



SECTION II

CLINICAL INFORMATION

FOR

PRACTICUM I - VI

Revised Summer 2008



CLINICAL INFORMATION

INTRODUCTION

These Practicum course policies have been developed to assist Radiologic Technology students in understanding the rules and regulations that will apply during their *practicum* (clinical education) assignments. Students will be required to adjust their personal and work schedules and attitudes in order to comply with program standards and schedules. Clinical hours will not be adjusted for outside work schedules. This two year period will be very busy and demanding, but very rewarding. Success is expected.

Prospective students will make the program aware of family members employed in any position of influence 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 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.

FRATERNIZATION

Fraternization between students and hospital employees/doctors is strongly discouraged. If a personal relationship 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.

CLINICAL EDUCATION HOURS (PRACTICUM)

Clinical education will normally be eight-hour days, as assigned by the clinical coordinator or instructor. Any unavoidable, necessary personal appointments that must be made during assigned clinical education time will be subtracted from the student's ATO (discussed later). **No more than a total of forty hours of clinical and didactic education combined will be scheduled per week.**

Clinical education hours will vary according to the class schedules. When the clinical instructor documents adequate proficiency, evening and weekend shift assignments will begin (in hospitals with weekend and evening clinicals). Approximately forty hours per semester will be spent on the weekend shift. Approximately sixty hours per semester will be spent on the evening shift. The objective of the rotations is to better train students for work environments that more closely resemble those for new graduates. Evaluations for evening and weekend shifts will focus on professional demeanor, motivation and teamwork. In addition to normal radiographic procedures, students will:

1. Learn to handle phone messages in the light room and take actions from the messages.
2. Practice communication and cooperation skills with doctors and other 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. have to perform office procedures at a higher level: sees more of the whole picture
6. more able to learn to manage work flow, maybe make decisions about this
7. will get different technologists' ideas and tricks

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.

It is recommended that students do not hold outside jobs during the first semester enrolled in the Program. Students employed in health care agencies will wear the appropriate uniform of that agency. **The uniform, lab coat, 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.** See dress code.

RELEASE AFTER AN EXTENDED ILLNESS OR TRAUMA

If a student is involved in an accident that requires medical attention, he/she must furnish the Program a release from the physician before returning to the clinical site.

If the student is absent from clinical class for more than 1 clinical week, he/she must provide a statement from the physician concerning his or her capabilities to perform regular assignments. No light duty assignments are available. The student must provide a full release from his/her doctor. If this illness is a contagious disease, a release must be provided before attending clinic education.

**A student who is expected to miss more than the maximum number of days due to extended illness or trauma, who is unable to provide a signed medical release from his/her physician, will be required to withdraw from the program and re-enter in the same semester in the following year.

ATTENDANCE- Allowable Time Off (ATO)

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 letter. Students enrolled in clinicals 3 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 letter. 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. Unused ATO will not carry over to following semesters.

A student will never be allowed to spend more than 40 hours per week in the clinical area and the academic classes combined.

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.

****Non-compliance with attendance standards in any 3 semesters will result in dismissal from the program.**

- This includes accumulation of tardies during semester and going over ATO time during semester

TARDY POLICY

Students are permitted one incidence of tardiness per semester without adversely affecting the clinical grade. Tardy is considered up to one hour from your scheduled clinical start time by the clock designated by your Clinical Instructor. After the hour, any missed time will be deducted from the student's ATO time. **Each individual Clinical Instructor may decide in what increments the student may take ATO time.**

Example) If your CI allows no less than 2 hours of ATO to be taken at a time and you know you will be 1 ½ hours late, then you will need to be at your clinical site 3 hours from start time. 1 hour for tardy and 2 hours of ATO.

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 minute prior to scheduled time to leave without being instructed by the clinical instructor, or late returning from breaks or lunch breaks.

Tardiness beyond the one “free” incidence will result in the accumulation of demerits, lowering the clinical grade. A student who is tardy 3 times in any semester is out of compliance with program standards, and will fail the attendance category of clinical grading. Non-compliance with attendance standards in any 3 semesters will result in dismissal from the program.

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

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

SCHEDULING ATO TIME

You may take ATO in smaller increments than 8 hours. It will be up to each Clinical Instructor the smallest increment of ATO that you may take. It is the Clinical Instructor's discretion as to how you

notify them (verbal or written) if you are taking ATO time.

NO CALL/ NO SHOW

If the student must be absent, a phone call (made by the student himself or herself) to the clinical instructor, clinical coordinator 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, as described below. **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.

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. A counseling session with the clinical instructor must be completed before that student may return to the clinical floor. **A 2nd incident will result in dismissal from the program.**

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 15 minutes late he/she will be marked absent. The student will be responsible for finding the clinical instructor and ensuring the absence is changed to tardy.

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.

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 or grandparent. Absences due to any other funerals will be counted as normal absences.

ABSENCE DURING FINALS WEEK-CLINICAL

ATO may be "saved" until finals week and taken then to enable the student to study for finals. Any time missed in excess of the ATO will result in the lowering of the clinical grade by 1 letter and failure the attendance.

INCLEMENT WEATHER

Students scheduled for clinical education during inclement weather 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 weather conditions and 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 inclement weather (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**. Failure to call constitutes a no-call no-show. 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 necessary, and the student will be counted absent for that day.

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. Job Fair Day is a clinic day, and students are required to be present at clinicals. With permission from the clinical instructor at the clinical site, students may leave early to attend the Job Fair, but not before 2:00 PM. There will be no evening or weekend clinicals during finals week. Students will have a scheduled two-week vacation period during the summer (usually the 1st 2 weeks in July) 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.

ROTATION TO SPECIALTY AREAS

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

PERSONAL APPEARANCE

Trendy modes of dress (as determined to be “trendy” by the program faculty at it’s sole discretion) are prohibited. A patient forms an impression of the radiology department upon first sight of the personnel. It is important that the student's appearance be flawless. Students reporting to the clinical education area dressed in other than the approved uniform will leave the area and be marked absent for the entire day. The following has been established in accordance with typical clinical affiliate policies. If the

student is employed in an ionizing radiation area that requires a dosimetry device, he/she must not wear the TJC procured dosimetry device at work, nor may he/she wear the designated TJC uniform, patch or name badge. 2 incidences of ANY non-compliance with the items listed below will result in a failing grade (0) in “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. 2 incidences of “0” in personal appearance will result in dismissal from the program. Refusal to adhere to the dress code when informed of non-compliance in a single semester will result in dismissal from the program.

FEMALE STUDENTS:

1. The entire body must be clean and free from objectionable odors.
2. The fingernails must be clean and neatly trimmed. If used, nail polish must be clear or very light pink. “Fake nails” will not be worn.
3. Hair must be clean and neat. No rollers, scarves, or bright ribbons will be 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. There will be no elaborate hair dress.
4. No excessive amount of any make-up will be allowed. Students will remove excessive make-up before entering the clinical area.
5. Neutral or white hose will be worn when in uniform. These should be clean and free from runners. Plain, white, socks may be worn with pants.
6. The designated blue top and white (or blue) pants or skirt as described in the uniform information letter must be worn at all times. Scrub tops are not allowed. The top must have a zipper, snaps or buttons in front, and remain zipped, snapped or buttoned at all times. Plain white undershirts (T-shirt style, not tank tops, no visible writing is allowed on the shirts) may be worn under the designated top. A Long sleeved SOLID WHITE shirt may be worn under the uniform top. All shirts must be tucked in at all times. Pants **may not** be stretch pants or have a knit cuff. Underwear patterns or vivid colors may not be visible through the pants.
The Tyler Junior College Radiologic Technology Program emblem must be worn at all times. These patches are to be sewn on to the RIGHT SIDE of the chest just below shoulder level. White lab coats are to be used if needed for warmth; these must also have a patch. All garments are to be clean and neatly pressed. Students will be sent away from the clinical education, and marked absent if they report to the area in dirty or un-pressed uniforms.
7. Shoes must be white, clean, neatly polished, with clean shoelaces, and in good repair when the student is in uniform. White, closed toe solid front clogs may be worn if an ankle strap is present and used at all times. Dirty and unpolished shoes will not be tolerated. No other colors are acceptable. Students with off colored shoes will be asked to leave clinicals, and marked absent.
8. Perfume should be eliminated while in uniform. Fragrance is not pleasant to the patient and may tend to cause nausea (or worse).
9. Wedding rings, engagement rings, watches, and **ONE SET** of small gold or silver pierced earrings may be worn while in uniform. No other visible piercings are permitted (including tongue, lip, eyebrow rings, etc). Necklaces must fit inside uniform top.
10. The TJC name badge and dosimetry device are to be worn at all times. The badges will be purchased through TJC.

11. “Hickies” or any other inappropriate, artificially induced marks must be covered, or otherwise undetectable.
12. Visible tattoos must be covered with a lab coat.

MALE STUDENTS:

1. The entire body must be clean and free from objectionable odors.
2. The fingernails must be clean and neatly trimmed.
3. Hair, mustache, beard, and sideburns must be clean, neat and well trimmed. Hair length: SEE item # 3 under female students.
4. See item #6 under female students.
5. See item #7 under female students.
6. 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.
7. The TJC name badge and dosimetry device are to be worn at all times. These devices will be purchased through TJC.
8. See item # 11 under female students.
9. See item # 12 under female students

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.

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.**

ACCIDENT OR INJURY TO THE STUDENT

If the student is injured while at the clinical affiliate, the clinical instructor and/or assigned supervisor **MUST** be notified immediately. Accident insurance is automatically added to school charges when the student registers for clinical education classes. 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.

LIABILITY INSURANCE

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

IDENTIFICATION DISPLAY

Students will wear a Tyler Junior College-Radiologic Technology Student identification name badge during clinical assignments. Students will not be allowed to enter the clinical area without proper identification. These identification badges will be purchased through TJC. The badges **MUST** be worn at all times while in clinical education (including surgery rotations). Failure to wear the TJC name tag is a breach of the dress code.

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. Failure to wear the TJC name tag and dosimeter badge is a breach of the dress code.

THESE BADGES WILL BE FOR THE CURRENT MONITORING PERIOD OR THE STUDENT WILL BE REMOVED FROM THE CLINICAL SETTING UNTIL THE CURRENT BADGE IS SECURED. Records of the quarterly radiation exposure will be kept in the clinical coordinator's office. 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. Cumulated dosage information will be kept in the student's permanent file. Students interested in monitoring their own dose may access the Global Dosimetry website at www.dosimetry.com.

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. Employers, by law, are to furnish a radiation-monitoring device to all employees working in ionizing radiation areas. It will be the students' responsibility to maintain their own cumulated dosage sources. TLD's are included in tuition per long semester.

The student will exchange the last quarter's badge by the second class day of the exchange month while in class on campus. Failure to exchange the badge (regardless of it being lost or forgotten) by the second class day of the month will result in a lowering of the Practicum grade by one full letter grade at the end of the semester. 3 incidences of lost 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.

IF THE RADIATION REPORT FOR A STUDENT IS 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.

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. The TJC procured badge is not to be worn during employment hours. 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.

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. If a student becomes pregnant, her options include:

1. Continuation in the program without modification and without notification to program personnel. If this option is exercised, the student will not receive a fetal TLD and fetal dose will not be recorded. The student may drop from the program if she fears she will exceed absences or may continue if absences will not jeopardize her position in the program.
2. Declare the pregnancy to the Radiation Safety Officer and receive a fetal monitor but continue in the program. The student may drop from the program if she fears she will exceed absences or may continue if absences will not jeopardize her position in the program.
3. Drop from the program at any point she feels like her absences will jeopardize her position in the program.

If option 2 or 3 is exercised and the student drops from the program, space will be guaranteed for the student to re-enter at the beginning of the semester following the last completed semester. A student on probation or involved in disciplinary action at the time of withdrawal will not be allowed back into the program.

TYLER JUNIOR COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM
25 Texas Administrative Code 289.202
Program Policy

The 25 TAC 289.202 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). [signature]MARKERS

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).

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.

CLASSROOM CONDUCT

Classes held at the clinical site will be conducted in an orderly manner. No gum chewing, smoking, palm pilots, PDA's, cell phones, eating or ice chewing is allowed while in class, or when with a patient. 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.

Students with children will provide schools, daycares or childcare providers with the clinical instructor or light room phone numbers for emergencies. Cell phones will not be carried while in Practicum classes. Cell phones will be stored in the student's locker, purse, or car. A student will be allowed to check for calls only while on designated breaks (maximum 3 times daily, as described by the designated clinical instructor). The time required to check and return calls will not exceed normal break/lunch times.

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). The day will be made up in its entirety, and the student will receive a 0% in "Professional Demeanor" for the semester. If the absence places the student over the maximum allowed absences for the semester, the student will receive a 0% in attendance and punctuality also.

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 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 receive a 0% in attendance and punctuality also.

A second 0% in any category will result in dismissal from the program.

PROBATION and SUSPENSION

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

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.

**STANDARDS FOR AN ACCREDITED EDUCATION PROGRAM IN RADIOLOGIC SCIENCES. JAN 2002, JRCERT. (Copy provided in this handbook)*

CLINICAL GRADES AND EVALUATION

The clinical (semester) grade will be based on the clinical evaluation from technologists and/or clinical instructors. The evaluation form (pages 54-57) will be used. 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 (15) to achieve the semester grade.

91-100% = A

83-90% = B

75-82% = C

Below 75= 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).

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 supercede 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 GRADES

Mid term evaluations will be made for all clinical education classes. These grades are for the student to know his/her status in the class. The grades do not go on the transcript and no report card will be sent from the registrar's office.

RESPONSIBILITY FOR STUDENT FOLDERS

Clinical folders will remain at the student's clinical site and will change clinical sites with the student. If the student transports the 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.

CLINICAL DEMERITS

Demerits are a numerical documentation of unsatisfactory performance. 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.

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

Mis-marking film

Using someone else's marker

Mislabeling films

Not introducing self to the patient

Not explaining the exam to the patient

Failure to flash patient's name on film

Not following department protocol

Not finishing exam (including paperwork)
Passing poor quality film
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

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

1. Not properly identifying patients
2. Not checking the chart for inpatient orders before putting the patient on the table.
3. Not assisting the patient on to and off of the table into the wheelchair/stretchers.
4. Leaving an unstable patient alone with the rails down/on the table alone
5. Not finishing the paperwork/entering into the computer.
6. Not setting technique for manual technique procedures.
7. Not providing a clean sheet on the table prior to the exam.
8. Mis-marking or not marking a film
9. Not flashing a film
10. Not practicing universal precautions
11. Not practicing personal radiation protection
12. Discussing the patient's diagnosis
13. Improperly discarding/capping of needles
14. Not checking contrast/medications for content and expiration date
15. Not checking oxygen levels/checking for oxygen in tank
16. Not performing repeats under direct supervision.

