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I. INTRODUCTION

a. *The Field of Radiography*

A radiologic technologist, also known as radiographer, is a professional in the medical field specifically trained to produce various types of diagnostic radiographic images. The radiographer renders an important service to the medical profession and contributes to the welfare of humanity by providing personal services to the community.

A radiograph, commonly labeled an “x-ray,” is the ultimate product of the radiographer’s work. The radiograph serves as a diagnostic tool for the physician. Accuracy and quality are imperative in attaining an optimum diagnostic study.

As with every health care professional, the radiographer’s main objective is to provide excellent patient care and to maintain high standards of quality. Such an individual must be personable, flexible to change, physically agile, understanding, compassionate, and ever mindful of his/her purpose- patient care.

b. *Mercy Hospital St. Louis*

With a heritage of healing that reaches back more than 150 years, Mercy Hospital St. Louis, continues to provide distinctive services offered by a team that cares for people, not illnesses. We are the only Level I Trauma Center in St. Louis County. Mercy Hospital St. Louis sponsors a two-year program for Radiographers. The school is accredited by the Joint Review Committee on Education in Radiologic Technology, which is recognized by the United States Department of Education as an independent accrediting agency. Complaints or grievances that the program is not in compliance with JRCERT standards may be directed to the accrediting agency at:

JRCERT
20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
Phone (312)704-5300
www.jrcert.org

c. *The profession*

The profession of radiography requires the ability to provide appropriate health care services. Radiographers are highly skilled professionals qualified by education to perform imaging examinations and accompanying responsibilities at the request of physicians qualified to prescribe and/or perform radiologic procedures. The radiographer is able to:

- Apply knowledge of anatomy, physiology, positioning and radiographic techniques to accurately demonstrate anatomical structures on a radiograph or other imaging receptor.

- Determine exposure factors to achieve optimum radiographic techniques with minimum radiation exposure to the patient.
- Evaluate radiographic images for appropriate positioning and image quality.
- Apply the principles of radiation protection to the patient, self and others.
- Provide patient care and comfort.
- Recognize emergency patient conditions and initiate lifesaving first aid and basic life support procedures.
- Detect equipment malfunctions, report same to proper authority, and know the safe limits of equipment operation.
- Exercise independent judgment and discretion in the technical performance of medical imaging procedures.
- Participate in radiographic quality assurance programs.
- Provide patient/public education related to radiologic procedures and radiation safety/protection.

d. Philosophy

The Radiography Program is designed to provide the Radiologic Health Team with a member who, under the supervision of a Radiologist, uses ionizing radiation as an investigative function, which contributes to the diagnosis of disease and injury.

The student will develop technical and social skills through active participation in an organized sequence of classroom, laboratory, and clinical experiences provided in the curriculum.

The student will perform radiography with the skill and knowledge of total patient care appropriate to radiology and effective measures of radiation protection.

The technical abilities of the Radiographer will enable the health team to improve community health services and provide upward mobility for the individual's career development.

II. SCHOOL OF RADIOLOGIC TECHNOLOGY

a. Goals

To develop a radiographer who-

- *Demonstrates clinical proficiency and competence*
- *Communicates effectively in the clinical setting*
- *Demonstrates critical thinking and problem solving skills*
- *Demonstrates professional and ethical behavior*

To provide a quality program that meets the expectations of the graduates

b. Admission

It is the policy of Mercy Hospital St. Louis School of Radiologic Technology to recruit applicants for admission without regard to race, color, creed, national origin, religion, gender, age, or disability except where such condition is bona fide occupational qualification for the field of Radiologic Technology.

Applicants must be a graduate of an accredited high school or equivalent, maintained a 2.5 or better grade point average, and achieved a composite score on the ACT of 18 or better.

An associate (or more advanced) degree, or a completion baccalaureate degree program in Radiography is required prior to applying.

Prerequisite courses must include:

- Mathematics/Logical reasoning
College Algebra*
- Communication
English/Speech*
- Information Systems
Computer course
- Social/Behavioral Sciences
Psychology/sociology
- Natural sciences
Anatomy & Physiology
Biology/Chemistry
Physics

**Sections A and B are mandatory requirements. The sections are suggested courses.*

A job shadow in a radiology department is also required.

