learns the 1st time. Unable to assimilate implied instruction	
PERFORMANCE UNDER PRESSURE	Always responds exceptionally well		Usually maintains control	Average. Sometimes responds inappropriately to stress.	Does not handle stress well. Often displays frustration/annoyance	
CRITICAL THINKING	Always analyzes the situation, identifies adjusts to patient needs and unusual examinations. Recognizes the need for, knows and applies optional positioning.		Usually adjusts to unusual situations, sometimes needs guidance.	Average analysis and identification of special needs. Can adjust when optional positioning is explained.	Can analyze and identify some times, but usually unable to adjust.	
EFFICIENCY OF WORK	Always completes exams quickly and correctly with limited motion, and without being asked. being asked.		Usually performs without being asked. Usually efficient. Few mistakes	Worked when asked. Average speed and efficiency.	Has to be told to work. Slow and inefficient.	
Customer Service	Always engages patients in conversation. Excellent bedside manner. Consistently uses warm and pleasant tone. Demonstrates understanding and respect for human dignity and individuality. Addresses patients professionally and refrains from using "Sweetie", "Hun", "Sugar"		Good Bedside manner. Uses clear and concise directions. Uses empathetic responses accurately. Speaks using pleasant tone and volume. Compassionate.	Average common courtesy. Uses neutral tone. Usually able to clearly communicate directions to patient. Average exam time considering procedure. Usually empathetic. Occasionally does not address patient professionally.	Does not exhibit politeness but not negative. Uses improper tone and volume. Not able to acquaint with patient clearly. A little too quick or slow with exam time. Occasionally shows compassion. Does not address patient professionally.	
QUANTITY OF WORK (CHECKOFFS)	Received the maximum number of check-offs			Received the minimum standard of check-offs		
			0 0	0 0	0	0 0

PROBATION and SUSPENSION

Refer to "Probation" and Suspension in the General Section of this handbook.

RETURNING STUDENTS

The rescinding a check off policy will especially be applied to returning students. Students will be asked to display skills for competencies earn. If the student is not able to perform a procedure, the check-off will be rescinded and will have to be repeated.

Returning students must also supply a current Negative TB skin test and CPR license, drug screening and background check before the student may return to clinical. This documentation must be on file with Clinical Coordinator.

Students will not be placed in their previous clinical site.

STUDENTS RESPONSIBILITIES FOR POLICIES FOR PROGRAM AND HANDBOOK

Students are required to understand and follow the program policies, even in the perceived or apparent lack of enforcement of the policies. Once the faculty learns that a student is in violation of one or more of the program policies, the policies will still be enforced. In the event that an end of semester clinical grade was derived in the absence of policy enforcement and the program learns that clinical staff calculated the grade without consideration for effects of the violation of the program policies, the program will recalculate the grade based on the student performance and policy violation. If the recalculation results in the student's grade being lowered to below passing, the student will be dismissed from the program. Clinical dismissal may result in the student being ineligible for readmission to the Radiologic Technology Program or other programs in the College of Nursing and Health Professions. See the program dismissal policy for more information.

RESPONSIBILITY FOR STUDENT FOLDERS

Clinical folders will remain at the student's clinical site and will change clinical sites with the student. The Clinical Coordinator will mainly be responsible for transporting folders to clinical sites. Should the student transport their folder, it is his/her responsibility to ensure it is delivered directly to the clinical instructor at the new site. If a student removes his/her clinical folder from the site for any reason, and loses the folder, he/she will be required to replace all documentation in the clinical folder, including repeating all clinical competencies. The competencies must be physically repeated. A technologist's signature on a blank form will NOT be accepted. Failure to repeat the minimum required competencies will result in failure of the "Quantity of Work (check-offs)" section of the clinical evaluation, and may result in failure of the clinical course.

Student's must be allowed time during clinicals to review their charts and fill out the observations in their folder.

Student Charts

- Left side of chart should hold Check off Sheet, Site Orientations, Lab Competency Sheets, Observations, Vital Signs, Sterile Aseptic Technique, Computed Radiography Check off Sheet, and Equipment, Transportation, and Oxygen Administration Sheet.
- Right side of chart should hold time sheets, Evaluations, ATO forms, ATO Certificates and Student Information page.

DISMISSAL OFFENSES (non re-entry)

In addition to the items listed in the agreement, YOU WILL BE DROPPED FROM THE PROGRAM WITH A FAILING GRADE IN ANY PRACTICUM AND/OR DIDACTIC CLASS, AND BE INELIGIBLE FOR RE-ENTRY FOR ANY OF THE FOLLOWING REASONS:

- Breach of patient confidentiality for personal gain or patient defamation purposes.
- 2 incidences of breach of patient confidentiality
- 1 incidence of gross negligence that could have (or did) result in patient harm
- 2 incidences of mildly negligent patient care that causes no harm to the patient
- Willful harm to the patient, patient's family, a hospital employee, a fellow student or TJC faculty member.
- If a hospital requests you removed from their site for any of the following reasons:
 1. Breach of patient care
 2. Breach of patient confidentiality
 3. Theft of hospital property or goods
 4. Abusive or disrespectful behavior towards patients, family members or employees
- If 2 hospitals ask that you not return to their site for ANY REASON(S)
- Non-compliance with attendance and punctuality rules as outlined in the handbook, including:
 1. Exceeding the maximum permissible number of absence days or occurrences in multiple semesters (failing the same category 2 times)**
 2. Exceeding absences or tardies in any 3 semesters******See Dismissal Policy with Re-Entry for exceeding tardies/absences in Practicum V or Practicum VI**
- **Also #1 and #2 student may petition their dismissal for possible re-entry. The petition will be reviewed by TJC Faculty and representatives from the Radiation Advisory Committee.**
- 2 no-call no-show absences
- Clocking in to work while on clinical time
- Falsifying sign in sheets / time cards (yours or anyone else's)
- Submission of any type of falsified forms
- Refusal to comply with dress code.
- Failure of the Personal Appearance section on Clinical Evaluation 2 times.
- 3 incidences of lost/replaced TLD (including fetal)
- 1 incidence of tampering with a TLD
- Failure to meet standards in any 2 areas on the clinical evaluation form (regardless of grade).
- 2 incidence of discussing grades with other students
- Failure to complete the minimum number of competencies in any 2 semesters
- Insubordinate and disrespectful behavior and attitude towards clinical instructors, supervisors, hospital staff, patients, fellow students and TJC faculty
- ANY incidences of observed cheating or assisting anyone else cheat on any test (including didactic classes, lab practicums, tests given during class at clinicals) by a faculty member
- Third Documented incidence of a student failing to correctly Identify a patient in Practicums I-VI

All of the reasons for dismissal above will result in the student being **ineligible for re-entry except for #1 and #2 in the Non Compliance with Attendance Category**. The items that require multiple events for dismissal WILL RESULT IN THE STUDENT BEING PLACED ON PROBATION for a single event, which prevents the student from rotating to specialty areas in Practicum 4 and 5.