Student Evaluation and Grade Sheet (Clinical instructor)

Student _____ Date: _____

Staff Signature: _____ Student Signature _____

| | 93% | 81% | 62% | 25% | |
|------------------------------------|---|--------------------------------------|--------------------|--|--|
| | Outstanding 100% | Above Average 87% | Average 75% | Below Average 50% | Unsatisfactory 0% |
| Interpersonal relationships | Excellent team worker, professional, respected and respectful | Almost always works well with others | Average impression | At times arrogant; rude; harsh; passive; prone to gossip or subversion; at times | Subversive, creates problems, often rude and confrontational; refuses constructive |

| | | | | | |
|--|--|---|--|--|---|
| | | | | uses a hostile tone. | criticism. Hostile. |
| Patient perception | Always anticipates patient's wants and needs. Never has to be asked | Usually has everything immediately available for the patient | Provides for the patient promptly when asked | Often slow when providing for the patient | Frequently frustrates the situation in the room by misinterpreting the patient's needs. |
| Initiative | Never idle. Always busy with productive work. | Occasionally has to be asked to perform procedures | Does what is asked | Has to be told what to do; has to be prodded to work. | Actively avoids work. Lazy |
| Self confidence | Eagerly attempts new procedures (with proper supervision), displays independence | Willingly performs new procedures when encouraged | Hesitant to attempt new procedures | Won't work independently or OVER confident | Actively avoids new procedures or extremely overconfident, possibly threat to patient |
| Attitude and flexibility | Superior attitude towards others, facilities and learning. Readily adapts without complaining to changing environments and schedules | Good attitude. Adapts well. | Usually has a good attitude. Adapts when changes are necessary. | Often displays an unprofessional attitude towards others. Adapts, but doesn't like it. | Poor attitude, as displayed by behavior towards others; argumentative. Hesitant to work. Has to be made to accept changes. Ignores instruction. |
| Dependability | Always available; completes exams efficiently; completes paperwork without reminder. Self reliant | Usually available; usually completes exams efficiently; usually submits paperwork on time | Sometimes out of assigned area; often needs help completing assignments; turns in paperwork when asked | Often away from assigned areas; can only be left alone with simple tasks; turns in paperwork with multiple reminders | Usually has to be found and immediately supervised. Unable to perform alone with any task |
| Professional demeanor | Demonstrates leadership. Superior work ethic. Always uses appropriate, professional language and grammar. | Always truthful and honest, good work ethic. Always in compliance with policies including dress code. Almost always uses proper language and grammar. | Usually honest and truthful; usually in compliance; average work ethic. Usually uses proper language and grammar. Occasionally uses slang. | Often out of compliance with regulations; low work ethic. Often uses inappropriate and unprofessional language. | Cannot be trusted. Disregards regulations. Poor work ethic. Language and vocabulary does not fit a professional setting. |
| Personal Appearance | Always complies completely with the dress code | | Out of dress code no more than twice in the semester | | Out of dress code more than twice in the semester |
| 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 1 st things 1 st All required equipment on hand before the exam; chart checked and routine researched prior to the 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 | Confused; appears lost and uninformed. Often doesn't know what to do. |
| Ability to follow instructions | Assumes responsibility for all instructions, | Above average; usually learns quickly | Average. Sometimes requires refresher instruction | Seldom learns the 1 st time. Unable to assimilate implied | Unable to follow directions: verbal, written or implied. |

| | | | | | |
|-------------------------------------|---|---|--|--|---|
| | including implied; learns quickly; only needs to be told once | | | instruction | Ignores instruction. |
| Performance under Pressure | Always responds exceptionally well | Occasionally displays frustration | Easily frustrated | Does not handle stress well. Often displays frustration | Complete breakdown under stress. |
| 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. | Can only perform textbook procedures on textbook patients. Unable to analyze situations or adjust to special needs. |
| Efficiency of work | Always completes exams quickly and correctly with limited motion, and without 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. | Continuously goaded and prodded to work. |
| Quantity of work(check-offs) | Received the maximum number of check-offs | | Received the minimum standard of check-offs | | Received less than the minimum standard |

COMMENTS:

GOALS OR IMPROVEMENTS NEEDED:

Student Evaluation and Grade Sheet (Technologist)

Student _____ Date: _____

Staff Signature: _____ Student Signature _____

| | Outstanding | Above Average | Average | Below Average | Unsatisfactory |
|------------------------------------|---|--------------------------------------|--------------------|---|--|
| Interpersonal relationships | Excellent team worker, professional, respected and respectful | Almost always works well with others | Average impression | At times arrogant; rude; harsh; passive; prone to gossip or subversion; at times uses a hostile tone. | Subversive, creates problems, often rude and confrontational; refuses constructive criticism. Hostile. |

| | | | | | |
|--|--|---|--|--|---|
| Patient perception | Always anticipates patient's wants and needs. Never has to be asked | Usually has everything immediately available for the patient | Provides for the patient promptly when asked | Often slow when providing for the patient | Frequently frustrates the situation in the room by misinterpreting the patient's needs. |
| Initiative | Never idle. Always busy with productive work. | Occasionally has to be asked to perform procedures | Does what is asked | Has to be told what to do; has to be prodded to work. | Actively avoids work. Lazy |
| Self confidence | Eagerly attempts new procedures (with proper supervision), displays independence | Willingly performs new procedures when encouraged | Hesitant to attempt new procedures | Won't work independently or OVER confident | Actively avoids new procedures or extremely overconfident, possibly threat to patient |
| Attitude and flexibility | Superior attitude towards others, facilities and learning. Readily adapts without complaining to changing environments and schedules | Good attitude. Adapts well. | Usually has a good attitude. Adapts when changes are necessary. | Often displays an unprofessional attitude towards others. Adapts, but doesn't like it. | Poor attitude, as displayed by behavior towards others; argumentative. Hesitant to work. Has to be made to accept changes. Ignores instruction. |
| Dependability | Always available; completes exams efficiently; completes paperwork without reminder. Self reliant | Usually available; usually completes exams efficiently; usually submits paperwork on time | Sometimes out of assigned area; often needs help completing assignments; turns in paperwork when asked | Often away from assigned areas; can only be left alone with simple tasks; turns in paperwork with multiple reminders | Usually has to be found and immediately supervised. Unable to perform alone with any task |
| Professional demeanor | Demonstrates leadership. Superior work ethic. Always uses appropriate, professional language and grammar. | Always truthful and honest, good work ethic. Always in compliance with policies including dress code. Almost always uses proper language and grammar. | Usually honest and truthful; usually in compliance; average work ethic. Usually uses proper language and grammar. Occasionally uses slang. | Often out of compliance with regulations; low work ethic. Often uses inappropriate and unprofessional language. | Cannot be trusted. Disregards regulations. Poor work ethic. Language and vocabulary does not fit a professional setting. |
| Personal Appearance | Always complies completely with the dress code | | Out of dress code no more than twice in the semester | | Out of dress code more than twice in the semester |
| 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 1 st things 1 st All required equipment on hand before the exam; chart checked and routine researched prior to the 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 | Confused; appears lost and uninformed. Often doesn't know what to do. |
| Ability to follow instructions | Assumes responsibility for all instructions, including implied; learns quickly; only | Above average; usually learns quickly | Average. Sometimes requires refresher instruction | Seldom learns the 1 st time. Unable to assimilate implied instruction | Unable to follow directions: verbal, written or implied. Ignores instruction. |

| | | | | | |
|-------------------------------------|---|---|--|--|---|
| | needs to be told once | | | | |
| Performance under Pressure | Always responds exceptionally well | Occasionally displays frustration | Easily frustrated | Does not handle stress well. Often displays frustration | Complete breakdown under stress. |
| 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. | Can only perform textbook procedures on textbook patients. Unable to analyze situations or adjust to special needs. |
| Efficiency of work | Always completes exams quickly and correctly with limited motion, and without 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. | Continuously goaded and prodded to work. |
| Quantity of work(check-offs) | Received the maximum number of check-offs | | Received the minimum standard of check-offs | | Received less than the minimum standard |

COMMENTS:

GOALS OR IMPROVEMENTS NEEDED:

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 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". No books or help allowed. The student will wait for the next exam of that type to come to the department and try again for a "check-off".

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.

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.
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 (post dating) 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, if there are not sufficient check-offs for a 2 or 4 in that category.

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.**
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.

****Falsification and submission of any form will constitute non re-entry dismissal from the program.**

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 2001 *Standards for an Accredited Educational Program in Radiologic Sciences* defines direct and indirect supervision. Refer to CLINICAL pages 50.

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 | NUMBER OF CHECK-OFF'S | NUMBER OF CONT. COMPS | FINAL COMPS 2 ND YEAR |
|------------------------|----------------|---------------------------------|-----------------------|-----------------------|----------------------------------|
| 1 ST FALL | 100 75 0 | RADR 1311 EXAMS | 15 10 <10 | NONE | NONE |
| 1 ST SPRING | 100 75 0 | RADR 1311 RADR 2301 EXAMS | 30 20 <20 | 15 10 <10 | NONE |
| 1 ST SUMMER | 100 75 | ALL EXAMS | 45 35 | 30 25 | NONE |

| | | | | | |
|-----------------|-----|-----------|-----|-----|-----|
| | 0 | | <35 | <25 | |
| 2 ND | 100 | ALL EXAMS | 60 | 45 | 30 |
| FALL | 75 | | 50 | 40 | 25 |
| | 0 | | <50 | <40 | <25 |
| 2 ND | 100 | ALL EXAMS | 75 | 60 | 55 |
| SPRING | 75 | | 65 | 55 | 50 |
| | 0 | | <65 | <55 | <50 |
| 2 ND | 100 | ALL EXAMS | 80 | 68 | 68 |
| SUMMER | 75 | | 75 | 63 | 63 |
| | 0 | | <66 | <58 | <58 |

ALL MANDATORY COMPETENCIES ARE REQUIRED TO GRADUATE!

NOTE:

1. Simulations may be done on elective exams with approval from your Clinical Instructor.
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 to achieve the competency three times.
4. Elective exams are tagged by ** on monthly and yearly procedure lists.
5. UNLESS exams on the monthly and yearly procedure lists are marked with ** those exams are MANDATORY.

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!
- 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.

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. Also, some 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.

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

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, independently identifies the mistake and independently makes corrections, the clinical instructor may use his/her judgement as to whether or not the student is competent in that examination.

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.

ADDITIONAL COMMENTS:

If your markers appear on the radiograph, you are responsible for the examination.

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.

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.

Evaluations from technologists will be used as input for assessment 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.

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

A grade of F may be submitted for the student if proper paper work is not submitted on schedule. Example: monthly procedure records, check off's, make up time, journal, etc.

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.

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 INELIGABLE 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

3. 2 no-call no-show absences

4. Clocking in to work while on clinical time

5. Falsifying sign in sheets (yours or anyone else's)

6. Submission of any type of falsified forms

Refusal to comply with dress code.

Failure of the Personal Appearance 2 times.

3 incidences of lost 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

by a faculty member

All of the reasons for dismissal above will result in the student being ineligible for re-entry. 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

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

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

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.

****All competencies, paper work, documentation, make up work, etc., are due on the Wednesday before Tyler Junior College finals week. Work submitted after that date 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 DEemeanor, WHICH CONSTITUTES A FAILING GRADE IN THAT CATEGORY.



SECTION III

DOCUMENTS OF INTEREST



The American Registry of Radiologic Technologists[®]
(as copied from <http://www.arrt.org>)

ARRT Standards of Ethics
Effective: July 2003

PREAMBLE

The Standards of Ethics of The American Registry of Radiologic Technologists shall apply solely to persons holding certificates from ARRT who either hold current registrations by ARRT or formerly held registrations by ARRT (collectively, “Registered Technologists”), and to persons applying for examination and certification by ARRT in order to become Registered Technologists (“Candidates”). The Standards of Ethics are intended to be consistent with the Mission Statement of ARRT, and to promote the goals set forth in the Mission Statement.

A. CODE OF ETHICS

The Code of Ethics forms the first part of the Standards of Ethics. The Code of Ethics shall serve as a guide by which Registered Technologists and Candidates may evaluate their professional conduct as it relates to patients, health care consumers, employers, colleagues and other members of the health care team. The Code of Ethics is intended to assist Registered Technologists and Candidates in maintaining a high level of ethical conduct and in providing for the protection, safety and comfort of patients. The Code of Ethics is aspirational.

1. The radiologic technologist conducts herself or himself in a professional manner, responds to patient needs and supports colleagues and associates in providing quality patient care.
2. The radiologic technologist acts to advance the principal objective of the profession to provide services to humanity with full respect for the dignity of mankind.
3. The radiologic technologist delivers patient care and service unrestricted by the concerns of personal attributes or the nature of the disease or illness, and without discrimination on the basis of sex, race, creed, religion or socioeconomic status.
4. The radiologic technologist practices technology founded upon theoretical knowledge and concepts, uses equipment and accessories consistent with the purposes for which they were designed, and employs procedures and techniques appropriately.
5. The radiologic technologist assesses situations; exercises care, discretion and judgment; assumes responsibility for professional decisions; and acts in the best interest of the patient.
6. The radiologic technologist acts as an agent through observation and communication to obtain pertinent information for the physician to aid in the diagnosis and treatment of the patient and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.
7. The radiologic technologist uses equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice, and demonstrates expertise in minimizing radiation exposure to the patient, self and other members of the health care team.

8. The radiologic technologist practices ethical conduct appropriate to the profession and protects the patient's right to quality radiologic technology care.
9. The radiologic technologist respects confidences entrusted in the course of professional practice, respects the patient's right to privacy and reveals confidential information only as required by law or to protect the welfare of the individual or the community.
10. The radiologic technologist continually strives to improve knowledge and skills by participating in continuing education and professional activities, sharing knowledge with colleagues and investigating new aspects of professional practice.

B. RULES OF ETHICS

The Rules of Ethics form the second part of the Standards of Ethics. They are mandatory and directive-specific standards of minimally acceptable professional conduct for all present Registered Technologists and Candidates. Certification is a method of assuring the medical community and the public that an individual is qualified to practice within the profession. Because the public relies on certificates and registrations issued by ARRT, it is essential that Registered Technologists and Candidates act consistently with these Rules of Ethics. These Rules of Ethics are intended to promote the protection, safety and comfort of patients. The Rules of Ethics are enforceable. Registered Technologists and Candidates engaging in any of the following conduct or activities, or who permit the occurrence of the following conduct or activities with respect to them, have violated the Rules of Ethics and are subject to sanctions as described here under:

1. Employing fraud or deceit in procuring or attempting to procure, maintain, renew or obtain reinstatement of certification or registration as issued by ARRT; employment in radiologic technology; or a state permit, license or registration certificate to practice radiologic technology. This includes altering in any respect any document issued by the ARRT or any state or federal agency, or by indicating in writing certification or registration with the ARRT when that is not the case.
2. Subverting or attempting to subvert ARRT's examination process. Conduct that subverts or attempts to subvert ARRT's examination process includes, but is not limited to:
 - i. conduct that violates the security of ARRT examination materials, such as removing or attempting to remove examination materials from an examination room, or having unauthorized possession of any portion of or information concerning a future, current or previously administered examination of ARRT; or disclosing information concerning any portion of a future, current or previously administered examination of ARRT; or disclosing what purports to be, or under all circumstances is likely to be understood by the recipient as, any portion of or "inside" information concerning any portion of a future, current or previously administered examination of ARRT;
 - ii. conduct that in any way compromises ordinary standards of test administration, such as communicating with another Candidate during administration of the examination,

copying another Candidate's answers, permitting another Candidate to copy one's answers, or possessing unauthorized materials; or

- iii. impersonating a Candidate or permitting an impersonator to take the examination on one's own behalf.
3. Convictions, criminal proceedings or military court-martials as described below:
 - i. Conviction of a crime, including a felony, a gross misdemeanor or a misdemeanor with the sole exception of speeding and parking violations. All alcohol and/or drug related violations must be reported.
 - ii. Criminal proceeding where a finding or verdict of guilt is made or returned but the adjudication of guilt is either withheld or not entered, or a criminal proceeding where the individual enters a plea of guilty or nolo contendere.
 - iii. Military court-martials that involve substance abuse, any sex-related infractions, or patient-related infractions.
 4. Failure to report to the ARRT that:
 - . charges regarding the person's permit, license or registration certificate to practice radiologic technology or any other medical or allied health profession are pending or have been resolved adversely to the individual in any state, territory or country, (including but not limited to, imposed conditions, probation, suspension or revocation); or
 - i. that the individual has been refused a permit, license or registration certificate to practice radiologic technology or any other medical or allied health profession by another state, territory or country.
 5. Failure or inability to perform radiologic technology with reasonable skill and safety.
 6. Engaging in unprofessional conduct, including, but not limited to:
 - . a departure from or failure to conform to applicable federal, state or local governmental rules regarding radiologic technology practice; or, if no such rule exists, to the minimal standards of acceptable and prevailing radiologic technology practice;
 - i. any radiologic technology practice that may create unnecessary danger to a patient's life, health or safety; or
 - ii. any practice that is contrary to the ethical conduct appropriate to the profession that results in the termination from employment. Actual injury to a patient or the public need not be established under this clause.

7. Delegating or accepting the delegation of a radiologic technology function or any other prescribed health care function when the delegation or acceptance could reasonably be expected to create an unnecessary danger to a patient's life, health or safety. Actual injury to a patient need not be established under this clause.
8. Actual or potential inability to practice radiologic technology with reasonable skill and safety to patients by reason of illness, use of alcohol, drugs, chemicals or any other material; or as a result of any mental or physical condition.
9. Adjudication as mentally incompetent, mentally ill, a chemically dependent person, or a person dangerous to the public, by a court of competent jurisdiction.
10. Engaging in any unethical conduct, including, but not limited to, conduct likely to deceive, defraud or harm the public; or demonstrating a willful or careless disregard for the health, welfare or safety of a patient. Actual injury need not be established under this clause.
11. Engaging in conduct with a patient that is sexual or may reasonably be interpreted by the patient as sexual, or in any verbal behavior that is seductive or sexually demeaning to a patient; or engaging in sexual exploitation of a patient or former patient. This also applies to any unwanted sexual behavior, verbal or otherwise, that results in the termination of employment. This rule does not apply to pre-existing consensual relationships.
12. Revealing a privileged communication from or relating to a former or current patient, except when otherwise required or permitted by law.
13. Knowingly engaging or assisting any person to engage in, or otherwise participating in, abusive or fraudulent billing practices, including violations of federal Medicare and Medicaid laws or state medical assistance laws.
14. Improper management of patient records, including failure to maintain adequate patient records or to furnish a patient record or report required by law; or making, causing or permitting anyone to make false, deceptive or misleading entry in any patient record.
15. Knowingly aiding, assisting, advising or allowing a person without a current and appropriate state permit, license or registration certificate or a current certificate of registration with ARRT to engage in the practice of radiologic technology, in a jurisdiction which requires a person to have such a current and appropriate state permit, license or registration certificate or a current and appropriate certification of registration with ARRT in order to practice radiologic technology in such jurisdiction.
16. Violating a rule adopted by any state board with competent jurisdiction, an order of such board, or state or federal law relating to the practice of radiologic technology, or any other medical or allied health professions, or a state or federal narcotics or controlled substance law.
17. Knowingly providing false or misleading information that is directly related to the care of a former or current patient.