Ten students are selected into the program each year. Should the applicant be accepted to enter the School of Radiologic Technology, the student must pass the routine physical and drug testing given by Mercy Corporate Health. The student must be able to perform all required technical and physical standards of a student in the Radiologic Technology Program.

c. Enrollment

From July through March, completed applications, transcripts, personal or professional references will be accepted for enrollment in the class beginning the following July.

Each applicant will be required to take an entrance exam. The top applicants will be eligible for interviews based on transcripts, applications and entrance exam scores. After interviews have been completed, the Admissions Committee will again review each applicant's file. Letters of acceptance or denial will then be mailed.

Because of limited enrollment capacity, the Program must realistically offer few student positions. Therefore, should an applicant decide to accept student position or terminate consideration of the application, he/she is expected to notify the School of Radiologic Technology in writing of such action immediately.

III. CLINICAL EDUCATION

a. Overview

- ✓ Clinical education for the radiology student consists of applying what has been learned in the classroom to the clinical setting.
- ✓ To be successful in clinical education, a student must have been successful (made an 85% or better) in previous academic or clinical efforts. Additionally in any medical service assignment, it is imperative that providers at all levels be proficient in basic life-saving techniques. Principles of body mechanics are also very important to the individual student in his/her clinical practice in order to avoid injury.
- ✓ Assignment of students to "active" clinical education areas are made by the school office. These assignments provide students the volume and variety of clinical experiences to successfully progress through the program.
- ✓ Daily assignments will be posted
- ✓ Students will be assigned approximately 30 hrs/wk in clinical education areas.
- ✓ The reporting times for clinical education assignments vary:
 - 7:00AM – 3:00PM
 - 7:30AM – 3:00PM
 - 8:00AM – 4:30PM

Note: Any paid employment of a student in clinical radiography is a separate entity from the educational phase of the program and, as such has no bearing on the structured clinical experience.

- ✓ The school office will keep a record of absence and tardiness. This will be made part of the clinical grade. If a student must be absent from clinical assignments, he/she must notify a School Official. If the program personnel cannot be reached, the clinical supervisor must be notified. In either instance, the student must state the reason for the absence.
- ✓ Any violation of the absenteeism and tardiness policy will lead to student counseling. The clinical instructor(s) will be responsible for keeping attendance records current. The records will be used to determine a student's clinical hours.
- ✓ Students are subject to all rules and regulations of the Medical Center, both institutional and departmental.

b. Clinical Competency Evaluation System

The responsibilities of a radiographer have grown in complexity with the development of more sophisticated procedures and equipment in the medical sciences. It is essential that the Medical Center provide the best possible educational experiences to all students. During the clinical experience, students must have the opportunity to perform all routine types of radiographic procedures. Only in this manner will they be prepared for entry into the profession.

With the Medical Center responsible for the final student performance, we feel there must be a competency-based curriculum, both academic and clinical. Efforts have been made to develop a clinical evaluation system whereby students may progress through clinical education with their strengths and weaknesses identified.

Competency-based evaluation is a means of checking the progression rate of students during their education by determining whether or not they are able to meet specified objectives thus demonstrating proficiency. Students' cognitive knowledge skills are directly evaluated in the classroom and indirectly evaluated throughout their educational experience. Their psychomotor application skills are evaluated in the energized laboratory at the Medical Center. In order to properly evaluate students' psychomotor skills, it is essential to determine the level of performance ability. Only through the use of a competency based evaluation system can we determine the proficiency level a student has achieved.

It is very important that knowledge and skills be reinforced and evaluated in the clinical setting to maximize the students' clinical effectiveness. It is the program's role to provide clinical experiences designed to bridge the gap between theory and application. This can only be accomplished through quality supervised clinical experiences in the Medical Center.