Cheating includes but is not limited to:

- Copying from the test of another student
- Allowing another student to copy from your test
- Possessing materials or objects not authorized by the instructor during the test, including "crib notes", programmable calculators, open textbooks, notebooks or notes, even if unused.
- Copying, recording, buying, stealing, transporting or soliciting tests (pre or post testing), test keys, questions written assignments or computer programs
- Seeking aid from or collaborating with another student for aid without permission from the instructor during a test
- Discussing the test with a student who has not already taken the test-includes Lab Practicum or online testing
- Substituting for another person, or permitting another to substitute for you
- Alteration of scantron or any other grade sheets through changing answers or filling in of blank

- spaces after being graded
- Online testing-is to be done individually not in as a group

Plagiarism is defined as copying someone else's work and presenting it as one's own, without the knowledge of the original author. All research due must give credit when quotes are used.

DISMISSAL OFFENSES (with possible re-entry [IF SPACE EXISTS])

YOU WILL BE REQUIRED TO DROP FROM THE PROGRAM, OR RECEIVE A FAILING GRADE IN CLINICALS AND/OR DIDACTIC CLASSES FOR THE FOLLOWING REASONS (students ARE eligible for reapplication for the following reasons):

- Failure of a second laboratory make-up test in the 1st or 2nd semester
- Failure of any didactic course
- Inability to perform clinicals due to any physical limitation including, but not limited to:
 1. An accident, trauma or any other personal situation where a extended absent is required, exceeding the maximum number of absence days in a semester. (A student may voluntarily withdraw to prevent a failing grade)
 2. Pregnancy where the student expects preferential treatment, or physician requires bed rest
 3. Any physical limitation to patient transportation, movement, patient care and/or safety to the student, patient or co-workers, including CI's, fellow students, clinical staff or faculty
- A student in Practicums V or Practicum VI that is in good standing academically and in clinical skills and knowledge but fails clinicals due to exceeded number of tardies or absences

In the absence of faculty first hand witness, any student who accuses another student of any wrongdoing and expects the faculty to act in a disciplinary way must provide written, signed, detailed documentation of the incident. The accuser's name WILL BE MADE KNOWN to the accused, so the accused may confront his/her accuser, per Tyler Junior College policy.

****Work submitted after due date for the clinical semester according to the Clinical Coordinator will not be counted toward that semester's Practicum grade. NO EXCEPTIONS WILL BE MADE. No check-offs will be counted toward the grade for the current semester. Monthly procedure reports must be filled out and updated in the chart, or the student will receive no more than a 75% on the professional demeanor section of the evaluation. MORE THAN 1 MONTHLY PROCEDURE REPORT MISSING WILL RESULT IN A LESS THAN 75% SCORE ON PROFESSIONAL DEMEANOR, WHICH CONSTITUTES A FAILING GRADE IN THAT CATEGORY.**

SECTION III

RADIATION SAFETY RULES

RADIATION SAFETY REGULATIONS FOR RADIOLOGIC TECHNOLOGISTS

In order to comply with regulations of the Texas State Department of Health, to observe recommendations of the National Council on Radiation Protection and Measurements, and to observe all common radiation safety practices, it is imperative that all personnel observe the following rules and regulations.

The purpose of the medical use of ionizing radiation is to obtain optimum diagnostic information or therapeutic effect with minimum exposure to the patient, the radiologic personnel concerned, and the general public. This objective can be reached only by the professional judgments of physicians and technologists. Therefore, we are concerned with correct application of technical methods. These methods will greatly reduce the exposure of individuals.

Effective Absorbed Dose Equivalent Limits have been set by the National Council on Radiation Protection and Measurements. The establishment of EADEL resulted from studies on the somatic and genetic effects of radiation and the reasons for the EADEL are (1) to keep the exposure of radiation workers well below a level at which adverse effects are likely to be observed during his lifetime and (2) to minimize the incidence of genetic effects for the population as a whole.

Rules

A. GENERAL RULES: ALARA (As Low As Reasonably Achievable) is a concept that is to always be as the guidelines.

1. The useful beam shall be limited to the smallest area practicable and consistent with the radiologic examination.
2. The voltage used in Radiologic Examination shall be as great as practical and consistent with the study.
3. Protection of the embryo or fetus during radiological examination or treatment of women known to be pregnant must be given special consideration.
4. Gonadal shields shall be used on all patients who are potentially procreative when the examination or treatment plan may include the gonads in useful beam, unless the shield interferes with the objectives of the examination or treatment.
5. All people working in the vicinity of an x-ray machine or other source of ionizing radiation shall wear a film badge or other approved monitoring devices at collar level, outside the lead apron.

B. FLUOROSCOPIC PROCEDURES:

1. The smallest practical field sizes and shortest exposure times shall be employed.
2. High tube potential and low current should be used as practicality permits.
3. Shields shall be used for the gonads in potentially procreative patients and for the embryo or fetus in patients known or suspected of being pregnant, if practical.

4. Protective aprons of at least 0.25 MM lead equivalent shall be worn in the fluoroscope room by all personnel not behind a barrier. It is recommended students wear lead aprons of 0.5 MM lead equivalent and a thyroid shield when in fluoro or areas of high exposure. If the person is adjacent to the table, the lead equivalent should be 0.5 MM
5. Only persons whose presence is needed shall be in the fluoroscopy room during exposures.

C. MOBILE RADIOGRAPHIC EQUIPMENT:

1. All rules outlined under fixed radiographic equipment apply except 5 and 6.
2. Source-skin distance shall be at least 12 inches minimum and should be at least 15 inches.
3. The operator shall stand at least 12 feet from the useful beam and never in the primary beam.
4. The operator shall wear a protective apron or stand behind a suitable shield.

D. FIXED RADIOGRAPHIC EQUIPMENT:

1. The useful beam shall be limited to the smallest area consistent with the clinical requirements.
2. Care shall be taken to align the x-ray beam carefully with the patient and film.
3. Gonadal shielding shall be used when appropriate.
4. When a patient must be held in position for radiography, mechanical supporting or restraining devices should be used. If the patient must be held by an individual, that individual shall wear gloves and apron and shall be so positioned that no part of their body will be struck by the useful beam and his/her body is as far as possible from the edge of the useful beam.
5. Only persons whose presence is necessary shall be in the radiographic room during exposure. All such persons shall be protected.
6. The radiographer shall stand behind the barrier provided for his protection during radiographic exposures.
7. If automatic exposure control devices are used, proper selection of the correct fields and precise positioning should be given special attention.

STUDENTS HOLDING PATIENTS POLICY

To ensure the health and safety of the student and to demonstrate compliance with JRCERT Standards, the program ensures that students employ proper radiation safety practices. Students must not hold image receptors during any radiographic procedure. Students should not hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care. If a mechanical patient immobilizer is impossible, a non-pregnant parent, friend, or relative accompanying the patient should hold the patient. If such person is not available, a nurse or radiology staff member may be asked to help. Those persons assisting in holding the patient shall be provided with protective aprons and be positioned so that they are not in the path of the primary beam. If all other options have been exhausted a student may be asked to hold following institutional policy for radiation safety.