18. Practicing outside the scope of practice authorized by the individual's current state permit, license or registration certificate, or the individual's current certificate of registration with ARRT.
19. Making a false statement or knowingly providing false information to ARRT or failing to cooperate with any investigation of ARRT or the Ethics Committee.
20. Engaging in false, fraudulent, deceptive or misleading communications to any person regarding the individual's education, training, credentials, experience or qualifications, or the status of the individual's state permit, license or registration certificate in radiologic technology or certificate of registration with ARRT.
21. Knowing of a violation or a probable violation of any Rule of Ethics by any Registered Technologist or by a Candidate and failing to promptly report in writing the same to the ARRT.

C. ADMINISTRATIVE PROCEDURES

These Administrative Procedures provide for the structure and operation of the Ethics Committee; they detail procedures followed by the Ethics Committee and by the Board of Trustees of ARRT in handling challenges raised under the Rules of Ethics, and in handling matters relating to the denial of an application for examination (for reasons other than failure to meet the criteria as stated in Article II, Sections 2.02 and 2.03 of the Rules and Regulations of ARRT, in which case, there is no right to a hearing) or the denial of renewal or reinstatement of a registration. All Registered Technologists and Candidates are required to comply with these Administrative Procedures; the failure to cooperate with the Ethics Committee or the Board of Trustees in a proceeding on a challenge may be considered by the Ethics Committee and by the Board of Trustees according to the same procedures and with the same sanctions as failure to observe the Rules of Ethics.

1. Ethics Committee

- a. Membership and Responsibilities of the Ethics Committee. The President, with the approval of the Board of Trustees, appoints at least three Trustees to serve as members of the Ethics Committee, each such person to serve on the Committee until removed and replaced by the President, with the approval of the Board of Trustees, at any time, with or without cause. The President, with the approval of the Board of Trustees, will also appoint a fourth, alternate member to the Committee. The alternate member will participate on the Committee in the event that one of the members of the Ethics Committee is unable to participate. The Ethics Committee is responsible for
 1. investigating each alleged breach of the Rules of Ethics and determining whether a Registered Technologist or Candidate has failed to observe the Rules of Ethics in the Standards, and determining an appropriate sanction; and
 2. periodically assessing the Code of Ethics, Rules of Ethics and Administrative Procedures in the Standards and recommending any amendments to the Board of Trustees.

- b. The Chair of the Ethics Committee. The President, with the approval of the Board of Trustees, appoints one member of the Ethics Committee as the Committee's Chair to serve for a term of two years as the principal administrative officer responsible for management of the promulgation, interpretation and enforcement of the Standards of Ethics. The President may remove and replace the Chair of the Committee, with the approval of the Board of Trustees, at any time, with or without cause. The Chair presides at, and participates in, meetings of the Ethics Committee and is responsible directly and exclusively to the Board of Trustees, using staff, legal counsel and other resources necessary to fulfill the responsibilities of administering the Standards of Ethics.
- c. Preliminary Screening of Potential Violation of the Rules of Ethics. The Chair of the Ethics Committee shall review each alleged violation of the Rules of Ethics that is brought to the attention of the Ethics Committee. If in the sole discretion of the Chair
 - 1. there is insufficient information upon which to base a charge of a violation of the Rules of Ethics, or
 - 2. the allegations against the Registered Technologist or Candidate are patently frivolous or inconsequential, or
 - 3. the allegations if true would not constitute a violation of the Rules of Ethics, the Chair may summarily dismiss the matter. The Chair may be assisted by staff and/or legal counsel of ARRT. The Chair shall report each such summary dismissal to the Ethics Committee.
- d. Alternative Dispositions. At the Chair's direction and upon request, the Executive Director of ARRT shall have the power to investigate allegations and to enter into negotiations with the Registered Technologist or Candidate regarding the possible settlement of an alleged violation of the Rules of Ethics. The Executive Director may be assisted by staff members and/or legal counsel of ARRT. The Executive Director is not empowered to enter into a binding settlement, but rather may recommend a proposed settlement to the Ethics Committee. The Ethics Committee may accept the proposed settlement, make a counterproposal to the Registered Technologist or Candidate, or reject the proposed settlement and proceed under these Administrative Procedures.
- e. Summary Suspensions. If an alleged violation of the Rules of Ethics involves the occurrence, with respect to a Registered Technologist, of an event described in paragraph 3 of the Rules of Ethics, or any other event that the Ethics Committee determines would, if true, potentially pose harm to the health, safety or well being of any patient or the public, then notwithstanding anything apparently or expressly to the contrary contained in these Administrative Procedures, the Ethics Committee may, without prior notice to the Registered Technologist and without a prior hearing, summarily suspend the registration of the Registered Technologist pending a final determination under these Administrative Procedures with respect to the alleged violation of the Rules of Ethics in fact occurred. Within five working days after the Ethics Committee summarily suspends the registration of a Registered Technologist in accordance with this provision, the Ethics Committee shall, by

certified mail, return receipt requested, give to the Registered Technologist written notice that describes (1) the summary suspension, (2) the reason or reasons for it, and (3) the right of the Registered Technologist to request a hearing with respect to the summary suspension by written notice to the Ethics Committee, which written notice must be received by the Ethics Committee not later than 15 days after the date of the written notice of summary suspension by the Ethics Committee to the Registered Technologist. If the Registered Technologist timely requests a hearing with respect to the summary suspension, the hearing shall be held before the Ethics Committee or a panel comprised of no fewer than three members of the Ethics Committee as promptly as practicable, but in any event within 30 days after the Ethics Committee's receipt of the Registered Technologist's request for the hearing. The applicable provisions of paragraph 2 of these Administrative Procedures shall govern all hearings with respect to summary suspensions, except that neither a determination of the Ethics Committee, in the absence of a timely request for a hearing by the affected Registered Technologist, nor a determination by the Ethics Committee or a panel following a timely requested hearing is appealable to the Board of Trustees.

2. Hearings

Whenever the ARRT proposes to take action in respect to the denial of an application for examination (for reasons other than failure to meet the criteria as stated in Article II, Sections 2.02 and 2.03 of the Rules and Regulations of ARRT, in which case there is no right to a hearing) or of an application for renewal or reinstatement of a registration, or in connection with the revocation or suspension of a certificate or registration, or the censure of a Registered Technologist for an alleged violation of the Rules of Ethics, it shall give written notice thereof to such person, specifying the reasons for such proposed action. A Registered Technologist or a Candidate to whom such notice is given shall have 30 days from the date the notice of such proposed action is mailed to make a written request for a hearing. The written request for a hearing must be accompanied by a nonrefundable hearing fee in the amount of \$100. In rare cases, the hearing fee may be waived, in whole or in part, at the sole discretion of the Ethics Committee.

Failure to make a written request for a hearing and to remit the hearing fee (unless the hearing fee is waived in writing by the ARRT) within such period shall constitute consent to the action taken by the Ethics Committee or the Board of Trustees pursuant to such notice. A Registered Technologist or a Candidate who requests a hearing in the manner prescribed above shall advise the Ethics Committee of his or her intention to appear at the hearing. A Registered Technologist or a Candidate who requests a hearing may elect to appear by a written submission which shall be verified or acknowledged under oath.

Failure to appear at the hearing or to supply a written submission in response to the charges shall be deemed a default on the merits and shall be deemed consent to whatever action or disciplinary measures which the Ethics Committee determines to take. Hearings shall be held at such date, time and place as shall be designated by the Ethics Committee or the Executive Director. The Registered Technologist or the Candidate shall be given at least 30 days' notice of the date, time and place of the hearing.

The hearing is conducted by the Ethics Committee with any three or more of its members participating, other than any member of the Ethics Committee whose professional activities are conducted at a location in the approximate area of the Registered Technologist or the Candidate in question. In the event of disqualification, the President may appoint a Trustee to serve on the Ethics Committee for the sole purpose of participating in the hearing and rendering a decision. At the hearing, ARRT shall present the charges against the Registered Technologist or Candidate in question, and the facts and evidence of ARRT in respect to the basis or bases for the proposed action or disciplinary measure. The Ethics Committee may be assisted by legal counsel. The Registered Technologist or Candidate in question, by legal counsel or other representative if he or she desires (at the sole expense of the Registered Technologist or Candidate in question), shall have the right to call witnesses, present testimony and be heard in his or her own defense; to hear the testimony of and cross-examine any witnesses appearing at such hearing; and to present such other evidence or testimony as the Ethics Committee shall deem appropriate to do substantial justice. Any information may be considered which is relevant or potentially relevant. The Ethics Committee shall not be bound by any state or federal rules of evidence. A transcript or an audio recording of the hearing is made. The Registered Technologist or Candidate in question shall have the right to submit a written statement at the close of the hearing.

In a case where ARRT proposes to take action in respect to the denial of an application for examination (for reasons other than failure to meet the criteria as stated in Article II, Sections 2.02 and 2.03) or the denial of renewal or reinstatement of a registration, the Ethics Committee shall assess the evidence presented at the hearing and make its decision accordingly, and shall prepare written findings of fact and its determination as to whether grounds exist for the denial of an application for examination or renewal or reinstatement of a registration, and shall promptly transmit the same to the Board of Trustees and to the Registered Technologist or Candidate in question.

In the case of alleged violations of the Rules of Ethics by a Registered Technologist, the Ethics Committee shall assess the evidence presented at the hearing and make its decision accordingly, and shall prepare written findings of fact and its determination as to whether there has been a violation of the Rules of Ethics and, if so, the appropriate sanction; and shall promptly transmit the same to the Board of Trustees and to the Registered Technologist in question. Potential sanctions include denial of renewal or reinstatement of a registration with ARRT; revocation or suspension of a certification or registration, or both, with ARRT; or the public or private reprimand of a Registered Technologist.

Unless a timely appeal from any findings of fact and determination by the Ethics Committee is taken to the Board of Trustees in accordance with paragraph 3 below, the Ethics Committee's findings of fact and determination in any matter (including the specified sanction) shall be final and binding upon the Registered Technologist or Candidate in question.

3. Appeals

Except as otherwise noted in these Administrative Procedures, the Registered Technologist or Candidate may appeal any decision of the Ethics Committee to the Board of Trustees by submitting a written request for an appeal within 30 days after the decision of the Ethics Committee is mailed. The written request for an appeal must be accompanied by a nonrefundable appeal fee in the amount

of \$250. In rare cases, the appeal fee may be waived, in whole or in part, at the sole discretion of the Ethics Committee.

In the event of an appeal, those Trustees who participated in the hearing at the Ethics Committee shall not participate in the appeal. The remaining members of the Board of Trustees shall consider the decision of the Ethics Committee, the files and records of ARRT applicable to the case at issue, and any written appellate submission of the Registered Technologist or Candidate in question, and shall determine whether to affirm or to overrule the decision of the Ethics Committee or to remand the matter to the Ethics Committee for further consideration. In making such determination to affirm or to overrule, findings of fact made by the Ethics Committee shall be conclusive if supported by any evidence. The Board of Trustees may grant re-hearings, hear additional evidence or request that ARRT or the Registered Technologist or the Candidate in question provide additional information, in such matter, on such issues and within such time as it may prescribe.

All hearings and appeals provided for herein shall be private at all stages. It shall be considered an act of professional misconduct for any Registered Technologist or Candidate to make an unauthorized publication or revelation of the same, except to his or her attorney or other representative, immediate superior or employer.

4. Publication of Adverse Decisions

Final decisions that are adverse to the Registered Technologist or Candidate will be communicated to the appropriate authorities of all states, and provided in response to inquiries into a person's registration status. ARRT shall also have the right to publish any adverse decisions and the reasons therefore. For purposes of this paragraph, a "final decision" means and includes: a determination of the Ethics Committee relating to a summary suspension, if the affected Registered Technologist does not timely request a hearing; a non-appealable decision of the Ethics Committee or a panel relating to a summary suspension that is issued after a hearing on the matter; an appealable decision of the Ethics Committee from which no timely appeal is taken; and, in a case involving an appeal of an appealable decision of the Ethics Committee in a matter, the decision of the Board of Trustees in the matter.

Introduction To Radiography Practice Standards

(as copied from <http://www.arrt.org>)

The complex nature of disease processes involves multiple imaging modalities. Although an interdisciplinary team of radiologists, radiographers and support staff plays a critical role in the delivery of health services, it is the radiographer who performs the radiographic examination that creates the images needed for diagnosis. Radiography integrates scientific knowledge and technical skills with effective patient interaction to provide quality patient care and useful diagnostic information.

Radiographer

Radiographers must demonstrate an understanding of human anatomy, physiology, pathology and medical terminology. Radiographers must maintain a high degree of accuracy in radiographic positioning and exposure technique. He or she must maintain knowledge about radiation protection and safety. Radiographers prepare for and assist the radiologist in the completion of intricate radiographic examinations. They prepare and administer contrast media and medications in accordance with state and federal regulations. Radiographers are the primary liaison between patients and radiologists and other members of the support team. They must remain sensitive to the physical and emotional needs of the patient through good communication, patient assessment, patient monitoring and patient care skills. Radiographers use professional and ethical judgment and critical thinking when performing their duties. Quality improvement and customer service allow the radiographer to be a responsible member of the health care team by continually assessing professional performance. Radiographers embrace continuing education for optimal patient care, public education and enhanced knowledge and technical competence.

Education and Certification

Radiographers prepare for their role on the interdisciplinary team by satisfactorily completing an accredited educational program in Radiologic technology. Two-year certificate, associate degree and four-year baccalaureate degree programs exist throughout the United States. Accredited programs must meet specific curricular and educational standards. The Joint Review Committee on Education in Radiologic Technology (JRCERT) is the accrediting agency for Radiologic technology programs recognized by the U.S. Department of Education. Upon completion of a course of study in Radiologic technology, individuals may apply to take the national certification examination. The American Registry of Radiologic Technologists (ARRT) is the recognized certifying agency for radiographers. Those who successfully complete the certification examination in radiography may use the credential R.T.(R) following their name; the R.T. signifies registered technologist and the (R) indicates radiography. RT maintains ARRT certification, a level of expertise and awareness of changes and advances in practice, radiographers must complete 24 hours of appropriate continuing education every two years.

Practice Standards

The practice standards define the practice and establish general criteria to determine compliance. Practice standards are authoritative statements enunciated and promulgated by the profession for judging the quality of practice, service and education. They include desired and achievable levels of performance against which actual performance can be measured. Professional practice constantly changes and actual practice varies from state to state as determined by local law and community custom. Recognizing this, the profession has adopted standards that are general in nature. The general format was favored over a “cookbook” style or “step-by-step” approach that would be difficult to maintain in a changing environment and confining for those practitioners with an expanded practice. The standards focus on the dynamic nature of the health care delivery system. The standards are adaptable not only to the area of practice but also the locality of practice and institutional needs. While a minimum standard of acceptable performance is appropriate and should

be followed by all practitioners in a specific area, it is unrealistic and highly inappropriate to assume that professional practice is the same in all regions of the United States.¹ State statute or regulation may dictate practice parameters. To conduct an appropriate review of the standards, one must look to the professional standard as well as local or state law that may impact the nature and scope of practice.

Format

The cohesive nature and inherent differences of medical imaging and radiation therapy are recognized in the general format of the standards. The standards are divided into three sections: Clinical performance, quality performance and professional performance.

Clinical Performance Standards. The clinical performance standards define the activities of the practitioner in the care of patients and delivery of diagnostic or therapeutic procedures and treatments. The section incorporates patient assessment and management with procedural analysis, performance and evaluation.

Quality Performance Standards. The quality performance standards define the activities of the practitioner in the technical areas of performance including equipment and material assessment, safety standards and total quality management.

¹The term “practitioner” is used in all areas of the standards in place of the various names used in medical imaging and radiation therapy, such as radiologic technologist, sonographer or radiation therapist. Practitioner is defined as any individual practicing in a specific area or discipline. The profession believes that any individual practicing in one of the defined disciplines or specialties should be held to a minimum standard of performance to protect the patients who receive professional services.

Professional Performance Standards. The professional performance standards define the activities of the practitioner in the areas of education, interpersonal relationships, personal and professional self-assessment and ethical behavior. Each section of the standards is subdivided into individual standards. The standards are numbered and followed by a term or set of terms that identify the standards, such as “assessment” or “analysis/determination.” The next statement is the expected performance of the practitioner when performing the procedure or treatment. A rationale statement follows and explains why a practitioner should adhere to the particular standard of performance.

Criteria. Criteria are used in evaluating a practitioner’s performance. Each set of criteria is divided into two parts, the general criteria and the specific criteria. Both the measurement and specific criteria should be used when evaluating performance.

General Criteria. General criteria are written in a general style that applies to either medical imaging or radiation therapy practitioners. These criteria are the same in all sections of the standards and should be used for the appropriate area of practice. For example, a radiographer should use good professional judgment to make decisions concerning the adaptation of equipment and technical variables for a diagnostic procedure. Under these circumstances, the evaluation of the decision-making process concerning radiation therapy procedures would not be appropriate and should not be applied unless the procedure is diagnostic in nature, such as simulation.