The clinical portion of the radiography program is an integral part of the total curriculum. All persons involved with the program must thoroughly understand the structure and function of the clinical evaluation system for the students' total education experience to be effective.

c. Clinical Procedure Performance Objective

In order for the student to perform clinical practice with an acceptable degree of proficiency, the student must be able to perform each of the items under the following headings:

I. Clinical Performance Skills

- A. Patient Care
- B. Identification (Evaluation of requisition)
- C. Positioning (Physical facilities readiness)
- D. Equipment Manipulation
- E. Exposure Factors
- F. Film/Digital imaging
- G. Radiation Protection
- H. Injectable media and procedures
- I. Image Evaluation
- J. General
- K. Fluoroscopic Skills
- L. Portable and Surgery Skills

II. Professional Behavior Traits

- A. Compassion
- B. Interest and Preparation
- C. Cooperation
- D. Motivation
- E. Dependability
- F. Poise and Self-Discipline
- G. Maturity and Judgment
- H. Appearance

CLINICAL PROCEDURE PERFORMANCE OBJECTIVES

I. Clinical Performance Skills

A. Patient Care

- Based on the requisition, the patient's chart, or verbal communication, determine the:
 - ✓ Patient's name
 - ✓ Appropriate Radiographic Procedure
 - ✓ Special considerations, which are or may be indicated
 - ✓ Possible contraindications, which do or may exist
 - ✓ Patient's condition (clinical history, probable diagnosis, etc.)
 - ✓ Information affecting how the patient is to be handled or technical factors to be used
 - ✓ Equipment to be used
 - ✓ Completeness of information
 - ✓ Accomplishment of prior preparation of patient that was ordered
 - ✓ Pregnancy of patient, where appropriate.
 - ✓ Appropriate shielding of patient
- Draw implications from patient information to permit conduct of radiographic examination and make the patient as comfortable as possible.
- Determine the necessary positions and projections of the area of interest with relation to the patient's condition
- Demonstrate respect for each patient's privacy and concern(s)
- Treat each patient with dignity and concern
- Alert radiologist to possible contraindication(s) to the requisitioned radiographic examination(s), i.e.,
 - ✓ Possible radiation exposure to a fetus
 - ✓ Recent duplication of the examination
 - ✓ Patient's condition
 - ✓ Effectiveness of the preparation of the patient for the radiographic procedure(s)
 - ✓ Signs of distress, adverse, or emergency reaction(s) of the patient
- Transport patients to and from the radiology department without injury to the patient or self, into the radiographic room; assist the patient safely between the transport vehicle and the radiographic table.
- Determine the proper bandages and dressings to be used in connection with the diagnostic radiographic examination requisitioned, checking presence of various types of tourniquets, sterile dressings for puncture or trephine sites, pad for puncture needle as desired
- Explain the radiographic examination to the patient or to an accompanying family member; keep the patient informed of what will happen during the radiographic procedure(s)

- Reassure the patient and answer questions as appropriate.
- Determine information to convey to the patient, which is based on patient condition and behavior as well as institutional policy
- Give appropriate instructions to the patient for the part and projection performed
- Give breathing instructions appropriate for the part projection performed that are in accordance with those specified in the radiology department's procedure manual
- Assist patients, allowing them to be as comfortable as possible
- Use care in moving patients to avoid harming, causing pain, or needless discomfort
- Handle oxygen supply, catheter(s), or chest tube(s) with care to avoid disruption of proper function
- Follow instructions outlined on the radiographic requisition
- Select and implement patient position(s)/area projections which will accomplish the examination purpose with the least discomfort to the patient
- Use details about the conditions of shock trauma as they manifest in a patient in performing radiography to:
 - ✓ Properly move and care for the patient
 - ✓ Position and immobilize safely
 - ✓ Recognize emergency symptoms
 - ✓ Select exposure factors
- Recognize shock reaction in a patient; observe the patient throughout the radiographic procedure and be alert to any sign(s) of pain, emergency, adverse reaction to the procedure/contrast materials, or impairment of respiration
- Conclude if the patient is having an adverse (emergency) reaction to the radiographic procedure or contrast material
- Rapidly secure lines, bed pans, emesis basins, emergency drugs, and supplies when an emergency condition occurs
- Assist the patients who wait for long periods of time in the radiology department as much as possible; e.g., talk with them, check needs, etc.