Students will be made aware of methods and procedures for protecting themselves, the patient and the general public from unnecessary exposure to radiation before being allowed to use the college energized lab or to be out on the floor at their clinical assignment.

1. The student shall utilize ionizing radiation equipment in a safe manner and provide patient and personnel protection by practicing the following:
 - a. Implementation of the Three Cardinal Rules (time, distance & shielding) of Radiation Protection.
 - b. Providing gonadal shielding correctly, as the specific exams allow.
 - c. Wearing protective apparel (lead aprons, thyroid shields, etc.) during any fluoroscopic or mobile procedure.
 - d. Questioning all female patients of childbearing age, as to the likelihood of pregnancy.
 - e. Complying with the program policy prohibiting the holding of patients during exposure.
 - f. Complying with the program policy pertaining to student pregnancy.
 - g. Complying with the program policy pertaining to performing any repeat exposure under direct supervision only.

2. Wearing the radiation-monitoring device is done in order to maintain accordance with established recommendations of the National Council on Radiation Protection and Measurements (NCRP). In addition to compliance with the above regulations, utilization of these devices is necessary to insure that radiation doses are maintained "As Low As Reasonably Achievable," and to provide protection for the college by providing documentation and proper management of student radiation exposure.

3. Students will not, under any circumstances, be allowed to perform radiologic examinations without wearing their radiation-monitor badge. The radiation-monitor is to be worn at the collar level and outside the protective lead apron. The student is responsible for wearing the radiation monitor whenever he/she reports to clinical. In the case of a lost or damaged monitor, the student shall report the situation to the Clinical Coordinator and a replacement badge shall be ordered.

RADIOLOGY LABORATORY SAFETY RULES

1. Radiation monitoring device. Must be worn at all times while in the radiology department at collar level outside the lead apron.
2. X-rays will be made only of the x-ray phantom, and at no time will they be made on fellow students or other persons.
3. All persons must be behind protective walls or outside the room during an exposure.
4. The door must be closed whenever an exposure is made.
5. Proper collimation must be used at all times.
6. Proper exposure factors and film size should be used at all times.
7. In case of equipment failure notify the lab or clinical instructor immediately.
8. Use of room allowed only under proper supervision or with supervisory permission.
9. In case of fire turn power off, leave room immediately and notify proper authorities.
10. Authorized personnel only will use and/or work on machines.
11. Proper dark room technique must be used at all times.
12. Students must not mix or handle the processing chemicals.
13. Lab instructor or Department Chair must be informed immediately if any infraction of the above rules occur. Failure to do so could result in dismissal from the program.

MAGNETIC RESONANCE IMAGING (MRI) AND FERROMAGNETIC SAFETY POLICY

Students are advised that although the majority of their observation and clinical experience will be in general diagnostic radiology, you may be provided with the opportunity to observe, tour, or complete a special rotation in the Magnetic Resonance Imaging (MRI) area. In order to ensure student safety, and the safety of others in the department, it is important that students respect the following rules at all times while in the MRI environment:

1. Each facility's MRI clinical and safety policies and screening requirements must be followed and/or completed
2. Do not enter the MRI suite unless cleared and accompanied by an MRI technologist
3. Assume the magnet is always ON
4. Carrying ferromagnetic items or equipment into the MRI suite is strictly prohibited because these items can become projectiles, causing serious injury or death and/or equipment failure. These items include, but are not limited to, most metallic items such as: oxygen tanks, wheelchairs, carts, monitors, IV poles, laundry hampers, tools, and furniture. MRI-compliant

medical equipment is available for use in the MRI department; do not borrow or use this equipment for general use in other areas of the medical imaging department.

5. Personal ferromagnetic items must be removed prior to entering the MRI room. These include the following:

☐ Purse, wallet, money clip, credit cards or other cards with magnetic strips, electronic devices such as beepers or cell phones, hearing aids, metallic jewelry (including all piercings) and watches, pens, paper clips, keys, nail clippers, coins, pocket knives, hair barrettes, hairpins, shoes, belt buckles, safety pins, and any article of clothing that has a metallic zipper, buttons, snaps, hooks, or under-wires

6. If applicable, disclose or ask about all known indwelling metallic device(s) or fragment(s) to the supervising technologist or program faculty prior to entering an MRI scan room to prevent internal injury as described below.

In addition to the personal items listed, **students are advised that any metallic implants, bullets, shrapnel, or similar metallic fragment in the body pose a potential health risk in the MRI suite** because they could change position in response to the magnetic field, possibly causing injury. In addition, the magnetic field of the scanner can damage an external hearing aid or cause a heart pacemaker to malfunction.

Examples of items that may create a health hazard or other problems in the MRI examination room include: • Cardiac pacemaker, wires, heart valve(s) or implanted cardioverter defibrillator (ICD) • Neurostimulator system • Aneurysm clip(s) • Metallic implant(s) or prostheses • Implanted drug infusion device • History of welding, grinding or metal injuries of or near the eye • Shrapnel, bullet(s), BB's, or pellets • Permanent cosmetics or tattoos (if being scanned) • Dentures/teeth with magnetic keepers • Eye, ear/cochlear, or other implants • Medication patches that contain metal foil (i.e., transdermal patch)

Items that are allowable in the MRI suite, and that generally do not pose a hazard to the student or other persons include:

- ☐ Intrauterine devices (IUD's)
- ☐ Gastric bypass devices (lapbands)
- ☐ Most cerebrospinal fluid (CSF) shunts

Students are required to disclose the presence of potential in-dwelling or external ferromagnetic devices during orientation prior to beginning clinical rotations. Additionally, students are required to make the program aware of changes in presence of ferromagnetic hazards. The presence of in-dwelling or external ferromagnetic devices or objects does not disqualify a student from entering the radiography program. However, students wanting to do a specialty rotation may be required to complete an MRI Safety Clearance Form, if recommended by the facility.

For more information regarding MRI Safety, please refer to the American College of Radiology's MR Safety Guidelines available at: <http://www.acr.org/quality-safety/radiology-safety/mr-safety>

**TYLER JUNIOR COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM**

25 Texas Administrative Code 289.231
Program Policy

The TAC 289.231 administered by the Texas Department of Health requires that:

1. A separate radiation monitoring device will be worn for each and every site/location while engaging in duties of employment in which exposure to ionizing radiation is possible.
2. The Tyler Junior College TLD must be worn only when conducting oneself as a TJC student, **AND** a different badge (supplied by the employer) is to be worn when working around ionizing radiation while not functioning in the capacity of a TJC student.
3. Each student is required to inform the Department Chair or RSO in writing when employment in a radiation area begins and ends.
4. The employer is supplied with each student's radiation dosimetry reports. The employer will supply TJC with radiation dosimetry reports from that place of employment.
5. Cumulative records will be kept by both parties and supplied to the student at the end of affiliation with either party.