Specific Criteria. Specific criteria meet the needs of the practitioners in the various areas of professional performance. While many areas of performance within medical imaging and radiation therapy are similar, others are not. The specific criteria are drafted with these differences in mind. For example, a criterion that calls for daily review of patient treatment records and doses to ensure that treatment does not exceed prescribed dose or normal tissue tolerance is imperative for those who practice in radiation therapy yet is not applicable to those who practice in the imaging professions. A profession's practice standards serve as a guide for appropriate practice. Standards provide role definition for practitioners that can be used by individual facilities to develop job descriptions and practice parameters. Those outside the medical imaging and radiation therapy community can use the standards as an overview of the role and responsibilities of the practitioner as defined by the profession.

Radiography Clinical Performance Standards

Standard One - Assessment

The practitioner collects pertinent data about the patient and about the procedure.

Rationale

Information about the patient's health status is essential in providing appropriate imaging and therapeutic services.

General Criteria The practitioner:

1. Uses consistent and appropriate techniques to gather relevant information from the medical record, significant others and health care providers. The collection of information is determined by the patient's needs or condition.
2. Reconfirms patient identification and verifies the procedure requested or prescribed.
3. Verifies the patient's pregnancy status when appropriate.

4. Determines whether the patient has been appropriately prepared for the procedure.
5. Assesses factors that may contraindicate the procedure, such as medications, insufficient patient preparation or artifacts.

Specific Criteria The practitioner:

1. Identifies artifact-producing objects such as dentures, chest leads, jewelry and hearing aids.

Standard Two - Analysis/Determination

The practitioner analyzes the information obtained during the assessment phase and develops an action plan for completing the procedure.

Rationale

Determining the most appropriate action plan enhances patient safety and comfort, optimizes diagnostic and therapeutic quality and improves cost effectiveness.

General Criteria

The practitioner:

1. Selects the most appropriate and cost-effective action plan after reviewing all pertinent data and assessing the patient's abilities and condition.
2. Uses his or her professional judgment to adapt imaging and therapeutic procedures to improve diagnostic quality and therapeutic outcome.
3. Consults appropriate medical personnel to determine a modified action plan when necessary.
4. Determines the needs for accessory equipment.

Specific Criteria

The practitioner:

1. Evaluates lab values prior to administering contrast media and beginning interventional procedures.
2. Selects appropriate shielding devices.
3. Selects appropriate patient immobilization devices.
4. Determines appropriate type and dose of contrast agent to be administered, based on the patient's age, weight and medical/physical status.
5. Reviews the patient's chart and the physician's request to determine optimal imaging procedure for suspected pathology.

Standard Three - Patient Education

The practitioner provides information about the procedure to the patient, significant others and health care providers.

Rationale

Communication and education are necessary to establish a positive relationship with the patient, significant others and health care providers.

General Criteria The practitioner:

1. Verifies that the patient has consented to the procedure and fully understands its risks, benefits, alternatives and follow-up. Verifies that written consent has been obtained when appropriate.
2. Provides accurate explanations and instructions at an appropriate time and at a level the patient can understand. Addresses and documents patient questions and concerns regarding the procedure when appropriate.
3. Refers questions about diagnosis, treatment or prognosis to the patient's physician.
4. Provides appropriate information to any individual involved in the patient's care.

Specific Criteria

The practitioner:

1. Consults with other departments, such as patient transportation and anesthesia, for patient services.
2. Instructs patients regarding preparation prior to imaging procedures, including providing information about oral or bowel preparation and allergy preparation.
3. Ensures that all procedural requirements are in place to achieve a quality diagnostic examination.
4. Explains precautions regarding administration of contrast agents to nursing mothers.

Standard Four – Implementation

The practitioner implements the action plan.

Rationale

Quality patient services are provided through the safe and accurate implementation of a deliberate plan of action.

General Criteria

The practitioner:

1. Implements an action plan that falls within established protocols and guidelines.
2. Elicits the cooperation of the patient to carry out the action plan.
3. Uses an integrated team approach as needed.
4. Modifies the action plan according to changes in the clinical situation.
5. Administers first aid or provides life support in emergency situations.
6. Uses accessory equipment when appropriate
7. Assesses and monitors the patient's physical and mental state.

Specific Criteria

The practitioner:

1. Performs venipuncture, IV patency and maintenance procedures according to established guidelines.
2. Administers contrast agents according to established guidelines.

3. Monitors the patient for reactions to contrast agent.
4. Uses appropriate radiation safety devices.
5. Monitors the patient's physical condition during the procedure.
6. Applies appropriate patient immobilization devices when necessary.

Standard Five – Evaluation

The practitioner determines whether the goals of the action plan have been achieved.

Rationale

Careful examination of the procedure is necessary to determine that all goals have been met.

General criteria

The practitioner:

1. Evaluates the patient and the procedure to identify variances that may affect patient outcome. The evaluation process should be timely, accurate and comprehensive.
2. Measures the procedure against established protocols and guidelines.
3. Identifies any exceptions to the expected outcome.
4. Documents any exceptions clearly and completely.
5. Develops a revised action plan to achieve the intended outcome if necessary.
6. Disseminates reasons for revisions to all team members.

Specific Criteria

The practitioner:

1. Reviews images to determine if additional images will enhance the diagnostic value of the procedure.

Standard Six – Implementation

The practitioner implements the revised action plan.

Rationale

It may be necessary to make changes to the action plan to achieve the intended outcome.

General Criteria

The practitioner:

1. Bases the revised action plan on the patient's condition and the most appropriate means of achieving the intended outcome.
2. Takes action based on patient and procedural variances.
3. Measures and evaluates the results of the revised action plan.
4. Notifies appropriate health provider when immediate clinical response is necessary based on procedural findings and patient condition.

Specific Criteria

None added.

Standard Seven – Outcomes Measurement

The practitioner reviews and evaluates the outcome of the procedure.

Rationale

To evaluate the quality of care, the practitioner compares the actual outcome with the intended outcome.

General Criteria

The practitioner:

1. Reviews all diagnostic or therapeutic data for completeness and accuracy.
2. Determines whether the actual outcome is within the established criteria.
3. Evaluates the process and recognizes opportunities for future changes.
4. Assesses the patient's physical and mental status prior to discharge from the practitioner's care.

Specific Criteria

None added.

Standard Eight – Documentation

The practitioner documents information about patient care, the procedure and the final outcome.

Rationale

Clear and precise documentation is essential for continuity of care, accuracy of care and quality assurance.

General Criteria

The practitioner:

1. Documents diagnostic, treatment and patient data in the appropriate record. Documentation must be timely, accurate, concise and complete.
2. Documents any exceptions from the established criteria or procedures.
3. Records diagnostic or treatment data.

Specific Criteria

None added.

Quality Performance Standards

Standard One - Assessment

The practitioner collects pertinent information regarding equipment, the procedures and the work environment.

Rationale

The planning and provision of safe and effective medical services relies on the collection of pertinent information about equipment, procedures and the work environment.

General Criteria

The practitioner:

1. Ensures that services are performed in a safe environment in accordance with established guidelines.
2. Ensures that equipment maintenance and operation comply with established guidelines.
3. Assesses equipment to determine acceptable performance based on established guidelines.
4. Ensures that protocol and procedure manuals include recommended criteria and are reviewed and revised on a regular basis.

Specific Criteria

The practitioner:

1. Maintains controlled access to restricted area during radiation exposure to ensure safety of patients, visitors and hospital personnel.

Standard Two - Analysis/Determination

The practitioner analyzes information collected during the assessment phase and determines whether changes need to be made to equipment, procedures or the work environment.

Rationale

Determination of acceptable performance is necessary for the provision of safe and effective services.

General Criteria

The practitioner:

1. Assesses whether services, procedures and the work environment meet or exceed established guidelines. If not, the practitioner develops an action plan.
2. Evaluates equipment to determine if it meets or exceeds established standards. If not, the practitioner develops an action plan.
3. Analyzes information collected during the assessment phase to determine whether optimal services are being provided. If not, the practitioner develops an action plan.

Specific Criteria

None added.

Standard Three - Education

The practitioner informs patients, the public and other health care providers about procedures, equipment and facilities.

Rationale

Open communication promotes safe practices.

General Criteria

The practitioner:

1. Elicits confidence and cooperation from the patient, the public and health care providers by providing timely communication and effective instruction.
2. Presents explanations and instructions at the learner's level of understanding and learning style.

Specific Criteria

The practitioner:

1. Instructs health care providers and students regarding radiographic procedures and radiation safety.
2. Educates the public about radiographic procedures and radiation safety.

Standard Four - Performance

The practitioner performs quality assurance activities or acquires information on equipment and materials.

Rationale

Quality assurance activities provide valid and reliable information regarding the performance of materials and equipment.

General Criteria

The practitioner:

1. Performs quality assurance activities based on established quality protocols.
2. Provides evidence of ongoing quality assurance activities.

Specific Criteria

The practitioner:

1. Monitors image production to determine variance from established quality standards.

Standard Five - Evaluation

The practitioner evaluates quality assurance results and establishes an appropriate action plan.

Rationale

Materials, equipment and procedure safety depend on ongoing quality assurance activities that evaluate performance based on established guidelines.

General Criteria

The practitioner:

1. Compares quality assurance results to established acceptable values.
2. Verifies quality assurance testing conditions and results.
3. Formulates an action plan following verification of testing.

Specific Criteria

None added.

Standard Six - Implementation

The practitioner implements the quality assurance action plan.

Rationale

Implementation of a quality assurance action plan is imperative for quality diagnostic and therapeutic procedures and patient care.

General Criteria

The practitioner:

1. Obtains assistance from appropriate personnel to implement the quality assurance action plan.
2. Implements the quality assurance action plan.

Specific Criteria

None added.

Standard Seven - Outcomes Measurement

The practitioner assesses the outcome of the quality assurance action plan in accordance with established guidelines.

Rationale

Outcomes assessment is an integral part of the ongoing quality assurance plan to enhance diagnostic and therapeutic services.

General Criteria

The practitioner:

1. Reviews the implementation process for accuracy and validity.
2. Determines whether the performance of equipment and materials is safe for practice based on outcomes assessment.
3. Develops and implements a modified action plan when testing results are not in compliance with guidelines.

Specific Criteria

None added.

Standard Eight – Documentation

The practitioner documents quality assurance activities and results.

Rationale

Documentation provides evidence of quality assurance activities designed to enhance the safety of

patients, the public and health care providers during diagnostic and therapeutic services.

General Criteria

The practitioner:

1. Maintains documentation of quality assurance activities, procedures and results in accordance with established guidelines.
2. Provides timely, concise, accurate and complete documentation.
3. Provides documentation that adheres to current protocol, policy and procedures.

Specific Criteria

None added.

Professional Performance Standards

Standard One – Quality

The practitioner strives to provide optimal care to all patients.

Rationale

All patients expect and deserve optimal care during diagnosis and treatment.

General Criteria

The practitioner:

1. Works with others to elevate the quality of care.
2. Participates in quality assurance programs.
3. Adheres to the accepted standards, policies and procedures adopted by the profession and regulated by law.
4. Provides the best possible diagnostic study or therapeutic treatment for each patient by applying professional judgment and discretion.
5. Anticipates and responds to the needs of the patient.

Specific Criteria

None added.

Standard Two – Self-Assessment

The practitioner evaluates personal performance, knowledge and skills.

Rational

Self-assessment is an important tool in professional growth and development.

General Criteria

The practitioner:

1. Monitors personal work ethics, behaviors and attitudes.
2. Monitors and evaluates orientation guidelines and recommends improvements or changes as needed.
3. Evaluates performance and recognizes opportunities for improvement.
4. Recognizes his or her strengths and uses them to benefit patients, coworkers and the profession.
5. Performs procedures only after receiving appropriate education and training.

6. Recognizes and takes advantage of opportunities for educational growth and improvement in technical and problem-solving skills.
7. Actively participates in professional societies and organizations.

Specific Criteria

None added.

Standard Three – Education

The practitioner acquires and maintains current knowledge in clinical practice.

Rationale

Advancements in medical science require enhancement of knowledge and skills through education.

General Criteria

The practitioner:

1. Maintains appropriate credentials and certification related to clinical practice.
2. Demonstrates completion of the appropriate education related to clinical practice.
3. Participates in educational activities to enhance knowledge, skills and performance.
4. Shares knowledge and expertise with others.

Specific Criteria

None added.

Standard Four – Collaboration and Collegiality

The practitioner promotes a positive, collaborative practice atmosphere with other members of the health care team.

Rationale

To provide quality patient care, all members of the health care team must communicate effectively and work together efficiently.

General Criteria

The practitioner:

1. Shares knowledge and expertise with colleagues, peers, students and all members of the health care team.
2. Develops collaborative partnerships with other health care providers in the interest of diagnostic and therapeutic quality and cost effectiveness and safety.

Specific Criteria

None added.

Standard Five – Ethics

The practitioner adheres to the profession's accepted Code of Ethics.

Rationale

All decisions and actions made on behalf of the patient are based on a sound ethical foundation.

General Criteria

The practitioner:

1. Provides health care services with respect for the patient's dignity and age-specific needs.
2. Acts as a patient advocate to support patients' rights.
3. Takes responsibility for professional decisions.
4. Delivers patient care and service without bias based on personal attributes, nature of the disease, sex, race, creed, religion or socioeconomic status.
5. Respects the patient's right to privacy and confidentiality.
6. Adheres to the established practice standards of the profession.

Specific Criteria

None added.

Standard Six – Exploration and Investigation

The practitioner participates in the acquisition, dissemination and advancement of the professional knowledge base.

Rationale

Scholarly activities such as research, scientific investigation, presentation and publication advance the profession and thereby improve the quality and efficiency of patient services.

General Criteria

The practitioner:

1. Reads and critically evaluates research in diagnostic and therapeutic services.
2. Investigates new, innovative methods and applies them in practice.
3. Shares information with colleagues through publication, presentation and collaboration.
4. Pursues lifelong learning.
5. Participates in data collection.

Specific Criteria

None added.

POSITION DESCRIPTION

| | |
|---------------------------|--|
| Discipline: | Radiography |
| Position Title(s): | Radiographer (ASRT preferred term) Radiologic Technologist Diagnostic Medical Radiographer |
| Scope of Practice: | Radiography - Practice Comprehensive |

Position Summary:

Provides health care services, applying x-ray energy to assist in diagnosis or treatment. Performs radiographic procedures and related techniques, producing images for the interpretation by; or at the request of a licensed practitioner. Exercises professional judgment in performance of services and maintains a demeanor complementary to medical ethics. Provides appropriate patient care and recognizes patient conditions essential for successful completion of the procedure.

Duties and Responsibilities:

1. Performs diagnostic radiographic procedures.
 - A. Corroborates patient's clinical history with procedure, assuring information is documented and available for use by a licensed practitioner.
 - B. Prepares patient for procedures; providing instructions to obtain desired results, gain cooperation, and minimize anxiety.
 - C. Selects and operates radiography equipment, imagine and/or associated accessories to successfully perform procedures.
 - D. Positions patient to best demonstrate anatomic area of interest , respecting patient ability and comfort.
 - E. Immobilizes patients as required for appropriate examination.
 - F. Determines radiographic technique exposure factors.
 - G. Applies principles of radiation protection to minimize exposure to patient, self and others.
 - H. Evaluates radiographs or images for technical quality, assuring proper identification is recorded.
 - I. Assumes responsibility for provision of physical and psychological needs of patients during procedures.
 - J. Practices aseptic techniques as necessary.
 - K. Understands methods and is capable of performing venipunctures.
 - L. In agreement with state statute(s) and/or where institutional policy permits, prepares, identifies and/or administers contrast media and/or medications as prescribed by a licensed practitioner.
 - M. Verifies informed consent for, and assists a licensed practitioner with interventional procedures.

- N. Assist licensed practitioner with fluoroscopic and specialized interventional radiography procedures.
 - O. May perform non-interpretive fluoroscopic procedures as appropriate and consistent with applicable state statutes.
 - P. Initiates basic life support action when necessary.
2. Provides patient education.
 3. Assists in maintaining records, respecting confidentiality and established policy.
 4. Assumes responsibility for assigned area and report equipment malfunction.
 5. Provides input for equipment purchase and supply decisions.
 6. Provides practical instruction for students and/or other health care professionals.
 7. Participates in the department's quality assessment and improvement plan. May be responsible for specific quality control duties in the assigned area.
 8. May be responsible for control of inventory and purchase of supplies for the assigned area.
 9. Maintains knowledge of and observes Universal precautions.
 10. Understands and applies patient relations skills.
 11. Pursues appropriate continuing education.

Qualifications:

1. Graduate of a J.R.C.E.R.T. (Joint Review Committee on Education in Radiologic Technology) accredited radiography program or equivalent.
2. Certification by the American Registry of Radiologic Technologists in radiography, or equivalent.
3. Possess valid state credential, if applicable.