B. Identification

The student will:

- Correctly identify the patient for whom the radiographic procedure is requisitioned
- Determine the patient's mode of transportation
- Follow the instruction(s) as outlined on the requisition
- Using lead markers ("R", "L", "ERECT", etc.), to identify the patient part correctly relative to the side, time, position, or the patient part, etc., appropriate to the department's procedure manual

C. Positioning

The student will:

- Position image receptor in bucky or cassette holder
- Adjust and center the image receptor to the part or the central ray
- Evaluate requisition for patient positions and projections of the area of interest with relation to the patient's condition
- Place patient's body and body part correctly for radiography; use appropriate immobilization devices
- Position the part correctly to demonstrate the anatomical image(s) necessary for diagnosis; instruct patient appropriately to accomplish projection
- Select and apply immobilization devices to prevent patient movement without interfering with the patient's breathing or circulation
- Account for body habitus in relating external reference structures to internal structures
- Mark or define anatomical reference lines to provide correct angulation or rotation
- Draw or imagine anatomical reference points to position body part with proper rotation and angulation
- Select appropriate external anatomical reference points to position the patient for the specific examination according to the area of the body involved; select accurate alternative points if patient is obese and traditional points are obscured by adipose tissue
- If necessary, select alternative positioning to obtain the requested view of the area of interest
- In positioning of the patient, make note of location of suspected fractures, unhealed fractures, or presence of foreign bodies; handle patient accordingly
- Position the patient or body part to be imaged in the correct relation to the film
- When using the Bucky, center the patient part to the midline of the Bucky
- Place the long axis of the part to coincide with the long axis of the IR.
- Center the part designated by the requisition accurately to the IR.
- With IR in cassette holder or in Bucky, center the film to the part
- With upright cassette holder, adjust height of film holder to transverse level of part, and center the part to the IR.
- Position the x-ray tube with the primary beam entering the area of interest at the correct angle to project the image needed

D. Equipment Manipulation

The student will:

- Implement safety procedures, equipment, and information on timing of radiographic procedure(s)
- Correctly use the rotor and exposure switches of the radiographic unit
- Carefully note any signs of malfunction of the equipment and report it immediately
- Safely transport IR to be processed
- When appropriate, correctly erase IR.
- Assist with maintenance of clean, organized radiographic room by :
 - Folding and replenishing linen supplies
 - Cleaning table at appropriate intervals
 - Dusting room and equipment at appropriate intervals
- Reviewing supply of emergency drugs-quantity and dates; re-supply as determined by use and expiration date(s)
- Checking daily for the presence of :
 - ✓ appropriate lead markers
 - ✓ proper size and type of syringes and needles
 - ✓ lead aprons and gloves, which may be needed during the radiographic procedure(s) to be performed

- In radiography of patients, carefully check to ascertain if materials and equipment required are present in radiography room
- Assemble the accessory equipment required to perform the particular radiographic procedure(s) specified by the requisition
- Prepare the radiographic room for the procedure before the patient enters the examination room
- Make sure the proper IR(s); size(s) and type(s), are in the radiographic room
- Correctly reload IR holder if need is determined or appropriate

E. Exposure Factors

The student will:

- Measure the patient part with calipers at path of central ray or as specified for the requisitioned procedure by the radiology department's procedure manual; using a technique chart guide, determine and select the appropriate minimal exposure factors compatible with diagnostic quality desired for projection(s) performed
- Select correct exposure factors; carefully adjust technical factors for special considerations; i.e., patient's size, condition, use of magnification, post op changes, patient's body type, sex, age, or muscular development
- Note radiologist's density preferences or equipment problems to avoid "repeat" radiographs
- Follow instructions for establishing exposure factors on the control panel

- Using conversion charts or posted information, convert exposure factors correctly to an equivalent output using arithmetic manipulation, numerical symbols, etc.
- Position the radiographic tube with the primary beam entering the area of interest at the appropriate angle to project the image required; maneuvering the radiographic tube correctly and safely in the presence of the patient
- Implement safety procedures, equipment, and information on timing of radiographic procedures