I agree to keep the Tyler Junior College RSO promptly informed, using the prescribed form, of activities/employment other than those of a student in which exposure to ionizing radiation is part of that activity/employment. I will wear the proper film badge in each capacity of ionizing radiation exposure (student or employee).

Student Name Printed _____

Student
Date _____

Signature _____

The following can be found at the U.S. Nuclear Regulatory Commission website at:
<http://www.nrc.gov/reading-rm/doc-collections/reg-guides/occupational-health/active/8-13/index.html>

**TYLER JUNIOR COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM**

Radiation Area Employment Notification

In compliance with 25 Texas Administrative Code 289.231, administered by the Texas Department of Health:

I, _____ (Print Name), am informing the Tyler Junior College Radiologic Technology Program of my employment in an ionizing radiation area. In this employment area, I am functioning as an employee, not as a student.

Name of Employer: _____

Employer's Address: _____

Employer's Telephone Number: _____

Name of Radiation Safety Officer: _____

Date Employment Begins: _____

I will inform the RSO of any termination date and/or change of employment status in an ionizing radiation area.

Printed Name _____

Student Signature _____ Date _____



Texas Department of State Health Services Radiation Safety Licensing Branch

REGULATORY GUIDE 4.3

GUIDE FOR THE PREPARATION OF OPERATING AND SAFETY PROCEDURES FOR THE HEALING ARTS OF MEDICINE, PODIATRY, AND CHIROPRACTIC

1. Introduction

Operating and safety procedures are required by 25 Texas Administrative Code (TAC) '289.227(i)(2). The model procedures in this regulatory guide are generalized. You must write procedures that are specific for your facility. By using the sections of this guide that apply, you may create your unique set of operating and safety procedures. This guide may also be used to develop operating and safety procedures for facilities with mobile services. Although other formats are acceptable, information contained in '289.227(t) must be included in your operating and safety procedures. Individuals who are sole practitioners and sole operators and the only occupationally exposed individual are exempt from the requirement to have and implement written operating and safety procedures.

II. Sample Operating and Safety Procedures

OPERATING AND SAFETY PROCEDURES FOR TYLER JUNIOR COLLEGE

This manual establishes procedures that will minimize radiation exposure to patients and employees. They are provided to comply with rules enforced by the Texas Department of State Health Services (DSHS), Radiation Control. The rules require that each x-ray facility be registered with DSHS, Radiation Control. The certificate of registration contains conditions and restrictions that apply to the operation of the x-ray machines in this facility as well as a listing of the sections of the rules that apply. These rules are available for your review in/at RADIOLOGY TECHNOLOGY HANDBOOK [See '289.203(b)].

Regulatory Guides are issued to describe and make available acceptable methods of implementing specific sections of **Title 25 Texas Administrative Code Chapter 289, Texas Regulations for Control of Radiation**, to delineate techniques used by the staff in evaluating specific issues, or to provide guidance to applicants, licensees, or registrants. Regulatory Guides are **NOT** substitutes for regulations and compliance with them is not required. Methods and solutions different from those set out in the guides will be acceptable if they provide a basis for the Texas Department of State Health Services, Radiation Control, to make necessary determinations to issue or continue a license or certificate of registration

Comments and suggestions for improvements in these Regulatory Guides are encouraged at all times and they will be revised, as appropriate, to accommodate comments and to reflect new information or experience. Comments should be sent to the Radiation Policy/Standards/Quality Assurance Group, Texas Department of State Health Services, 1100 W. 49th Street, Austin, Texas 78756-3189.

Regulatory guides may be reproduced or may be obtained by contacting the agency at (512) 834-6688 or accessing the Radiation Control web page at www.dshs.state.tx.us/radiation/regguide.htm

The rules require that a Radiation Safety Officer (RSO) be designated. The RSO has the responsibility and authority for assuring safe radiation practices and serves as the contact person between this facility and the DSHS, Radiation Control. Direct all your questions or concerns on radiation safety to the RSO for this facility,

NATHAN STALLINGS [See '289.226(e)(2)].

A. Operator and Patient Safety

1. Credentialing Requirements for Operators of X-ray Machines

All operators of x-ray machines, including fluoroscopy, must meet the appropriate credentialing requirements of the Medical Radiologic Technologist (MRT) Certification Act, Texas Occupations Code, Chapter 601. [See '289.227(i)(5)]. [For information about credentialing, contact the MRT Program at 512-834-6617].

2. Individual Monitoring Requirements [See '289.231(n)(1) and (s)(3)]

Any adult who is likely to receive a dose from occupational exposure to radiation in excess of 500 millirem in a year must use an individual monitoring device such as a film badge or thermoluminescent dosimeter. Declared pregnant women who are likely to receive a dose from occupational exposure to radiation in excess of 100 millirem during the entire pregnancy must also use an individual monitoring device [See '289.231(n)(1)(C)].

a. Individual monitoring devices must be worn at the unshielded location of the whole body likely to receive the highest exposure. When a protective apron is worn, the location of the individual monitoring device is typically at the neck (collar) [See '289.231(q)(1)(B)].

b. Additional individual monitoring devices used for monitoring the dose to the embryo/fetus of a declared pregnant woman must be located at the waist under any protective apron being worn by the woman [See '289.231(q)(1)(C)].

c. The individual monitoring device shall be assigned to and must be worn only by one individual [See '289.231(q)(1)(A)].

d. When wearing a protective apron during fluoroscopy procedures, multiple individual monitoring devices may be worn. When multiple devices are worn, occupational doses shall be determined in accordance with '289.231(m)(3)(C).

e. If multiple individual monitoring devices are worn by a declared pregnant woman, dose to the embryo/fetus and the occupational dose to the woman shall be determined in accordance with '289.231(m)(1)(D)(iv).

f. Individual monitoring devices that are not being worn and the control monitoring device will be stored in an area that is away from rooms where radiation machines are in use. This is in/at OFFICE 2.280

g. AMY ROBINSON is responsible for the occupational dose records and exchanging the individual monitoring devices on QUARTERLY STARTING JANUARY 1. The individual monitoring device readings (film badge reports) are located in/at ONLINE AT www.mirion.com & OFFICE T 2.280

h. If you are working for another employer and receive an occupational dose, you should report that dose to the RSO so that it can be included in your annual record of occupational dose.

3. Use of Protective Devices

a. Use protective devices, such as lead aprons, gloves, and shields, to reduce exposure to radiation and keep radiation exposure as low as reasonably achievable (ALARA).