Standards for an Accredited Educational Program in Radiologic Sciences

EFFECTIVE JANUARY 1, 2002

Adopted by:

**The Joint Review Committee on Education
in Radiologic Technology: January 1996; Revised 2001**

Essentials initially adopted:

Radiography-1944; Revised 1955, 1969, 1978, 1983, 1990, 1994

Radiation Therapy-1968; Revised 1976, 1981, 1988, 1994

The Joint Review Committee on Education in Radiologic Technology is dedicated to excellence in education and to quality and safety of patient care through the accreditation of educational programs in radiation and imaging sciences.

The Joint Review Committee on Education in Radiologic Technology (JRCERT) is recognized by the United States Department of Education to accredit educational programs in radiography and radiation therapy. The JRCERT awards accreditation to programs demonstrating substantial compliance with these **STANDARDS**.

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Statement on Assessment of Program Effectiveness¹

The Joint Review Committee on Education in Radiologic Technology (JRCERT) believes that the accreditation process offers a means of providing public assurance that a program meets standards and of stimulating programmatic improvement. The JRCERT Standards for an Accredited Educational Program in Radiologic Sciences (STANDARDS) require a program to articulate its purposes; to demonstrate that it has adequate human, financial, and physical resources effectively organized for the accomplishment of its purposes; to document its effectiveness in accomplishing its purposes; and to provide assurance that it can continue to meet accreditation standards. A variety of assessment approaches in its evaluation processes strengthens a program's ability to document its effectiveness.

The JRCERT believes that assessment leads to programmatic improvement. The JRCERT does not prescribe a specific approach to assessment. That determination should be made by the program in terms of its own purposes and resources. Assessment is not an end in itself but a means of gathering information that can be used in evaluating the program's ability to accomplish its purposes. An effective assessment process provides information that assists program officials in making useful decisions about the program and in developing plans for its improvement.

The JRCERT expects programs to develop a system of planning and evaluation to demonstrate its effectiveness in relation to student achievement. The program is expected to describe and document student learning outcomes and the pursuit of academic excellence.

Introduction

The Standards for an Accredited Educational Program in Radiologic Sciences are directed at the assessment of program and student outcomes. Using these STANDARDS, the goals of the accreditation process are to: protect the student and the public, stimulate programmatic improvement, provide protective measures for federal funding or financial aid, and promote academic excellence.

Each STANDARD is titled and includes a narrative statement, supported by objectives, describing the outcome required for compliance with the STANDARD. Selected key terms are underlined and defined in the Glossary to clarify the meaning. The definitions contained in the Glossary are considered a component of the STANDARDS and, as such, must be satisfied to comply with the STANDARDS.

¹This Statement is based on a similar Statement developed by the Commission on

Institutions of Higher Education, North Central Association of Colleges and Schools. The JRCERT acknowledges, with thanks, the permission of the North Central Association for its use.

Standards for an Accredited Educational Program in Radiologic Sciences

Table of Contents

Standard One: Mission/Goals, Outcomes, and Effectiveness

The program, in support of its mission and goals, develops and implements a system of planning and evaluation to determine its effectiveness and uses the results for program improvement.

Standard Two: Program Integrity.

The program demonstrates integrity in representations to communities of interest and the public, in pursuit of educational excellence, and in treatment of and respect for students, faculty, and staff.

Standard Three: Organization and Administration

Organizational and administrative structures support quality and effectiveness of the educational process.

Standard Four: Curriculum and Academic Practices.

The program's curriculum and academic practices promote the synthesis of theory, use of current technology, competent clinical practice, and professional values.

Standard Five: Resources and Student Services

The program's learning resources, learning environments, and student services are sufficient to support its mission and goals.

Standard Six: Human Resources.

The program has sufficient qualified faculty and staff with delineated responsibilities to support the program's mission and goals.

Standard Seven: Students.

The program's and sponsoring institution's policies and procedures serve and protect the rights, health, and educational opportunities of all students.

Standard Eight: Radiation Safety.

Program policies and procedures are in compliance with federal and state radiation protection laws.

Standard Nine: Fiscal Responsibility.

The program and the sponsoring institution have adequate financial resources, demonstrate financial stability, and comply with obligations for Title IV federal funding, if applicable.

Glossary

Awarding, Maintaining, and Administering Accreditation

Standard One: Mission/Goals, Outcomes, and Effectiveness

The program, in support of its mission and goals, develops and implements a system of planning and evaluation to determine its effectiveness and uses the results for program improvement.

Objectives:

In support of **Standard One**, the program:

- 1.1 Has a mission statement that defines its purpose and scope.
- 1.2 Has written goals that outline what the program is designed to achieve.
- 1.3 Makes its mission statement and goals readily available to students, faculty, administrators, and the general public.
- 1.4 Develops and implements an assessment plan that identifies benchmarks for the measurement of outcomes in relation to its mission statement and goals and includes:
 - program completion rate;
 - clinical performance and clinical competence;
 - problem solving skills and critical thinking;
 - communication skills;
 - professional development and growth;
 - graduate satisfaction; and
 - employer satisfaction.
- 1.5 Documents outcomes consistent with each of the following JRCERT policies:
 - over the past five years, credentialing examination pass rate average of not less than 75% at first attempt; and
 - over the past five years, job placement rate of not less than 75% within six months of graduation.
- 1.6 Regularly solicits feedback from students, faculty, radiologists/radiation oncologists, graduates, employers, and other communities of interest.
- 1.7 Analyzes and uses feedback from communities of interest and outcome data for continuous improvement of its policies, procedures, and educational offerings.
- 1.8 Periodically evaluates its mission statement, goals, and assessment plan and makes revisions as necessary to achieve continuous quality improvement.

Standard Two: Program Integrity

The program demonstrates integrity in representations to communities of interest and the public, in pursuit of educational excellence, and in treatment of and respect for students, faculty, and staff.

Objectives:

In support of **Standard Two**, the program:

- 2.1 Adheres to high ethical standards in relation to students, faculty, and staff.
- 2.2 Has program faculty recruitment and employment practices that are nondiscriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, and national origin.
- 2.3 Publishes statements accurately reflecting the program's offerings.
- 2.4 Has due process procedures that are readily accessible, fair, and equitably applied.
- 2.5 Has a policy that assures timely and appropriate resolution of complaints regarding allegations of non-compliance with JRCERT STANDARDS and maintains a record of such complaints and their resolution.
- 2.6 Regularly evaluates program policies, procedures, and publications and revises as appropriate.
- 2.7 Documents the continuing accreditation of the sponsoring institution.
- 2.8 Documents the continuing recognition of each clinical education setting by applicable regulatory agencies.
- 2.9 Maintains JRCERT recognition of all clinical education settings.
- 2.10 Maintains JRCERT recognition of all applicable faculty appointments.
- 2.11 Complies with requirements to achieve and maintain JRCERT accreditation.

Standard Three: Organization and Administration

Organizational and administrative structures support quality and effectiveness of the educational process.

Objectives:

In support of **Standard Three**, the program:

- 3.1 Has organizational and administrative structures that support the program's mission and student learning outcomes.
- 3.2 Establishes and maintains affiliation agreements with clinical education settings.
- 3.3 Assures the security and confidentiality of student records, instructional materials, and other appropriate program materials.
- 3.4 Assures an appropriate relationship between program length and the subject matter taught and the objectives for the degree or credential offered.
- 3.5 Measures the length of all didactic and clinical courses in clock hours or credit hours.

Standard Four: Curriculum and Academic Practices

The program's curriculum and academic practices promote the synthesis of theory, use of current technology, competent clinical practice, and professional values.

Objectives:

In support of **Standard Four**, the program:

- 4.1 Maintains a master plan of education.
- 4.2 Follows a JRCERT recognized and accepted curriculum that prepares the student to practice in the professional discipline.
- 4.3 Provides a curriculum that promotes professional values, life-long learning, and competency in critical thinking and problem solving skills.
- 4.4 Provides a well-structured, competency based curriculum that supports the program's mission and goals.
- 4.5 Has a curriculum that reflects assessment of affective, cognitive, and psychomotor domains.
- 4.6 Provides learning opportunities in current and developing imaging and/or therapeutic technologies.
- 4.7 Provides equitable learning opportunities.

Standard Five: Resources and Student Services

The program's learning resources, learning environments, and student services are sufficient to support its mission and goals.

Objectives:

In support of **Standard Five**, the program:

5.1 Provides classrooms, laboratories, clinical education settings, administrative and faculty offices, and other facilities to support its mission and goals.

5.2 Provides clinical observation sites, as appropriate.

5.3 Has clinical education settings that provide students with a variety and volume of procedures for competency achievement.

5.4 Reviews, evaluates, and maintains learning resources to assure the achievement of student learning outcomes and program goals.

5.5 Reviews, evaluates, and maintains student services to assure the achievement of student learning outcomes and program goals.

Standard Six: Human Resources

The program has sufficient qualified faculty and staff with delineated responsibilities to support the program's mission and goals.

Objectives:

In support of **Standard Six**, the program:

6.1 Documents that all faculty and staff possess academic and professional qualifications appropriate for their assignments.

- Full-time Program Director:

- Holds, at a minimum, a masters degree;

- Is proficient in curriculum design, program administration, evaluation, instruction, and counseling;

- Documents the equivalent of three years full-time experience in the professional discipline;

Documents two years experience as an instructor in a JRCERT accredited program;
Holds American Registry of Radiologic Technologists certification or equivalent and registration in the pertinent discipline.

- **Didactic Program Faculty:**
 - Is qualified to teach the subject;
 - Is knowledgeable of course development, instruction, evaluation, and academic counseling;
 - Holds appropriate professional credentials, if applicable.

- **Full-Time Clinical Coordinator:**
 - Holds, at a minimum, a baccalaureate degree;
 - Is proficient in curriculum development, supervision, instruction, evaluation, and counseling;
 - Documents the equivalent of two years full-time experience in the professional discipline;
 - Documents a minimum of one year of experience as an instructor in a JRCERT accredited program;
 - Holds American Registry of Radiologic Technologists certification or equivalent and registration in the pertinent discipline.

- **Radiography Clinical Instructor(s) or Radiation Therapy Clinical Supervisor(s):**
 - Is proficient in supervision, instruction, and evaluation;
 - Documents the equivalent of two years full-time experience in the professional discipline;
 - Holds American Registry of Radiologic Technologists certification or equivalent and registration in the pertinent discipline.

- **Clinical Staff:**
 - Hold American Registry of Radiologic Technologists certification or equivalent and registration in the pertinent discipline.

6.2 Documents administrative, faculty, and clinical staff responsibilities are delineated and support the fulfillment of the program's mission and goals.

- **Program Director:**
 - Organizes, administers, reviews, develops, and assures program effectiveness;
 - Conducts on-going program assessment;
 - Participates in budget planning;
 - Evaluates and assures clinical education effectiveness;
 - Maintains current knowledge of the professional discipline and educational methodologies through continuing professional development;
 - Assumes the leadership role in the continued development of the program.

- **Didactic Faculty:**

Prepare and maintain course outlines and objectives, instruct and evaluate students, and report progress;
Cooperate with the program director in periodic review and revision of course materials;
Maintain appropriate expertise and competencies through continuing professional development.

- Clinical Coordinator:

Correlates clinical education with didactic education;
Evaluates students;
Coordinates clinical education and evaluates its effectiveness;
Cooperates with the program director in periodic review and revision of clinical course materials;
Maintains current knowledge of the professional discipline and educational methodologies through continuing professional development;
Maintains current knowledge of program policies, procedures, and student progress.

- Radiography Clinical Instructor(s) or Radiation Therapy Clinical Supervisor(s):

Is knowledgeable of program goals;
Understands the clinical objectives and clinical evaluation system;
Provides students with clinical instruction/supervision;
Evaluates students' clinical competence;
Maintains competency in the professional discipline and in instructional and evaluative techniques through continuing professional development;
Maintains current knowledge of program policies, procedures, and student progress.

- Clinical Staff:

Understand the clinical competency system;
Support the educational process;
Maintain current knowledge of program policies, procedures, and student progress.

6.3 Provides an adequate number of faculty to meet all educational, program, administrative, and accreditation requirements.

6.4 Provides support services to meet all educational, program, and administrative requirements.

6.5 Provides faculty with opportunities for continued professional development.

6.6 Evaluates didactic and clinical faculty performance regularly to assure instructional responsibilities are performed.

Standard Seven: Students

The program's and sponsoring institution's policies and procedures serve and protect the rights, health and educational opportunities of all students.

Objectives:

In support of **Standard Seven**, the program:

- 7.1 Has student recruitment and admission practices that are consistent with published policies of the program and sponsoring institution.
- 7.2 Uses student recruitment and admission practices that are non-discriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, and national origin.
- 7.3 Makes available to prospective students accurate information about admission policies, transfer credit, tuition and fees, refund policies, academic calendars, academic policies, graduation requirements, and student services.
- 7.4 Makes available to enrolled students accurate information about admission policies, transfer credit, tuition and fees, refund policies, academic calendars, academic policies, grading policies, graduation requirements, and student services.
- 7.5 Provides timely and supportive academic, behavioral, and clinical advisement to students enrolled in the program.
- 7.6 Provides student academic and clinical activities that are educationally valid and support attainment of student learning outcomes.
- 7.7 Safeguards the health and safety of students associated with educational activities through implemented policies and procedures in regard to workplace hazards, harassment, communicable diseases, and substance abuse.
- 7.8 Limits required clinical and academic involvement for students to not more than 40 hours per week.

Standard Eight: Radiation Safety

Program policies and procedures are in compliance with federal and state radiation protection laws.

Objectives:

In support of **Standard Eight**, the program:

- 8.1 Safeguards the health and safety of students associated with educational activities through the implementation of published policies and procedures that are in compliance with Nuclear Regulatory Commission regulations and state laws as applicable.
- 8.2 Has a pregnancy policy that is published and made known to accepted and enrolled female students that:
- is consistent with applicable federal regulations and state laws;
 - includes notice of voluntary disclosure; and
 - provides options for student continuance in the program.
- 8.3 Assures that students use equipment and accessories, employ techniques, and perform procedures in accordance with accepted equipment use and radiation safety practices to minimize radiation exposure to patients, selves, and others.
- 8.4 Assures that radiation therapy procedures are performed under the direct supervision of a qualified practitioner.
- 8.5 Assures that medical imaging procedures are performed under the direct supervision of a qualified practitioner until a radiography student achieves competency.
- 8.6 Assures that medical imaging procedures are performed under the indirect supervision of a qualified practitioner after a radiography student achieves competency.
- 8.7 Assures that radiography students repeating unsatisfactory radiographs are under the direct supervision of a qualified practitioner.
- 8.8 Maintains documentation that learning environments are in compliance with applicable state and federal radiation safety laws.

Standard Nine: Fiscal Responsibility

The program and the sponsoring institution have adequate financial resources, demonstrate financial stability, and comply with obligations for Title IV federal funding, if applicable.

Objectives:

In support of **Standard Nine**, the program:

- 9.1 Has sufficient on-going financial resources to support the program's mission and goals.
- 9.2 Provides the program director an opportunity to participate in the budget planning process.

9.3 For those institutions and programs for which the JRCERT or a mixed accreditor serves as gatekeeper for Title IV financial aid, maintains compliance with USDE policies and procedures.

Glossary

Affiliation Agreement - A formal written understanding between an institution sponsoring the program and an independent clinical education setting.

American Registry of Radiologic Technologists Certification or Equivalent - Certification by the American Registry of Radiologic Technologists or unrestricted state license to operate radiation producing equipment.

Assessment - The systematic collection, review, and use of information to improve student learning, educational quality, and program effectiveness.

Assessment Plan - Provides direction for actions and is a way to determine progress. At a minimum, an assessment plan should include goals, evaluation criteria and benchmarks, outcomes, and a plan of action.

Clinical Coordinator - Required if the program has 6 or more clinical education settings or more than 30 students enrolled in the clinical component. The clinical coordinator may not serve as program director. The clinical coordinator position may be considered equal to a full-time equivalent but may be shared by no more than four appointees.

Clinical Instructor(s) - In radiography one full-time equivalent clinical instructor for every 10 students involved in the competency achievement process.

Clinical Supervisor(s) - In radiation therapy, one clinical supervisor for each clinical education setting.

Clinical Education Setting - A facility recognized by the JRCERT as meeting appropriate qualifications for delivering clinical education and evaluation of clinical competency. A minimum of one clinical instructor/supervisor is designated at each site.

Clinical Observation Site - An observation site is used for student observation of the operation of equipment and/or procedures.

Clinical Staff - For radiography, the ratio of students to staff prior to student competency achievement in a given examination or procedure shall not exceed 1:1. For radiation therapy, the ratio of students to staff shall always be 1:1.

Communities of Interest - Institutions, organizations, groups and/or individuals interested in educational activities in radiologic sciences.

Competency Based - Student attainment of a specified level of proficiency.