F. Image Receptor

The student will:

- Select the appropriate size and type of image receptor based on patient size, area of interest, use of magnification technique, and number of projections to appear on the radiograph
- Position image receptor accurately in the Bucky or cassette holder

G. Radiation Protection

The student will:

- Determine the position of the gonads and provide appropriate radiation shielding based on position of patient and part projection required
- Make sure that any “repeat” radiograph(s) ordered is only for medical diagnostic purposes
- Collimate the x-ray beam to the size of the part being imaged; operate collimator controls to adjust collimation to expose only the area of interest
- Understand the effects of all ionizing radiation on human tissue; conscientiously conform to safety requirements; ie:
 - ✓ Wear protective lead garments if in the room during an exposure
 - ✓ Make exposure(s) from behind leaded protective barriers
 - ✓ Close all access doors to radiographic rooms before making exposures during a procedure
- Utilize gonadal shielding for the patient’s protection
- Utilize correct collimation for protection of patient and others
- Determine when accidental excessive radiation exposure may have occurred to self, patient, or other personnel using details about the properties and behavior of electromagnetic ionizing radiation in interaction with living tissue and other forms of matter taking account of scattered radiation, the qualities of radiolucent and radiopaque materials, absorption and density qualities of matter, reasons for monitoring, and detection device(s)
- Supply shielding to any persons other than patient who will be present in the room during radiographic exposure(s)
- Always wear currently dated, properly placed radiation monitoring devices
- Turn in and replace radiation monitoring devices used at the intervals prescribed by the Radiation Safety Officer

- Conscientiously note when accidental or excessive personal exposure to ionizing radiation may have occurred and report each occurrence promptly to the Program Director.
- Read and understand implications of letters from the Radiation Safety Officer informing of an unusually high monthly radiation exposure dose or of high cumulative exposure and possibly requesting an interview
- Discuss possible causes for unusually high radiation monitoring device(s) and possible transfer to other duties or work
- Implement safety procedure, equipment, and information on timing of radiographic procedure(s)
- Carefully shield the patient's gonads and radiosensitive areas
- Determine appropriate shielding for radiosensitive tissue considering direction of the central ray and proximity of area of radiographic interest to the radiosensitive tissues

H. Injectable Media and Procedures

The student will:

- In cases requiring injectable media and introductory procedures Using sterile technique, fill syringe(s) with contrast material needed for the requisitioned radiographic procedure
- In performing radiography when sterile surgical or introductory procedures are involved, use details about sterile conditions and procedures to achieve or maintain the sterile integrity of materials, areas, or parts of the patient's body
- Assist with application of various types of tourniquets or sterile dressings to be used in connection with the diagnostic radiographic examination(s) requisitioned; checking presence in room or on appropriate procedure tray
- Observe patient throughout radiographic procedure and be alert for any sign(s) of adverse reactions to a procedure or contrast material
- Check contrast material and emergency drugs for quantity present and possible chemical deterioration

I. Image Evaluation

The student will:

- Review radiograph(s) for technical quality using the proper sequence of events.
- Correctly use all equipment required to accomplish the review of a radiograph
- Indicate the possible variations to be expected in individual situations
- and demonstrate the proper sequence of events in each "plain" film review
- Apply academic abilities (Mathematics, English, Composition, Physics, Anatomy, etc.) to review of a radiograph