Protective devices must be used or provided in the following situations:

- (i) when it is necessary for an individual other than the patient to remain in the room or hold a patient [See '289.227(i)(4), (i)(8)(B)];
 - (ii) when a patient must hold the image receptor [See §289.227(i)(8)(D)];
 - (iii) when it is necessary to protect other patients who cannot be moved out of the room (Examples: critical care areas, emergency rooms, or trauma units) or [See '289.227(i)(12)]; or
 - (iv) when the gonads are in or within 5 centimeters of the x-ray beam, shields must be used unless the use of the shield interferes with the diagnostic procedure [See '289.227(i)(13)].
- b. If fluoroscopic procedures are being performed, protective devices (lead drapes, hinged sliding panels) shall be in place. If sterile fields or special procedures prohibit the use of protective devices, all individuals in the fluoroscopic room must wear protective aprons of 0.5 mm lead equivalent material [See'289.227(m)(8)].
 - c. Protective device(s) is/are stored in/at IN LAB .
 - d. Protective devices shall be checked annually for defects, such as holes, cracks, or tears. This check can be done by visually inspecting or feeling the protective devices or may also be done by x-raying these items. A record will be kept of this check [See Appendix C]. If a defect is found at the time of the annual check or on any other occasion, notify the RSO and remove the device from service until it can be repaired or replaced [See '289.227(i)(4)(B)].

4. Holding of patients and/or film

- a. If a patient or image receptor must be supported during a radiation procedure, use a mechanical holding device when circumstances permit. Mechanical devices cannot be routinely used during the following situations in this facility [See '289.227(i)(8)(C)(i)].

(1) ALWAYS USE MECHANICAL DEVICES

(2) _____

(3) _____

- b. If it becomes necessary for an individual to hold a patient or image receptor, the holder should not be pregnant. They must wear protective devices and keep out of the direct beam.

5. Holding of x-ray tubes. The x-ray tube housing shall not be held by an individual during any radiographic exposure [See '289.227(i)(11)].

6. Posting Notices, Instructions, and Reports to Workers; and Posting a Radiation Area

- a. Read the "Notice to Employees" sign posted in/at In Lab.
- b. The certificate of registration, operating and safety procedures, and any notices of violations involving radiological working conditions are located in/at In Lab [See '289.203(b)].

- c. Your rights and obligations as a radiation worker are found in '289.203(c), (d), (e), (f), (g), and (i).
- d. The room(s) in which the x-ray machine(s) is/are located and operated is a radiation area and is restricted [See '289.231(x)].

(Choose one of the following sentences)

- The radiation area is designated by "Caution Radiation Area" signs [See '289.231(x)(1)].
- Our facility is not required to post "Caution Radiation Area" signs because our operators have continuous surveillance [See '289.227(d)(3)].

B. Dose to Operators

1. Occupational dose limits are found in '289.231(m)
2. If any employee is pregnant or becomes pregnant, she may voluntarily inform the RSO in writing of the pregnancy [See '289.231(c)(12)]. If the RSO is informed of the pregnancy, the facility must ensure that the dose to the embryo/fetus does not exceed 0.5 rem (500 mrem) during the entire pregnancy [See '289.231(m)(1)(D)].

3. Radiation Incidents or Overexposure

If you suspect there has been an excessive exposure or a radiation incident, immediately notify the RSO.

C. Operation of the X-ray Machine and image creation

1. Ordering of X-ray Exams

No x-ray exams shall be taken unless ordered by a WE ARE AN EDUCATION FACILITY. WE WILL NOT BE PERFORMING ACTUAL EXAMS ON PATIENTS. SIMULATIONS MAY BE DONE ON A MANNEQUIN FACULTY IS IMMEDIATELY AVAILABLE WHEN STUDENTS OPERATE ENERGIZED LAB. [See '289.231(b)(1) and '289.227(b)(1)].

2. Operator Position During Exposure

- a. The operator must be able to continuously see, hear, and communicate with the patient [See '289.227(i)(9)].
- b. During the exposure, the operator must be positioned so that the operator exposure is as low as reasonably achievable (ALARA) and that he/she is at least six feet from the machine or is protected by a lead apron, gloves, or other shielding [See '289.227(i)(10)].

3. Use of a Technique Chart

Use of a technique chart aides in reducing the exposure to the operator and patient and it must be used for all exposures. Our technique charts are displayed in the vicinity of the control panel of each x-ray machine and may be WRITTEN [See '289.227(i)(1)].

4. Restriction and Alignment of the Beam

The useful x-ray beam shall be restricted to the area of clinical interest [See '289.227(l)(1)(A)(i) and '289.227(m)(8)(B)(ii)]. Use the centering and beam limiting devices (collimator) provided on the x-ray machine.

5. Use of Fluoroscopic Machines WE DO NOT HAVE FLUORO CAPABILITIES

- a. Reset the 5-minute cumulative timing device before each fluoroscopic procedure [See '289.227(m)(7)(A)].
- b. For mobile fluoroscopy (i.e. C-arm) machines, a 30-centimeter (cm) source-to-skin distance (SSD) must be used [See '289.227(m)(6)(A)(ii)].
- c. A 20-cm SSD (spacer) may be used for mobile fluoroscopy during (list procedures). The following precautionary measures must be used when a 20-cm spacer is utilized: (list measures). Immediately following the procedure, restore the 30-cm SSD [See '289.227(m)(6)(B)].
- d. See Section (II)(A)(3)(b) of these procedures for use of protective devices during fluoroscopy.

6. Use of Portable Machines WE DO NOT OPERATE A ENERGIZED PORTABLE

- Portable x-ray equipment is mounted on a permanent base with wheels and/or casters for moving while completely assembled.
- Portable x-ray equipment may also be designed to be hand-carried.

During the exposure the operator:

- a. must be positioned so that his/her exposure is as low as reasonably achievable (ALARA) [See '289.227(i)(10)] (e.g. 6 feet or more away); and/or
- b. must wear lead apron, gloves if necessary, or be protected by other shielding [See '289.227(i)(4)]; and
- c. should never be in line with the direct beam.

7. Film Processing [See Appendix B] WE ARE A DIGITAL FACILITY

- a. Unexposed film is stored NO LONGER USING FILM.
- b. Films shall be developed by the time and temperature recommended by the x-ray film manufacturer. These specifications are posted in/at NA [See '289.227(p)(1)].
 - (i) Check the temperature at the beginning of the work day. Do not process films unless the developer temperature is NA. Manual processing temperature should be checked throughout the work day.
 - (ii) For automatic processors, run blank films through the processor at the beginning of the work day.
- c. Expiration dates on film and chemicals should be checked periodically. New film or chemicals should be rotated so the oldest are used first. Do not use films or chemicals after the expiration date.

d. Chemicals will be replaced by NA according to the manufacturer's or chemical supplier's recommended interval, which is NA, or no longer than every three months [See '289.227(p)(2)].

e. Safe light(s) in the film processing/loading area is/are provided under these conditions and should not be changed without authorization from the RSO [See '289.227(p)(4)].

Filter type _____
Bulb wattage _____
Distance from work surfaces _____

f. If you see light leaks around doors, ceilings, or other openings in the darkroom, notify the RSO [See '289.227(p)(3)].