Credentialing Examination Pass Rate - The number of graduates who pass the American Registry of Radiologic Technologists Credentialing examination or an unrestricted state licensing examination compared with the number of graduates who take the examination.

Direct Supervision - Student supervision by a qualified practitioner who reviews the procedure in relation to the student's achievement, evaluates the condition of the patient in relation to the student's knowledge, is present during the procedure, and reviews and approves the procedure. A qualified radiographer is present during student performance of a repeat of any unsatisfactory radiograph.

Due Process - The formal procedure for resolution of a grievance or complaint that identifies timeframes for completion of each step and provides for a final appeal to a source external to the program.

Gatekeeper - An agency with responsibility for oversight of the distribution, record keeping, and repayment of Title IV financial aid.

Goals - Ends or results the program wants to achieve.

Indirect Supervision - For radiography, that supervision provided by a qualified practitioner immediately available to assist students regardless of the level of student achievement. Immediately available is interpreted as the physical presence of a qualified practitioner 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.

Job Placement Rate - The number of students employed in the radiologic sciences compared to the number of students actively seeking employment in the radiologic sciences.

Learning Environment - Places, surroundings or circumstances where knowledge, understanding, or skills are studied or observed such as classrooms, laboratories and clinical education settings.

Learning Resources - Media and reference materials utilized to support and enhance the educational program and scholarly activity.

Master Plan of Education - Documentation of the entire course of study that includes at a minimum: didactic and clinical curricula, program policies and procedures, and strategies for assessing program effectiveness.

Mission Statement - A means to communicate an educational vision and purpose.

Mixed Accreditor - An accrediting agency whose responsibilities for accreditation include situations where the agency accredits the only educational program in an institution. Where there are multiple educational programs in an institution, the agency selected as the institutional accreditor.

Outcomes - Results, end products, or actual consequences resulting from the educational process. Outcomes include what the students demonstrated/accomplished or what the program achieved.

Program Completion Rate - The number of students who complete the program compared to the number of students initially enrolled in the program.

Program Length - Duration of the program which may be stated as total academic or calendar year(s), or total semesters, trimesters, or quarters.

Qualified Practitioner - A radiation therapist or radiographer possessing American Registry of Radiologic Technologists certification or equivalent and active registration in the pertinent discipline and practicing in the profession.

Recognized and Accepted Curriculum - 1) The latest American Society of Radiologic Technologists professional curriculum and/or 2) other professional curriculum adopted by the JRCERT Board of Directors following review and recommendation by the JRCERT Standards Committee.

Sponsoring Institution - The facility or organization that has primary responsibility for the educational program and grants the terminal award. A sponsoring institution must be accredited by a recognized agency or meet equivalent standards. Educational programs may be established in: community and junior colleges; senior colleges and universities, hospitals, medical schools, postsecondary vocational/technical schools and institutions; military/governmental facilities; proprietary schools; and consortia (two or more academic or clinical institutions that have formally agreed to sponsor the development and continuation of an educational program). Consortia must be structured to recognize and perform the responsibilities and functions of a sponsoring institution.

Title IV Financial Aid- Monies for education loaned or granted by the Federal government, e.g. Perkins loans, Stafford loans, PLUS loans, Pell grants, Supplemental Educational Opportunity grants and work-study programs.

Awarding, Maintaining, and Administering Accreditation

A. Program/Sponsoring Institution Responsibilities

1. Applying for Accreditation

The accreditation review process conducted by the Joint Review Committee on Education in Radiologic Technology (JRCERT) can be initiated only at the written request of the chief executive officer or an officially designated representative of the sponsoring institution. This process is initiated by submitting an application and self-study report, prepared according to JRCERT guidelines, to:

Joint Review Committee on Education in Radiologic Technology
20 North Wacker Drive, Suite 900
Chicago, IL 60606-2901

2. Administrative Requirements for Maintaining Accreditation

- a. Submitting the self-study report or a required progress report within a reasonable period of time, as determined by the JRCERT.
- b. Agreeing to a reasonable site visit date before the end of the period for which accreditation was awarded.
- c. Informing the JRCERT, within a reasonable period of time, of changes in the institutional or program officials, program director, clinical coordinator, and clinical supervisor(s) or clinical instructor(s).
- d. Paying JRCERT fees within a reasonable period of time.
- e. Returning, by the established deadline, a completed Annual Report.

Programs are required to comply with these and other administrative requirements for maintaining accreditation. Additional information on policies and procedures is available from the JRCERT.

Program failure to meet administrative requirements for maintaining accreditation may lead to being placed on Administrative Probationary Accreditation and ultimately to Withdrawal of Accreditation.

B. JRCERT Responsibilities

1. Administering the Accreditation Review Process

The JRCERT reviews educational programs to assess compliance with the Standards for an Accredited Educational Program in Radiologic Sciences.

The accreditation process includes a site visit.

Before the JRCERT takes accreditation action, the program being reviewed must respond to the report of findings.

The JRCERT is responsible for recognition of clinical education settings.

2. Accreditation Actions

JRCERT accreditation actions for Probation may be reconsidered following the established procedure.

JRCERT accreditation actions for Accreditation Withheld or Accreditation Withdrawn may be appealed following the established procedure.

All other JRCERT accreditation actions are final.

Procedures for reconsideration and appeal are published in the JRCERT Accreditation Handbook and are available upon request.

A program or sponsoring institution may, at any time prior to the final accreditation action, withdraw its request for initial or continuing accreditation.

Educators may wish to contact the following organizations for additional information and materials:

accreditation: Joint Review Committee on Education in Radiologic Technology

20 North Wacker Drive, Suite 900

Chicago, IL 60606-2901

(312) 704-5300

www.jrcert.org

curriculum: American Society of Radiologic Technologists

15000 Central Avenue, N.E.

Albuquerque, NM 87123-3917

(505) 298-4500

www.asrt.org

certification: American Registry of Radiologic Technologists

1255 Northland Drive

St. Paul, MN 55120-1155

(651) 687-0048

www.arrt.org

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Pages 90-109, "Accreditation Standards" copied from the JRCERT Website (<http://www.jrcert.org>), and the following page in Adobe Acrobat:
http://www.jrcert.org/pdfs/accreditation_process/standards/standards_%20for_an_accredited_educational_program_in_radiologic_sciences.pdf

Pages 110-111 are copied from the JRCERT website on the following Adobe Acrobat page:

http://www.jrcert.org/pdfs/accreditation_process/standards/interpretation_of_standards_forms.pdf

Joint Review Committee on Education in Radiologic Technology Interpretation of Standards for an Accredited Educational Program

in Radiologic Sciences

Standard Six: Human Resources

The program has sufficient qualified faculty and staff with delineated responsibilities to support program mission and goals. In support of Standard Six, the program:

Objective

6.1 Documents that all faculty and staff possess academic and professional qualifications appropriate for their assignments.

Full-time Program Director:

Interpretation:

Full-time status is determined by and consistent with the sponsoring institution's definition. For other than regular terms (e.g. summer session) when students are enrolled in didactic and/or clinical courses, the program director must be available to fulfill the responsibilities of the position as identified in Objective 6.2.

Full-time Clinical Coordinator:

Interpretation:

Full-time status is determined by and consistent with the sponsoring institution's definition. The clinical coordinator's position may be considered equal to a full-time equivalent but may be shared by no more than four appointees. For other than regular academic terms (e.g. summer session) when the students are enrolled in clinical courses, the clinical coordinator must be available to fulfill the responsibilities of the position as identified in Objective 6.2.

Adopted by the Joint Review Committee on Education in Radiologic Technology: 10/96

Revised: 9/00; 10/01 (effective 01/02)

Joint Review Committee on Education in Radiologic Technology Interpretation of Standards for an Accredited Educational Program in Radiologic Sciences

Standard Seven - Students

The program's and sponsoring institution's policies and procedures serve and protect the rights, health, and educational opportunities of all students. In support of Standard

Seven, the program:

Objective 7.7 Safeguards the health and safety of students associated with educational activities through implemented policies and procedures in regard to workplace hazards, harassment, communicable diseases, and substance abuse.

Interpretation:

Workplace hazards are conditions that expose students to recognized risks, such as chemical, electrical, and fire hazards, that could cause serious physical injury.

Adopted by the Joint Review Committee on Education in Radiologic Technology: 10/02

Joint Review Committee on Education in Radiologic Technology Interpretation of Standards for an Accredited Educational Program in Radiologic Sciences

Glossary

Sponsoring Institution - The facility or organization that has primary responsibility for the educational program and grants the terminal award. A sponsoring institution must be accredited by a recognized agency or meet equivalent standards. Educational programs may be established in: community and junior colleges; senior colleges and universities, hospitals, medical schools, postsecondary vocational/technical schools and institutions; military/governmental facilities; proprietary schools; and consortia (two or more academic or clinical institutions that have formally agreed to sponsor the development and continuation of an educational program). Consortia must be structured to recognize and perform the responsibilities and functions of a sponsoring institution.

Interpretation:

A healthcare system consists of multiple institutions operating under a common governing body or parent corporation. A healthcare system may not be identified as the program sponsor. A specific facility within the healthcare system must be identified as the sponsor. Adopted by the Joint Review Committee on Education in Radiologic Technology: 10/03

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, | 1 2 3 4 5 |

diagnoses system's performance, and corrects malfunctions.

- 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**

Pages 112-117 copied from <http://www.stcc.cc.tx.us/instruction/sskillschart.htm>

TYLER JUNIOR COLLEGE
 A.A.S. In Radiologic Technology
 Curriculum--2008-2009
FIRST YEAR

FICE CODE 003648
HEGIS CODE 8033
CIP CODE 51.0911

Lecture Laboratory External Contact Credit

| | | | Hours | Hours | Hours | Hours | Hours |
|--|--------------------------------|--|-------------|------------|---------------|---------------|-------------|
| <u>First Semester (16 weeks)</u> | | | | | | | |
| RADR | 2309 | Radiographic Imaging Equipment | 3.0 | 0.0 | 0.0 | 48.0 | 3.0 |
| RADR | 1303 | Patient Care | 3.0 | 0.0 | 0.0 | 48.0 | 3.0 |
| RADR | 1201 | Introduction To Radiology | 2.0 | 0.0 | 0.0 | 32.0 | 2.0 |
| RADR | 1311 | Basic Radiographic Procedures | 2.0 | 3.0 | 0.0 | 80.0 | 3.0 |
| RADR | 1266 | Practicum I | 0.0 | 0.0 | 16.0 | 256.0 | 2.0 |
| Total Hours: | | | 10.0 | 3.0 | 16.0 | 464.0 | 13.0 |
| <u>Second Semester (16 weeks)</u> | | | | | | | |
| RADR | 2313 | Radiation Biology and Protection Principles of Radiographic Imaging | 3.0 | 0.0 | 0.0 | 48.0 | 3.0 |
| RADR | 1213 | I Intermediate Radiographic | 2.0 | 0.0 | 0.0 | 32.0 | 2.0 |
| RADR | 2301 | Procedures | 2.0 | 3.0 | 0.0 | 80.0 | 3.0 |
| RADR | 1267 | Practicum II | 0.0 | 0.0 | 16.0 | 256.0 | 2.0 |
| SPCH | Elective | | 3.0 | 0.0 | 0.0 | 48.0 | 3.0 |
| BIOL | 2401 | Anatomy & Physiology I | 3.0 | 3.0 | 0.0 | 96.0 | 4.0 |
| Total Hours: | | | 13.0 | 6.0 | 16.0 | 560.0 | 17.0 |
| <u>Summer (11 weeks)</u> | | | | | | | |
| RADR | 2266 | Practicum III | 0.0 | 0.0 | 24.0 | 264.0 | 2.0 |
| RADR | 2336 | Special Patient Applications | 3.0 | 1.0 | 0.0 | 64.0 | 3.0 |
| RADR | 2233 | Advanced Medical Imaging | 2.0 | 0.0 | 0.0 | 32.0 | 2.0 |
| Total Hours: | | | 5.0 | 1.0 | 24.0 | 360.0 | 7.0 |
| <u>SECOND YEAR</u> | | | | | | | |
| <u>First Semester (16 weeks)</u> | | | | | | | |
| RADR | 2366 | Practicum IV | 0.0 | 0.0 | 24.0 | 384.0 | 3.0 |
| RADR | 2217 | Radiographic Pathology Principles of Radiographic Imaging | 2.0 | 0.0 | 0.0 | 32.0 | 2.0 |
| RADR | 2305 | II | 3.0 | 1.0 | 0.0 | 64.0 | 3.0 |
| BIOL | 2402 | Anatomy and Physiology II | 3.0 | 3.0 | 0.0 | 96.0 | 4.0 |
| ENGL | 1301 | Composition and Rhetoric | 3.0 | 0.0 | 0.0 | 48.0 | 3.0 |
| Total Hours: | | | 11.0 | 4.0 | 24.0 | 624.0 | 15.0 |
| <u>Second Semester (16 weeks)</u> | | | | | | | |
| RADR | 2367 | Practicum V Advanced Radiographic | 0.0 | 0.0 | 24.0 | 384.0 | 3.0 |
| RADR | 2431 | Procedures | 3.0 | 2.0 | 0.0 | 80.0 | 4.0 |
| Computer Science Elective** | | | 2.0 | 4.0 | 0.0 | 96.0 | 3.0 |
| Social/Behavioral Science Elective*** | | | 3.0 | 0.0 | 0.0 | 48.0 | 3.0 |
| Humanities or Fine Arts Elective* | | | 3.0 | 0.0 | 0.0 | 48.0 | 3.0 |
| Total Hours: | | | 11.0 | 6.0 | 24.0 | 656.0 | 16.0 |
| <u>Summer (11 weeks)</u> | | | | | | | |
| RADR | 2267 | Practicum VI Radiologic Technology Seminar | 0.0 | 0.0 | 16.0 | 176.0 | 2.0 |
| RADR | 2235 | **** | 2.0 | 0.0 | 0.0 | 32.0 | 2.0 |
| Total Hours: | | | 2.0 | 0.0 | 16.0 | 208.0 | 4.0 |
| Grand Total: | | | | | 1760.0 | 2872.0 | 72.0 |
| <u>Bold face:</u> | Denotes General Education Core | | | | | | |

- * Humanities Elective: Any 3 hour course in , humanities, journalism (mass communication only, literature, sophomore foreign language or sign language, philosophy, or a fine arts class (history or appreciation of art or music or theater).
- ** Any laboratory based computer class
- *** Social/Behavioral Science Elective: any 3 hour course in economics, geography, government, psychology, sociology, history or social work.
- **** *Capstone Course*

TYLER JUNIOR COLLEGE
 RADIOLOGIC TECHNOLOGY PROGRAM
 APPROXIMATE COSTS OF PROGRAM - 2008-2009***

| <u>Fall - First Year</u> | <u>In District</u> | <u>Out of District</u> | <u>Out of State</u> |
|----------------------------|--------------------|------------------------|---------------------|
| Tuition (12 hours) | \$ 632.00 | \$ 1,016.00 | \$ 1,352.00 |
| Laboratory Fees / Supplies | 50.00 | 50.00 | 50.00 |

| | | | |
|----------------------------------|--------------------|--------------------|---------------------|
| Books | 850.00 | 850.00 | 850.00 |
| Liability & Health Insurance | 115.00 | 115.00 | 115.00 |
| Uniforms, Badges and Markers | 250.00 | 250.00 | 250.00 |
| Criminal Background/Drug Screen | 31.00 | 31.00 | 31.00 |
| 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 | 2,125.00 | 2,509.00 | 2,845.00 |
| <u>Spring - First Year</u> | | | |
| Tuition (17 hours) | 862.00 | 1,406.00 | 1,882.00 |
| Laboratory Fees | 25.00 | 25.00 | 25.00 |
| Books | 120.00 | 120.00 | 120.00 |
| Radiation Dosimetry Fee | 25.00 | 25.00 | 25.00 |
| TOTAL | 1,032.00 | 1,576.00 | 2,052.00 |
| <u>Summer - First Year</u> | | | |
| Tuition (7 hours) | 402.00 | 626.00 | 822.00 |
| Books | 200.00 | 200.00 | 200.00 |
| TOTAL | 602.00 | 826.00 | 1,022.00 |
| <u>Fall - Second Year</u> | | | |
| Tuition (15 hours) | 770.00 | 1,250.00 | 1,670.00 |
| Uniforms | 100.00 | 100.00 | 100.00 |
| Books | 120.00 | 120.00 | 120.00 |
| Radiation Dosimetry Fee | 25.00 | 25.00 | 25.00 |
| Liability & Health Insurance | 115.00 | 115.00 | 115.00 |
| TOTAL | 1,130.00 | 1,610.00 | 2,030.00 |
| <u>Spring - Second Year</u> | | | |
| Tuition (16 hours) | 816.00 | 1,328.00 | 1,776.00 |
| Radiation Dosimetry Fee | 25.00 | 25.00 | 25.00 |
| Books | 70.00 | 70.00 | 70.00 |
| TOTAL | 911.00 | 1,423.00 | 1,871.00 |
| <u>Summer - Second Year</u> | | | |
| Tuition (4 Hours) | 264.00 | 392.00 | 512.00 |
| ARRT Examination Application Fee | 150.00 | 150.00 | 150.00 |
| State License Application Fee | 32.00 | 32.00 | 32.00 |
| Books/Supplies | 90.00 | 90.00 | 90.00 |
| TOTAL | 536.00 | 664.00 | 784.00 |
| GRAND TOTAL | \$ 6,336.00 | \$ 8,608.00 | \$ 10,604.00 |

Approximate cost of 24 month program

***Does not include general academic curriculum books

SECTION IV

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. 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.

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.

**TYLER JUNIOR COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM**

25 Texas Administrative Code 289.202
Program Policy

The TAC 289.202 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 Signature _____

Date _____

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>

Regulatory Guide 8.13 - Instruction Concerning Prenatal Radiation Exposure

(Draft was issued as DG-8014)


Revision 3
June 1999

[Availability Notice](#)

A. INTRODUCTION

The Code of Federal Regulations in [10 CFR Part 19](#), "Notices, Instructions and Reports to Workers: Inspection and Investigations," in [Section 19.12](#), "Instructions to Workers," requires instruction in "the health protection problems associated with exposure to radiation and/or radioactive material, in precautions or procedures to minimize exposure, and in the purposes and functions of protective devices employed." The instructions must be "commensurate with potential radiological health protection problems present in the work place."

The Nuclear Regulatory Commission's (NRC's) regulations on radiation protection are specified in [10 CFR Part 20](#), "Standards for Protection Against Radiation"; and [Section 20.1208](#), "Dose to an Embryo/Fetus," requires licensees to "ensure that the dose to an embryo/fetus during the entire pregnancy, due to occupational exposure of a declared pregnant woman, does not exceed 0.5 rem (5 mSv)." Section 20.1208 also requires licensees to "make efforts to avoid substantial variation above a uniform monthly exposure rate to a declared pregnant woman." A declared pregnant woman is defined in [10 CFR 20.1003](#) as a woman who has voluntarily informed her employer, in writing, of her pregnancy and the estimated date of conception.

This regulatory guide is intended to provide information to pregnant women, and other personnel, to help them make decisions regarding radiation exposure during pregnancy. This Regulatory Guide 8.13 supplements [Regulatory Guide 8.29](#) , "Instruction Concerning Risks from Occupational Radiation Exposure" (Ref. 1), which contains a broad discussion of the risks from exposure to ionizing radiation.

Other sections of the NRC's regulations also specify requirements for monitoring external and internal occupational dose to a declared pregnant woman. In [10 CFR 20.1502](#), "Conditions Requiring Individual Monitoring of External and Internal Occupational Dose," licensees are required to monitor the occupational dose to a declared pregnant woman, using an individual monitoring device, if it is likely that the declared pregnant woman will receive, from external sources, a deep dose equivalent in excess of 0.1 rem (1 mSv). According to Paragraph (e) of [10 CFR 20.2106](#), "Records of Individual Monitoring Results," the licensee must maintain records of dose to an embryo/fetus if monitoring was required, and the records of dose to the embryo/fetus must be kept with the records of dose to the declared pregnant woman. The declaration of pregnancy must be kept on file, but may be maintained separately from the dose records. The licensee must retain the required form or record until the Commission terminates each pertinent license requiring the record.

The information collections in this regulatory guide are covered by the requirements of [10 CFR Parts 19](#) or [20](#), which were approved by the Office of Management and Budget, approval numbers 3150-0044 and 3150-0014, respectively. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

B. DISCUSSION

As discussed in [Regulatory Guide 8.29 \(Ref. 1\)](#), exposure to any level of radiation is assumed to carry with it a certain amount of risk. In the absence of scientific certainty regarding the relationship between low dose exposure and health effects, and as a conservative assumption for radiation protection purposes, the scientific community generally assumes that any exposure to ionizing radiation may cause undesirable biological effects and that the likelihood of these effects increases as the dose increases. At the occupational dose limit for the whole body of 5 rem (50 mSv) per year, the risk is believed to be very low.

The magnitude of risk of childhood cancer following in utero exposure is uncertain in that both negative and positive studies have been reported. The data from these studies "are consistent with a lifetime cancer risk resulting from exposure during gestation which is two to three times that for the adult" (NCRP Report No. 116, Ref. 2). The NRC has reviewed the available scientific literature and has concluded that the 0.5 rem (5 mSv) limit specified in [10 CFR 20.1208](#) provides an adequate margin of protection for the embryo/fetus. This dose limit reflects the desire to limit the total lifetime risk of leukemia and other cancers associated with radiation exposure during pregnancy.

In order for a pregnant worker to take advantage of the lower exposure limit and dose monitoring provisions specified in [10 CFR Part 20](#), the woman must declare her pregnancy in writing to the licensee. A form letter for declaring pregnancy is provided in this guide or the licensee may use its own form letter for declaring pregnancy. A separate written declaration should be submitted for each pregnancy.

C. REGULATORY POSITION

1. Who Should Receive Instruction

Female workers who require training under [10 CFR 19.12](#) should be provided with the information contained in this guide. In addition to the information contained in Regulatory Guide 8.29 (Ref. 1),

this information may be included as part of the training required under 10 CFR 19.12.

2. Providing Instruction

The occupational worker may be given a copy of this guide with its Appendix, an explanation of the contents of the guide, and an opportunity to ask questions and request additional information. The information in this guide and Appendix should also be provided to any worker or supervisor who may be affected by a declaration of pregnancy or who may have to take some action in response to such a declaration.

Classroom instruction may supplement the written information. If the licensee provides classroom instruction, the instructor should have some knowledge of the biological effects of radiation to be able to answer questions that may go beyond the information provided in this guide. Videotaped presentations may be used for classroom instruction. Regardless of whether the licensee provides classroom training, the licensee should give workers the opportunity to ask questions about information contained in this Regulatory Guide 8.13. The licensee may take credit for instruction that the worker has received within the past year at other licensed facilities or in other courses or training.

3. Licensee's Policy on Declared Pregnant Women

The instruction provided should describe the licensee's specific policy on declared pregnant women, including how those policies may affect a woman's work situation. In particular, the instruction should include a description of the licensee's policies, if any, that may affect the declared pregnant woman's work situation after she has filed a written declaration of pregnancy consistent with [10 CFR 20.1208](#).

The instruction should also identify who to contact for additional information as well as identify who should receive the written declaration of pregnancy. The recipient of the woman's declaration may be identified by name (e.g., John Smith), position (e.g., immediate supervisor, the radiation safety officer), or department (e.g., the personnel department).

4. Duration of Lower Dose Limits for the Embryo/Fetus

The lower dose limit for the embryo/fetus should remain in effect until the woman withdraws the declaration in writing or the woman is no longer pregnant. If a declaration of pregnancy is withdrawn, the dose limit for the embryo/fetus would apply only to the time from the estimated date of conception until the time the declaration is withdrawn. If the declaration is not withdrawn, the written declaration may be considered expired one year after submission.

5. Substantial Variations Above a Uniform Monthly Dose Rate


According to 10 CFR 20.1208(b), "The licensee shall make efforts to avoid substantial variation above a uniform monthly exposure rate to a declared pregnant woman so as to satisfy the limit in paragraph (a) of this section," that is, 0.5 rem (5 mSv) to the embryo/fetus. The National Council on Radiation Protection and Measurements (NCRP) recommends a monthly equivalent dose limit of 0.05 rem (0.5 mSv) to the embryo/fetus once the pregnancy is known (Ref. 2). In view of the NCRP recommendation, any monthly dose of less than 0.1 rem (1 mSv) may be considered as not a substantial variation above a uniform monthly dose rate and as such will not require licensee justification. However, a monthly dose greater than 0.1 rem (1 mSv) should be justified by the licensee.

D. IMPLEMENTATION

The purpose of this section is to provide information to licensees and applicants regarding the NRC staff's plans for using this regulatory guide.

Unless a licensee or an applicant proposes an acceptable alternative method for complying with the specified portions of the NRC's regulations, the methods described in this guide will be used by the NRC staff in the evaluation of instructions to workers on the radiation exposure of pregnant women.

REFERENCES

1. USNRC, "Instruction Concerning Risks from Occupational Radiation Exposure," [Regulatory Guide 8.29, Revision 1](#) , February 1996.
2. National Council on Radiation Protection and Measurements, *Limitation of Exposure to Ionizing Radiation*, NCRP Report No. 116, Bethesda, MD, 1993.

APPENDIX: QUESTIONS AND ANSWERS CONCERNING PRENATAL RADIATION EXPOSURE

1. Why am I receiving this information?
The NRC's regulations (in 10 CFR 19.12, "Instructions to Workers") require that licensees instruct individuals working with licensed radioactive materials in radiation protection as appropriate for the situation. The instruction below describes information that occupational workers and their supervisors should know about the radiation exposure of the embryo/fetus of pregnant women. The regulations allow a pregnant woman to decide whether she wants to formally declare her pregnancy to take advantage of lower dose limits for the embryo/fetus. This instruction provides information to help women make an informed decision whether to declare a pregnancy.
2. If I become pregnant, am I required to declare my pregnancy?
No. The choice whether to declare your pregnancy is completely voluntary. If you choose to declare your pregnancy, you must do so in writing and a lower radiation dose limit will apply to your embryo/fetus. If you choose not to declare your pregnancy, you and your embryo/fetus will continue to be subject to the same radiation dose limits that apply to other occupational workers.
3. If I declare my pregnancy in writing, what happens?
If you choose to declare your pregnancy in writing, the licensee must take measures to limit the dose to your embryo/fetus to 0.5 rem (5 millisievert) during the entire pregnancy. This is one-tenth of the dose that an occupational worker may receive in a year. If you have already received a dose exceeding 0.5 rem (5 mSv) in the period between conception and the declaration of your pregnancy, an additional dose of 0.05 rem (0.5 mSv) is allowed during the remainder of the pregnancy. In addition, 10 CFR 20.1208, "Dose to an Embryo/Fetus," requires licensees to make efforts to avoid substantial variation above a uniform monthly dose rate so that all the 0.5 rem (5 mSv) allowed dose does not occur in a short period during the pregnancy.
This may mean that, if you declare your pregnancy, the licensee may not permit you to do some of your normal job functions if those functions would have allowed you to receive more than 0.5 rem, and you may not be able to have some emergency response responsibilities.
4. Why do the regulations have a lower dose limit for the embryo/fetus of a declared pregnant woman than for a pregnant worker who has not declared?
A lower dose limit for the embryo/fetus of a declared pregnant woman is based on a consideration of greater sensitivity to radiation of the embryo/fetus and the involuntary nature of the exposure. Several scientific advisory groups have recommended (References 1 and 2) that the dose to the embryo/fetus be limited to a fraction of the occupational dose limit.
5. What are the potentially harmful effects of radiation exposure to my embryo/fetus?
The occurrence and severity of health effects caused by ionizing radiation are dependent upon the type and total dose of radiation received, as well as the time period over which the exposure was received. See Regulatory Guide 8.29, "Instruction Concerning Risks from Occupational Exposure" (Ref. 3), for more information. The main concern is embryo/fetal susceptibility to the harmful effects of radiation such as cancer.
6. Are there any risks of genetic defects?
Although radiation injury has been induced experimentally in rodents and insects, and in the experiments was transmitted and became manifest as hereditary disorders in their offspring, radiation has not been identified as a cause of such effect in humans. Therefore, the risk of genetic effects attributable to radiation exposure is speculative. For example, no genetic effects have been

documented in any of the Japanese atomic bomb survivors, their children, or their grandchildren.

7. What if I decide that I do not want any radiation exposure at all during my pregnancy?

You may ask your employer for a job that does not involve any exposure at all to occupational radiation dose, but your employer is not obligated to provide you with a job involving no radiation exposure. Even if you receive no occupational exposure at all, your embryo/fetus will receive some radiation dose (on average 75 mrem (0.75 mSv)) during your pregnancy from natural background radiation.

The NRC has reviewed the available scientific literature and concluded that the 0.5 rem (5 mSv) limit provides an adequate margin of protection for the embryo/fetus. This dose limit reflects the desire to limit the total lifetime risk of leukemia and other cancers. If this dose limit is exceeded, the total lifetime risk of cancer to the embryo/fetus may increase incrementally. However, the decision on what level of risk to accept is yours. More detailed information on potential risk to the embryo/fetus from radiation exposure can be found in References 2-10.

8. What effect will formally declaring my pregnancy have on my job status?

Only the licensee can tell you what effect a written declaration of pregnancy will have on your job status. As part of your radiation safety training, the licensee should tell you the company's policies with respect to the job status of declared pregnant women. In addition, before you declare your pregnancy, you may want to talk to your supervisor or your radiation safety officer and ask what a declaration of pregnancy would mean specifically for you and your job status.

In many cases you can continue in your present job with no change and still meet the dose limit for the embryo/fetus. For example, most commercial power reactor workers (approximately 93%) receive, in 12 months, occupational radiation doses that are less than 0.5 rem (5 mSv) (Ref. 11). The licensee may also consider the likelihood of increased radiation exposures from accidents and abnormal events before making a decision to allow you to continue in your present job.

If your current work might cause the dose to your embryo/fetus to exceed 0.5 rem (5 mSv), the licensee has various options. It is possible that the licensee can and will make a reasonable accommodation that will allow you to continue performing your current job, for example, by having another qualified employee do a small part of the job that accounts for some of your radiation exposure.

9. What information must I provide in my written declaration of pregnancy?

You should provide, in writing, your name, a declaration that you are pregnant, the estimated date of conception (only the month and year need be given), and the date that you give the letter to the licensee. A form letter that you can use is included at the end of these questions and answers. You may use that letter, use a form letter the licensee has provided to you, or write your own letter.

10. To declare my pregnancy, do I have to have documented medical proof that I am pregnant?

NRC regulations do not require that you provide medical proof of your pregnancy. However, NRC regulations do not preclude the licensee from requesting medical documentation of your pregnancy, especially if a change in your duties is necessary in order to comply with the 0.5 rem (5 mSv) dose limit.

11. Can I tell the licensee orally rather than in writing that I am pregnant?

No. The regulations require that the declaration must be in writing.

12. If I have not declared my pregnancy in writing, but the licensee suspects that I am pregnant, do the lower dose limits apply?

No. The lower dose limits for pregnant women apply only if you have declared your pregnancy in writing. The United States Supreme Court has ruled (in *United Automobile Workers International Union v. Johnson Controls, Inc.*, 1991) that "Decisions about the welfare of future children must be left to the parents who conceive, bear, support, and raise them rather than to the employers who hire those parents" (Reference 7). The Supreme Court also ruled that your employer may not restrict you from a specific job "because of concerns about the next generation." Thus, the lower limits apply only if you choose to declare your pregnancy in writing.

13. If I am planning to become pregnant but am not yet pregnant and I inform the licensee of that in writing, do the lower dose limits apply?

No. The requirement for lower limits applies only if you declare in writing that you are already pregnant.

14. What if I have a miscarriage or find out that I am not pregnant?

If you have declared your pregnancy in writing, you should promptly inform the licensee in writing that you are no longer pregnant. However, if you have not formally declared your pregnancy in writing, you need not inform the licensee of your nonpregnant status.

15. How long is the lower dose limit in effect?

The dose to the embryo/fetus must be limited until you withdraw your declaration in writing or you inform the licensee in writing that you are no longer pregnant. If the declaration is not withdrawn, the written declaration may be considered expired one year after submission.

16. If I have declared my pregnancy in writing, can I revoke my declaration of pregnancy even if I am still pregnant?

Yes, you may. The choice is entirely yours. If you revoke your declaration of pregnancy, the lower dose limit for the embryo/fetus no longer applies.

17. What if I work under contract at a licensed facility?

The regulations state that you should formally declare your pregnancy to the licensee in writing. The licensee has the responsibility to limit the dose to the embryo/fetus.

18. Where can I get additional information?

The references to this Appendix contain helpful information, especially Reference 3, NRC's Regulatory Guide 8.29, "Instruction Concerning Risks from Occupational Radiation Exposure," for general information on radiation risks. The licensee should be able to give this document to you.

For information on legal aspects, see Reference 7, "The Rock and the Hard Place: Employer Liability to Fertile or Pregnant Employees and Their Unborn Children--What Can the Employer Do?" which is an article in the journal *Radiation Protection Management*.

You may telephone the NRC Headquarters at (301) 415-7000. Legal questions should be directed to the Office of the General Counsel, and technical questions should be directed to the Division of Industrial and Medical Nuclear Safety.

You may also telephone the NRC Regional Offices at the following numbers: Region I, (610) 337-5000; Region II, (404) 562-4400; Region III, (630) 829-9500; and Region IV, (817) 860-8100. Legal questions should be directed to the Regional Counsel, and technical questions should be directed to the Division of Nuclear Materials Safety.

REFERENCES FOR APPENDIX

1. National Council on Radiation Protection and Measurements, *Limitation of Exposure to Ionizing Radiation*, NCRP Report No. 116, Bethesda, MD, 1993.