8. Alternative Processing Systems **NOT APPLICABLE**

Our facility uses _____ (choose from the following: daylight processing systems, laser processors, self-processing (Polaroid) film units, or other alternative processing systems). Processing will be done according to the manufacturer's recommendations, which are located in _____ (specify location) [See §289.227(q)].

9. Digital imaging acquisition systems

Our facility uses a digital imaging acquisition system. Processing will follow the quality assurance/quality control protocol for image processing established by GE SYSTEM. The protocol are located in WE ARE AN EDUCATIONAL FACILTIY THAT DOES NOT OPERATE ON HUMAN PATIENTS [See §289.227(r)].

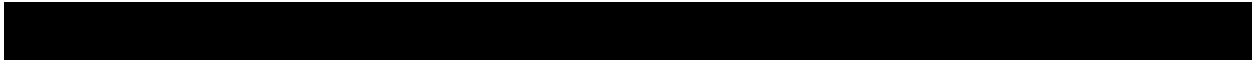
D. Inventory List [See Appendix D and §289.226(m)(1)(B)].

An annual inventory of all radiation machines is maintained by NATHAN STALLINGS,
DEPARTMENT CHAIR.



SECTION IV

DOCUMENTS OF INTEREST



Example Chart of SCANS Skills

SCANS Skills are grouped in two areas: (1) foundation skills and (2) workplace competencies.

Foundation Skills are defined in three areas: (a) basic skills, (b) thinking skills, and (c) personal qualities.

(a) Basic Skills: A worker must read, write, perform arithmetic and mathematical operations, listen, and speak effectively. These skills include:

Reading: locate, understand, and interpret written information in prose and in documents such as manuals, graphs, and schedules.

- Writing: communicate thoughts, ideas, information, and messages in writing, and create documents such as letters, directions, manuals, reports, graphs, and flow charts.
- Arithmetic and Mathematical Operations: perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques.
- Listening: receive, attend to, interpret, and respond to verbal messages and other cues.
- Speaking: organize ideas and communicate orally.

(b) Thinking Skills: A worker must think creatively, make decisions, solve problems, visualize, know how to learn, and reason effectively. These skills include:

- Creative Thinking: generate new ideas.
- Decision Making: specify goals and constraints, generate alternatives, consider risks, and evaluate and choose the best alternative.
- Problem Solving: recognize problems and devise and implement plan of action.
- Visualize ("Seeing Things in the Mind's Eye"): organize and process symbols, pictures, graphs, objects, and other information.
- Knowing How to Learn: use efficient learning techniques to acquire and apply new knowledge and skills.
- Reasoning: discover a rule or principle underlying the relationship between two or more objects and apply it when solving a problem.

(c) Personal Qualities: A worker must display responsibility, self-esteem, sociability, self-management, integrity, and honesty.

- Responsibility: exert a high level of effort and persevere toward goal attainment.
- Self-Esteem: believe in one's own self-worth and maintain a positive view of oneself.
- Sociability: demonstrate understanding, friendliness, adaptability, empathy, and politeness in group settings.
- Self-Management: assess oneself accurately, set personal goals, monitor progress, and exhibit self control.
- Integrity and Honesty: choose ethical courses of action.

(2) Workplace Competencies are defined in five areas: (a) resources, (b) interpersonal skills, (c) information, (d) systems, and (e) technology.

(a) Resources: A worker must identify, organize, plan, and allocate resources effectively.

- Time: select goal-relevant activities, rank them, allocate time, and prepare and follow schedules.

- Money: Use or prepare budgets, make forecasts, keep records, and make adjustments to meet objectives.
- Material and Facilities: Acquire, store, allocate, and use materials or space efficiently.
- Human Resources: Assess skills and distribute work accordingly, evaluate performance and provide feedback.

Examples: use computer software to plan a project; prepare a budget; conduct a cost/benefits analysis; design an RFP process; write a job description; develop a staffing plan.

b) Interpersonal Skills: A worker must work with others effectively.

- Participate as Member of a Team: contribute to group effort.
- Teach Others New Skills.
- Serve Clients/Customers: work to satisfy customers' expectations.
- Exercise Leadership: communicate ideas to justify position, persuade and convince others, responsibly challenge existing procedures and policies.
- Negotiate: work toward agreements involving exchange of resources, resolve divergent interests.
- Work with Diversity: work well with men and women from diverse backgrounds.

Examples: collaborate with a group member to solve a problem; work through a group conflict situation; train a colleague; deal with a dissatisfied customer in person; select and use appropriate leadership styles; use effective delegation techniques; conduct an individual or team negotiation; demonstrate an understanding of how people from different cultural backgrounds might behave in various situations.

(c) Information: A worker must be able to acquire and use information.

- Acquire and Evaluate Information.
- Organize and Maintain Information.
- Interpret and Communicate Information.
- Use Computers to Process Information.

Examples: research and collect data from various sources; develop a form to collect data; develop an inventory record-keeping system; produce a report using graphics; make an oral presentation using various media; use on-line computer data bases to research a report; use a computer spreadsheet to develop a budget.

(d) Systems: A worker must understand complex interrelationships.

- Understand Systems: know how social, organizational, and technological systems work and operate effectively with them.
- Monitor and Correct Performance: distinguish trends, predict impacts on system operations, diagnose deviations in systems' performance and correct malfunctions.
- Improve or Design Systems: suggest modifications to existing systems and develop new or alternative systems to improve performance.

Examples: draw and interpret an organizational chart; develop a monitoring process; choose a situation needing improvement, break it down, examine it, propose an improvement, and implement it.

(e) Technology: A worker must be able to work with a variety of technologies.

- Select Technology: choose procedures, tools or equipment including computers and related technologies.
- Apply Technologies to Task: understand overall intent and proper procedures for setup and operation of equipment.
- Maintain and Troubleshoot Equipment: Prevent, identify, or solve problems with equipment, including computers and other technologies.

Examples: read equipment descriptions and technical specifications to select equipment to meet needs; set up and assemble appropriate equipment from instructions; read and follow directions for troubleshooting and repairing equipment.

Sample: SCANS Occupational Assessment

The know-how identified by SCANS is made up of five competencies and a three-part foundation of skills and personal qualities needed for solid job performance. The rating level ranges from 1 (low) to 5 (high). Please circle your response.

COMPETENCY	RATING
Resources: Identifies, organizes, plans, and allocates resources.	
C1 Time: Selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules.	1 2 3 4 5
C2 Money: Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives.	1 2 3 4 5
C3 Materials and Facilities: Acquires, stores, allocates, and uses materials or space efficiently.	1 2 3 4 5
C4 Human Resources: Assesses skills and distributes work accordingly, evaluates performance, and provides feedback.	1 2 3 4 5
Information: Acquires and uses information.	
C5 Acquires and evaluates information.	1 2 3 4 5
C6 Organizes and maintains information.	1 2 3 4 5
C7 Interprets and communicates information.	1 2 3 4 5
C8 Uses computers to process information.	1 2 3 4 5
Interpersonal: Works with others.	
C9 Participates as a member of a team: Contributes to group effort.	1 2 3 4 5
C10 Teaches others new skills.	1 2 3 4 5
C11 Serves Clients/Customers: Works to satisfy customer's expectations.	1 2 3 4 5
C12 Exercises Leadership: Communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.	1 2 3 4 5

C13 Negotiates: Works toward agreements involving exchange of resources; resolves divergent interests. 1 2 3 4 5

C14 Works With Diversity: Works well with men and women from diverse backgrounds. 1 2 3 4 5

Systems: Understands complex interrelationships.

C15 Understands Systems: Knows how social, organizational, and technological systems work and operates effectively with them. 1 2 3 4 5

C16 Monitors and Corrects Performance: Distinguishes trends, predicts impacts on system operations, diagnoses system's performance, and corrects malfunctions. 1 2 3 4 5

C17 Improves or Designs Systems: Suggests modifications to existing systems and develops new or alternative systems to improve performance. 1 2 3 4 5

Technology: Works with a variety of technologies.

C18 Selects Technology: Chooses procedures, tools, or equipment, including computers and related technologies. 1 2 3 4 5

C19 Applies Technology to Task: Understands overall intent and proper procedures for setup and operation of equipment. 1 2 3 4 5

C20 Maintains and Troubleshoots Equipment: Prevents, identifies, or solves problems with equipment, including computers and other technologies. 1 2 3 4 5

RATING

FOUNDATION

Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens, and speaks.

F1 Reading: Locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules. 1 2 3 4 5

F2 Writing: Communicates thoughts, ideas, information, and messages in writing; creates documents such as letters, directions, manuals, reports, graphs, and flow charts. 1 2 3 4 5

F3 Arithmetic: Performs basic computations; uses basic numerical concepts such as whole numbers, etc. 1 2 3 4 5

F4 Mathematics: Approaches practical problems by choosing appropriately from a variety of mathematical techniques. 1 2 3 4 5

F5 Listening: Receives, attends to, interprets, and responds to verbal messages and other cues. 1 2 3 4 5

F6 Speaking: Organizes ideas and communicates orally. 1 2 3 4 5

Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons.

F7 Creative Thinking: Generates new ideas. 1 2 3 4 5

- F8** Decision Making: Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative. 1 2 3 4 5
- F9** Problem Solving: Recognizes problems and devises and implements plan of action. 1 2 3 4 5
- F10** Seeing Things in the Mind's Eye: Organizes and processes symbols, pictures, graphs, objects, and other information. 1 2 3 4 5
- F11** Knowing How to Learn: Uses efficient learning techniques to acquire and apply new knowledge and skills. 1 2 3 4 5
- F12** Reasoning: Discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem. 1 2 3 4 5

Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, integrity, and honesty.

- F13** Responsibility: Exerts a high level of effort and perseveres towards goal attainment. 1 2 3 4 5
- F14** Self-Esteem: Believes in own self-worth and maintains a positive view of self. 1 2 3 4 5
- F15** Sociability: Demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings. 1 2 3 4 5
- F16** Self-Management: Assesses self accurately, sets personal goals, monitors progress, and exhibits self-control. 1 2 3 4 5
- F17** Integrity/Honesty: Chooses ethical courses of action. 1 2 3 4 5

Web Sites

JRCERT

www.jrcert.org

Nuclear Regulatory Commission

NRC Regulatory Guide 8.13 Concerning Pregnancy

<http://www.ehs.ucr.edu/radiation/regulatoryguide8.13.pdf>

ARRT Standard of Ethics, Code of Ethics, Rules of Ethics, Practice Standards, Clinical Performance Standards, Quality Performance Standards, and Professional Performance Standards may be found at the following websites:

www.rrt.org

www.asrt.org

Texas Medical Board - License

<http://www.tmb.state.tx.us/page/licensing>

Approximate Cost of the Radiologic Technology Program

Approximate cost of 24 month program, 2022

***Does not include general academic curriculum books

	In District	Out of District	Out of State
Pre-requisite class	\$450.00	\$682.00	\$778.00
Fall - First Year			
Tuition + High Cost Health Professional Fee (12 hours)	\$1,597.00	\$2,195.00	\$2,355.00
Laboratory Fees / Supplies	75.00	75.00	75.00
Books (estimate)	1,050.00	1,050.00	1,050.00
Liability & Health Insurance	115.00	115.00	115.00
Uniforms, Badges, and Markers	250.00	250.00	250.00
Criminal Background/Drug Screen	40.00	40.00	40.00
Testing Fees	72.00	72.00	72.00
Physical, Immunizations	100.00	100.00	100.00
Radiation Dosimetry Fee	25.00	25.00	25.00
TOTAL	3,774.00	4604.00	4,182.00
Spring - First Year			
Tuition (13 hours)	1,397.00	1,995.00	2,290.00
Laboratory Fees	75.00	75.00	75.00
Books (estimate)	150.00	150.00	150.00
Radiation Dosimetry Fee	25.00	25.00	25.00
TOTAL	1,647.00	2,245.00	2,540.00
Summer - First Year			
Tuition (6 hours)	883.00	1,205.00	1,345.00
Books (estimate)	250.00	250.00	250.00

TOTAL	1,133.00	1,455.00	1,595.00
Fall - Second Year			
Tuition (14 hours)	1,430.00	2,121.00	2,421.00
Uniforms	100.00	100.00	100.00
Books (estimate)	180.00	180.00	180.00
Radiation Dosimetry Fee	25.00	25.00	25.00
Liability & Health Insurance	150.00	150.00	150.00
TOTAL	1,885.00	2,576.00	2,876.00
Spring - Second Year			
Tuition (12 hours)	1,498.00	2,234.00	2,554.00
Radiation Dosimetry Fee	25.00	25.00	25.00
Books (estimate)	220.00	220.00	220.00
TOTAL	1,743.00	2,479.00	2,799.00
Summer - Second Year			
Tuition (3 hours)	507.00	745.00	805.00
ARRT Examination Application Fee	200.00	200.00	200.00
State License Application Fee	125.00	125.00	125.00
Books/Supplies (estimate)	90.00	90.00	90.00
TOTAL	829.00	1,067.00	1,127.00
GRAND TOTAL	\$11,104.00	\$14,519.00	\$15,990.00

*State Licensing is no longer with Texas Department of Health. Texas Medical Board now issues state licensing, fees are now approximately \$165.



SECTION VI
FORMS / ENCLOSURES

DECLARATION OF PREGNANCY FORM

Section I. Voluntary Declaration of Pregnancy

In accordance with the Texas regulations for Control of Radiation in 25 TAC 289.232(j)(3)(A)(i)(IV), “Dose equivalent to an embryo/fetus”, I voluntarily declare that I am pregnant. My estimated date of conception is (month and year) _____ as regulatory required.