2. International Commission on Radiological Protection, *1990 Recommendations of the International Commission on Radiological Protection*, ICRP Publication 60, Ann. ICRP 21: No. 1-3, Pergamon Press, Oxford, UK, 1991.
3. USNRC, "Instruction Concerning Risks from Occupational Radiation Exposure," Regulatory Guide 8.29, Revision 1, February 1996.⁽¹⁾ (Electronically available at <http://www.nrc.gov/reading-rm/doc-collections/reg-guides/>)
4. Committee on the Biological Effects of Ionizing Radiations, National Research Council, *Health Effects of Exposure to Low Levels of Ionizing Radiation* (BEIR V), National Academy Press, Washington, DC, 1990.
5. United Nations Scientific Committee on the Effects of Atomic Radiation, *Sources and Effects of Ionizing Radiation*, United Nations, New York, 1993.
6. R. Doll and R. Wakeford, "Risk of Childhood Cancer from Fetal Irradiation," *The British Journal of Radiology*, 70, 130-139, 1997.
7. David Wiedis, Donald E. Jose, and Timm O. Phoebe, "The Rock and the Hard Place: Employer Liability to Fertile or Pregnant Employees and Their Unborn Children--What Can the Employer Do?" *Radiation Protection Management*, 11, 41-49, January/February 1994.
8. National Council on Radiation Protection and Measurements, *Considerations Regarding the Unintended Radiation Exposure of the Embryo, Fetus, or Nursing Child*, NCRP Commentary No. 9, Bethesda, MD, 1994.
9. National Council on Radiation Protection and Measurements, *Risk Estimates for Radiation Protection*, NCRP Report No. 115, Bethesda, MD, 1993.
10. National Radiological Protection Board, *Advice on Exposure to Ionising Radiation During Pregnancy*, National Radiological Protection Board, Chilton, Didcot, UK, 1998.
11. M.L. Thomas and D. Hagemeyer, "Occupational Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities, 1996," Twenty-Ninth Annual Report, NUREG-0713, Vol. 18, USNRC, 1998.⁽²⁾

FORM LETTER FOR DECLARING PREGNANCY

This form letter is provided for your convenience. To make your written declaration of pregnancy, you may fill in the blanks in this form letter, you may use a form letter the licensee has provided to you, or you may write your own letter.

(next page)

DECLARATION OF PREGNANCY

To: _____

In accordance with the NRC's regulations at 10 CFR 20.1208, "Dose to an Embryo/Fetus," I am declaring that I am pregnant. I believe I became pregnant in _____
(only the month and year need be provided).

I understand the radiation dose to my embryo/fetus during my entire pregnancy will not be allowed to exceed 0.5 rem (5 millisievert) (unless that dose has already been exceeded between the time of conception and submitting this letter). I also understand that meeting the lower dose limit may require a change in job or job responsibilities during my pregnancy.

(Your Signature)

(Your Name Printed)

(Date)

Gestation period at time of declaration

REGULATORY ANALYSIS

A separate regulatory analysis was not prepared for this regulatory guide. A regulatory analysis prepared for 10 CFR Part 20, "Standards for Protection Against Radiation" (56 FR 23360),

provides the regulatory basis for this guide and examines the costs and benefits of the rule as implemented by the guide. A copy of the "Regulatory Analysis for the Revision of 10 CFR Part 20" (PNL-6712, November 1988) is available for inspection and copying for a fee at the NRC Public Document Room, 2120 L Street NW, Washington, DC, as an enclosure to Part 20 (56 FR 23360).

1. Single copies of regulatory guides, both active and draft, and draft NUREG documents may be obtained free of charge by writing the Reproduction and Distribution Services Section, OCIO, USNRC, Washington, DC 20555-0001, or by fax to (301)415-2289, or by email to (DISTRIBUTION@NRC.GOV). Active guides may also be purchased from the National Technical Information Service on a standing order basis. Details on this service may be obtained by writing NTIS, 5285 Port Royal Road, Springfield, VA 22161. Copies of active and draft guides are available for inspection or copying for a fee from the NRC Public Document Room at 2120 L Street NW., Washington, DC; the PDR's mailing address is Mail Stop LL-6, Washington, DC 20555; telephone (202)634-3273; fax (202)634-3343.

2. Copies are available at current rates from the U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20402-9328 (telephone (202)512-1800); or from the National Technical Information Service by writing NTIS at 5285 Port Royal Road, Springfield, VA 22161. Copies are available for inspection or copying for a fee from the NRC Public Document Room at 2120 L Street NW., Washington, DC; the PDR's mailing address is Mail Stop LL-6, Washington, DC 20555; telephone (202)634-3273; fax (202)634-3343.

**TYLER JUNIOR COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM**

Radiation Area Employment Notification

In compliance with 25 Texas Administrative Code 289.202, 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 _____

SECTION VI

FORMS

RADIOLOGIC TECHNOLOGY AGREEMENTS

Print Name: _____ Date: _____

OSHA SAFETY SHEETS (MSDS)

(MSDS Sheets found at the back of the Student Handbook)

I have been oriented to the safety kit for processor chemistries. This orientation includes location and use of goggles, gloves, apron, eye wash, mask and absorbent material.

I have read and know the location of the Material and Safety Data Sheets (MSDS) regarding processor chemistries.

RADIATION SAFETY RULES

I have read and understand the Radiology Laboratory Safety Rules, Basic Radiation Protection Rules and Protection of Personnel Rules.

A copy of these rules has been supplied to me for my reference. These rules have been explained to me. I acknowledge that it is my responsibility to adhere to and comply with all of the stipulations and rules.

CONFIDENTIALITY

Professional Confidentiality Rules have been explained to me. All personal information concerning patients as well as all confidential information concerning activities of the Clinical Education Facilities and their staff will be held as such by me.

COMPENSATION AND SERVICE WORK STATEMENT

The clinical education or practicum experiences that students have should not be regarded strictly as work experience. Students must not take the responsibility or the place of [qualified staff]. However, after demonstrating competency, students are permitted and expected to perform procedures with appropriate supervision. There will be no monetary compensation for these activities.

I understand and agree to abide by these statements while enrolled in the Tyler Junior College Radiologic Technology Program.

Signature _____ Date _____

**TYLER JUNIOR COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM**

AGREEMENT

I, the undersigned, a student in the Radiologic Technology Program (RADR) at Tyler Junior College, for and in consideration of the training I will receive from Tyler Junior College, its faculty and staff, in consideration of my acceptance into the training program, and for other considerations to be received by me, hereby **promise and agree as follows:**

1. I am currently enrolled at Tyler Junior College and have paid my student liability insurance fee as required by Tyler Junior College.
2. I have read and understand all portions of the course syllabi and course schedules. **I agree to comply with all rules, regulations and requirements contained in the course syllabi and course schedules, and with any additional rules as communicated to me by the instructors during courses.** I understand that I am responsible for knowing and following the rules of all clinical sites where I may have rotations during courses.
3. I can be dropped from the Program with a grade of F for **unprofessional conduct** or **unsafe practices**. These behaviors include, but are not limited to:
 - a. breach of confidentiality.
 - b. stealing information or tangible goods.
 - c. misrepresenting any fact.
 - d. lying about any fact.
 - e. being barred (asked not to return) from any clinical site.
 - f. failing to complete clinical requirements on time.
 - g. **being under the influence or in possession of alcohol or drugs during class or during any clinical rotation assignment—immediate clinical suspension will occur.**
 - h. representing that I hold a level of certification or licensure I do not hold.
 - i. practicing beyond the scope of clinical objectives.
 - j. failure to practice within the Principles of Professional Conduct for Radiologic Technologists or the Patient's Bill of Rights.
 - k. committing a criminal act during clinical rotations.
 - l. failure to maintain current CPR certification.
 - m. failure to pass any of the RADR curriculum courses.
 - n. disruption of classes, making it difficult for other students to acquire the material presented. This can be observed by the faculty or reported by a fellow student.
 - o. willful damage to school, hospital, or private property.
 - p. documented evidence of lack of proper patient care.
 - q. leaving the clinical area without permission from a faculty member.
 - r. failure to comply with uniform code.
 - s. failure to follow radiation protection rules and regulations.
 - t. tampering with own or another person's radiation monitoring device.
 - u. noncompliance with attendance policies - see clinical section.
 - v. falsifying sign-in sheets/time cards for self or another student.
 - w. two incidences of being put on probation or suspended and charged with an unexcused absence.
 - x. cheating, lying, collaborating, plagiarizing or falsifying and/or submitting any type of documentation verbally or in print.
 - y. use of any form of abusing, disrespectful, arrogant, threatening or harassing language and/or behavior to classmates, instructors, hospital personnel or patients.
 - z. **violating or failing to comply with any provision of the rules, regulations or policies set forth, or any policy stated in the Radiologic Technology Student Handbook.**
 - aa. Sharing, comparing or discussing grades with classmates-yours or others
4. **I understand the following:**

***that I may contract a contagious disease, possibly a fatal one, through contact with patients.**

***that it is mandatory that I practice infection control techniques that have been explained to me at the beginning of this course.**

***that I may become physically injured by improper handling of patients and/or equipment.**

***that I will be assigned to more than one Practicum site and will manage the possible added monetary and time costs or burdens that this may create.**

Knowing all the above facts and with a thorough understanding of the risks involved in the training I am about to participate in, I hereby declare that I am willing to assume all risks involved with my training and that I do hereby assume all such risks, whatever they may be, and that if I become unwilling to assume all risks involved in my course of study, I will immediately inform my instructor of such unwillingness and will immediately withdraw from the course.

With full and complete knowledge and understanding of all statements contained in this document, and having asked for clarification of any parts that I might not have understood, so that I do have a clear and complete understanding of this document and what I am signing and agreeing to, I hereby promise and agree to hold harmless and indemnify, and DO HEREBY HOLD HARMLESS and indemnify Tyler Junior College, its faculty, staff, agents and employees, from any and all liability, payments, claims, costs, causes of action, judgments and attorney's fees of whatsoever nature and howsoever arising (1) in any way in connection with my being a student at Tyler Junior College and being enrolled in Radiologic Technology Program courses, (2) from clinical site (practicum) experiences in connection with the courses being taken, or (3) in any other way whatsoever.

If I violate or fail to abide and conform in any way to the promises, representations and covenants set forth in this document, I agree that I may be dropped from all courses in the Radiologic Technology Program in which I am enrolled, or that I may be given a failing grade in such courses, subject only to the rules of due process and to the procedures set forth in the Tyler Junior College catalog and student handbook.

I have read, understand and agree to each and every provision contained in this agreement, which consists of two (2) pages, including this page.

**CLINICAL SITE TRAVEL REQUIREMENTS
AGREEMENT**

If I am selected as a radiologic technology student, I understand that I will be **assigned** to a clinical education site and that I may be required to travel to a site to which driving may take considerable time. I also understand that the assigned site may, and very likely will, change at some point in my training and I do not assume that I will remain at one site for the entire two years. I am prepared to spend the time and money necessary to travel to an assigned clinical education site.

The cities in which the program has clinical education sites to which you could be assigned are: Tyler- (4 sites), Jacksonville, Athens, Palestine, and Greenville.

No one should assume that he/she would not be required to travel out of Tyler because of personal hardships. If you are unwilling or unable to travel from the Tyler area for your clinical experience, please, do not accept a position in the program.

APPLICANT SIGNATURE

DATE

PRINT NAME

**TYLER JUNIOR COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM
ADVANCED COMPETENCY EVALUATION
(Used at CI's Discretion)**

EVALUATION OF REQUISITION AND PATIENT ASSESSMENT

| | | | |
|-------------------------------------|-----|----|-------|
| CHART CHECKED FOR ACCURACY | YES | NO | _____ |
| PATIENT ARMBAND CHECKED | YES | NO | _____ |
| - COMPLETE PATIENT HISTORY OBTAINED | YES | NO | _____ |

PHYSICAL FACILITIES READINESS

| | | | |
|------------------------------|-----|----|-------|
| ROOM CLEAN, STOCKED | YES | NO | _____ |
| - PROPER ROOM SETUP FOR EXAM | YES | NO | _____ |

PATIENT CARE AND MANAGEMENT

| | | | |
|--|-----|----|-------|
| EXAM EXPLAINED TO PATIENT | YES | NO | _____ |
| PATIENT MADE COMFORTABLE | YES | NO | _____ |
| GOOD JUDGEMENT USED IN PT WITH A-TYPICAL NEEDS | YES | NO | _____ |

EQUIPMENT OPERATION AND TECHNIQUE SELECTION

| | | | |
|-----------------------------------|-----|----|-------|
| APPROPRIATE KVP USED | YES | NO | _____ |
| APPROPRIATE MAS/PHOTO CELLS USED | YES | NO | _____ |
| KNOWLEDGE OF HOW ROOM/TABLE WORKS | YES | NO | _____ |

POSITIONING SKILLS

| | | | |
|---|-----|----|-------|
| KNOWS ROUTINE FILMS FOR EXAM | YES | NO | _____ |
| KNOWS HOW MANY FILMS AND CORRECT SIZES | YES | NO | _____ |
| FILMS PLACED IN BUCKY CORRECTLY | YES | NO | _____ |
| - CENTRAL RAY PLACEMENT / ANGLE CORRECT | YES | NO | _____ |
| APPROPRIATE MARKERS USED | YES | NO | _____ |

**TYLER JUNIOR COLLEGE
RADIOLOGIC TECHNOLOGY
STUDENT CLINICAL EVALUATION**

INSTRUCTIONS TO EVALUATORS

- 1. REFER TO THE CLINICAL SECTION IN THE *RADIOLOGIC TECHNOLOGY STUDENT HANDBOOK* FOR CLINICAL EVALUATION.**
- 2. A MIDTERM PROGRESS EVALUATION WILL BE PERFORMED TO ASSES THE STUDENT'S LEVEL OF SKILL DEVELOPMENT. UNSATISFACTORY PROGRESS SHOULD BE DOCUMENTED AND THE STUDENT COUNSELED TO IDENTIFY AREAS THAT INTERVENTION MAYBE BENEFICIAL.**
- 3. THE SEMESTER GRADE IS DETERMINED BY THE STUDENT'S ABILITY TO EXCEED, MEET, OR NOT MEET OUTLINED STANDARDS ON A 0-100 POINTS SYSTEM FOR EVALUATION CATEGORY SEGMENTS.**
- 4. EACH SEGMENT OF A CATEGORY IS GRADED AND WEIGHTED THE SAME, AND THE GRADE IN ALL SEGMENTS ARE ADDED TOGETHER AND DIVIDED BY 15 (TOTAL NUMBER OF SEGMENTS) TO DETERMINE THE OVERALL GRADE.**
 - A. The point value of "0" in any segment of a category will reduce the total term calculated grade by one letter grade and the student will be put on probation. .
 - B. Any two consecutive semesters with "0" in the same segment of a category will result in dismissal from the program.
 - C. "0" in any 2 segments of the evaluation will result in dismissal from the program.
- 5. A= 91-100
 B= 83-90
 C= 75-83
 F= (BELOW 75)**

COMMENTS:

**TYLER JUNIOR COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM
PRACTICUM ABSENCE REPORT**

Name: _____

Date of Absence: _____

Shift Missed: _____ Hours Assigned: _____ Hours Missed: _____

Room Assignment for Day: _____

To Whom and Time Absence Reported: _____

Reason for Absence (be specific: example "sick", "child ill", "car trouble", etc. is not acceptable)

Student Signature

Date submitted

Absence number: _____

THIS FORM MUST BE SUBMITTED AT THE BEGINNING OF THE NEXT CLINICAL ASSIGNMENT.

**TYLER JUNIOR COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM**

COUNSELING FORM

Student: _____ Date: _____

1. Narrative/Explanation of unsatisfactory behavior with dates, places, people involved.

2. Why is behavior not appropriate?

3. What behavior is desired?

4. How behavior must change.

COUNSELING FORM - CONTINUED

Student: _____ Date _____

5. Suggestions for improvement.

6. Consequences of present behavior and/or consequences if problem does not change (include time allowed). Grade, discipline, probation - suspension.

7. State how Program has tried to help.

8. Persons attending conference.

9. Student's comments:
Point of view and agreeing to comply with behavior change (or not).

Student Signature

Faculty Signature

TYLER JUNIOR COLLEGE

RADIOLOGIC TECHNOLOGY PROGRAM
COUNSELING/ADVISEMENT RECORD

Student

Date

Faculty Signature

Student

TYLER JUNIOR COLLEGE
RADIOLOGIC TECHNOLOGY PROGRAM

DOCUMENTATION OF FAILING GRADE

STUDENT NAME:

| EXAMINATION | DATE | STUDENT'S INITIALS |
|-------------|------|--------------------|
| | | |
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ORAL WARNING:

ENCLOSURE:

Clinical grade sheet
INCIDENT REPORT FORM
Check-off sheets
Check off record
MPR
Annual PR
Clinical Time sheet
MSDS sheets

END OF