I understand that the dose equivalent to my embryo/fetus during my entire pregnancy will not be allowed to exceed 0.5 rem (5 mSv), unless this limit has already been exceeded between the time of conception and the date of declaration as stated. By attesting this document, I understand and agree that I have met the statutory definition of a declared pregnant woman.¹

Signature and Date

Student ID

Name (Printed)

Date of Birth

Section II. Rescinding Pregnancy Declaration

¹ 25 TAC 289.231 (c) (12) defines a declared pregnant woman as: A woman who has voluntarily informed the registrant, in writing, of her pregnancy and the estimated date of conception. The declaration remains in effect unless the declared pregnant woman voluntarily withdraws the declaration in writing or is no longer pregnant.

The pregnant student may undeclare the above declaration in writing at any time without explanation and the dose monitoring will be discontinued and the regular applicable radiation worker occupational dose limits will apply.

I, _____, declare that I no longer wish to be considered a declared pregnant woman.

Signature and Date

Student ID

1 25 TAC 289.231 (c) (12) defines a declared pregnant woman as: A woman who has voluntarily informed the registrant, in writing, of her pregnancy and the estimated date of conception. The declaration remains in effect unless the declared pregnant woman voluntarily withdraws the declaration in writing

RADIOLOGIC TECHNOLOGY PROGRAM ACKNOWLEDGMENT FORM

I, _____ (print name), hereby acknowledge that if accepted into the TJC Radiologic Technology Program (“Program”) I will follow all safety protocols set forth by TJC and the Program, not only on campus but at the clinical sites. I am aware that I may be dismissed from the Program for failure to abide by such protocols, unprofessional behavior, or any other prohibited behavior set forth in the Program Handbook, or Program policies. I am also aware that I may be dismissed from the Program or denied admission if I do not pass the drug screen or background check required as part of the admission process.

[THIS SECTION APPLIES TO FEMALE STUDENTS ONLY] I further understand that, if I am a female student, there is a policy for the Program related to pregnancy and I have read and understand same. I understand that I may voluntarily disclose my pregnancy and a special radiation dose limit for my unborn child will be required and control measures and/or dosimetry will be utilized for monitoring. However, if I choose not to voluntarily declare my pregnancy, these measures and dose limits will not be taken. I further understand and agree that if I choose to remain in the Program while pregnant, whether declared or not, I accept all risks to myself and unborn child related to radiation and hereby release and hold harmless TJC and its employees and any clinical site and its employees from any and all claims, liability or damages of any kind whatsoever related to my continued participation in the Program.

Signature and Date

Student ID

[TITLE 25](#)
[PART 1](#)
[CHAPTER 97](#)
[SUBCHAPTER B](#)

HEALTH SERVICES
 DEPARTMENT OF STATE HEALTH SERVICES
 COMMUNICABLE DISEASES
 IMMUNIZATION REQUIREMENTS IN TEXAS ELEMENTARY AND SECONDARY SCHOOLS
 AND INSTITUTIONS OF HIGHER EDUCATION

RULE §97.64**Required Vaccinations for Students Enrolled in Health-related and Veterinary Courses in Institutions of Higher Education**

- (a) Students enrolled in (non-veterinary) health-related courses. This section applies to all students enrolled in health-related higher education courses which will involve direct patient contact with potential exposure to blood or bodily fluids in educational, medical, or dental care facilities.
- (b) Vaccines Required. Students must have the all the following vaccinations before they may engage in the course activities described in subsection (a) of this section:
- (1) Tetanus-diphtheria. One dose of a tetanus-diphtheria toxoid (Td) is required within the last ten years. The booster dose may be in the form of a tetanus-diphtheria-pertussis containing vaccine (Tdap).
 - (2) Measles, Mumps, and Rubella Vaccines.
 - (A) Students born on or after January 1, 1957, must show, prior to patient contact, acceptable evidence of vaccination of two doses of a measles-containing vaccine administered since January 1, 1968 (preferably MMR vaccine).
 - (B) Students born on or after January 1, 1957, must show, prior to patient contact, acceptable evidence of vaccination of one dose of a mumps vaccine.
 - (C) Students must show, prior to patient contact, acceptable evidence of one dose of rubella vaccine.
 - (3) Hepatitis B Vaccine. Students are required to receive a complete series of hepatitis B vaccine prior to the start of direct patient care or show serologic confirmation of immunity to hepatitis B virus.
 - (4) Varicella Vaccine. Students are required to have received one dose of varicella (chickenpox) vaccine on or after the student's first birthday or, if the first dose was administered on or after the student's thirteenth birthday, two doses of varicella (chickenpox) vaccine are required.
- (c) Limited Exceptions:
- (1) Notwithstanding the other requirements in this section, a student may be provisionally enrolled in these courses if the student has received at least one dose of each specified vaccine prior to enrollment and goes on to complete each vaccination series on schedule in accordance with the Centers for Disease Control and Prevention's Recommended Adult Immunization Schedule as approved by the Advisory Committee on Immunization Practices (ACIP), American College of Obstetricians and Gynecologists (ACOG), the American Academy of Family Physicians (AAFP), and the American College of Physicians. However, the provisionally enrolled student may not participate in coursework activities involving the contact described in subsections (a) and/or (d) of this section until the full vaccination series has been administered.
 - (2) Students, who claim to have had the complete series of a required vaccination, but have not properly documented them, cannot participate in coursework activities involving the contact described in subsections (a) and/or (d) of this section until such time as proper documentation has been submitted and accepted.
 - (3) The immunization requirements in subsections (b) and (d) of this section are not applicable to individuals who can properly demonstrate proof of serological confirmation of immunity. Vaccines for which this may be potentially demonstrated, and acceptable methods for demonstration, are found in §97.65 of this title (relating to Exceptions to Immunization Requirements (Verification of Immunity/History of Illness)). Such a student cannot participate in coursework activities involving the contact described in subsection (a) of this section until such time as proper documentation has been submitted and accepted.
- (d) Students enrolled in schools of veterinary medicine.
- (1) Rabies Vaccine. Students enrolled in schools of veterinary medicine whose coursework involves direct contact with animals or animal remains shall receive a complete primary series of rabies vaccine prior to such contact. Serum antibody levels must be checked every two years, with a booster dose of rabies vaccine administered if the titer is inadequate according to current Centers for Disease Control and Prevention guidance.
 - (2) Hepatitis B Vaccine. Students enrolled in schools of veterinary medicine whose coursework involves potential exposure to human or animal blood or bodily fluids shall receive a complete series of hepatitis B vaccine prior to such contact.
- (e) Requirements regarding acceptable evidence of vaccination are found at §97.68 of this title (relating to Acceptable Evidence of Vaccination(s)).

Source Note: The provisions of this §97.64 adopted to be effective April 1, 2004, 29 TexReg 3188; amended to be effective March 5, 2009, 34 TexReg 1433; amended to be effective May 25, 2010, 35 TexReg 4178