- Demonstrate the proper review of radiographs produced in predetermined clinical radiographic procedures or simulations of radiographic procedures. To do this, the student will:
 - ✓ Provide technical quality review of specific radiographic series
 - ✓ Relate requisitions for patient procedures (as indicated on the requisition) to projections of the area of interest and patient's condition
 - ✓ Discuss the need for a change from standard positioning to accomplish the purpose of the examination that offers the least discomfort to the patient.
 - ✓ Consider patient's body type, size, sex, age, or muscularity in determining correctness of technical factors and positioning used
 - ✓ Assess each radiograph/procedure for:
 - Correct patient view and full area of interest is demonstrated
 - Unnecessarily large area is visible (irradiated)
 - Appropriate shielding of the patient is evident
 - Artifacts, blurring, or distortion of the image is present
 - Adequate detail and definition are present in the image
 - Adequate density and contrast are present to provide the diagnostic image required for the examination
 - The anatomy and condition of interest are demonstrated satisfactorily for diagnostic purposes based on review of the requisition and visual examination of the radiographs
 - Image problems were caused by radiographer's performance (improper positioning, centering, immobilization of patient, inappropriate exposure factors, failure to adjust to special circumstances, improper part-film distance, focal-film distance) or malfunctioning x-ray machine/film processor
 - Areas of the body are properly demonstrated, given the area of interest, requisition, and appearance of images in relation to appropriate technical standards
 - Anatomical structures needed for interpretation are shown in the image; their relationships are demonstrated appropriately
- Apply understanding of the effects of ionizing radiation on human organs and tissues, details of biological safety requirements, and protection procedures to conscientiously determine if an unnecessarily large area of the patient's body has been exposed; if there is visual evidence of proper field size collimation and appropriate shielding.
- Apply an understanding of diagnostic radiography to determine:
 - ✓ The type of radiographic images required for the examination listed on the requisition
 - ✓ If standards for diagnostic quality have been met
 - ✓ If any views are omitted

- ✓ What alternative patient or x-ray tube positioning may have been used to obtain views for which conventional positioning was contra-indicated
- Discuss the quality of the image, noting appearances of medically suspicious signs of pathological conditions
- Discuss what a radiographer should have done to improve the quality of the image; adjustment of technical factors, repositioning of the patient, or making additional exposures.
- While reviewing image(s) for technical quality, decide whether to “repeat” images or take additional views based on requisition orders
- In deciding if a “repeat” image(s) is needed, the reviewer should:
 - ✓ Restrict orders to those for medical reasons; i.e., for missing view(s)/area(s) of those needed to complete diagnostic information
 - ✓ Explain reasons for the decisions to “repeat”
- Accurately answer oral questions for clinical instructor related to radiographic quality
- Keep a written report of image(s) produced for reference to examination(s) in Image Critique sessions

The students will review each radiographic image to determine:

- Alignment of the Image receptor holder with the part to be radiographed:
- Centering of the tube to the film
- Positioning of the patient’s body part was in the correct relation to the IR for radiography; placement of the long axis of the part was coincident with the long axis of the IR or portion of the IR in use
- Accurate centering of the part to the IR holder; center of patient part was to the midline of the Bucky mechanism or midpoint of IR holder
- Adjustment of center of cassette holder was to the transverse level of the part; part is centered to the IR
- Positioning of the x-ray tube was so that the primary beam enters the area of interest at the appropriate angle to project the image needed

The student will review each image to assess whether:

- The tube was centered to the IR
- If instructions were accurately followed for establishing exposure factors on the control panel
- The image was overexposed/underexposed; if proper contrast and density of the image were produced and are present.
- The x-ray beam was collimated to the anatomical part to be demonstrated in each projection of the procedure.
- Radiologist’s density preference(s) was met
- There is evidence of equipment malfunction
- Any “repeat” image(s) ordered was only for medical diagnostic purposes

- Implementation of information on timing for the imaging procedure(s) was done.

The student should review each image to determine:

- Lead marker, identifying the structure, is visible on the image; note the appropriateness of use.
- Patient identification is readily visible, readable, and accurate for the patient for whom the radiographic procedure(s) was performed.
- That the correct lead marker(s) was used to identify the side(s) or body part(s).

J. General

The student will:

- Discuss with the supervisor incomplete, confusing, or unclear requisition(s); precautions needed in dealing with the patient; positioning options or contraindication(s) to imaging examination(s); the need to change from standard position to accomplish the examination purpose and will offer the least discomfort to the patient.
- Locate areas designated for storage of linen, bed pans, emesis basins, emergency drugs; be completely familiar with location of each in order to secure them quickly under emergency conditions.
- Use acceptable grammar, punctuation, spelling, sentence structure, and syntax in recording the radiographic examination of the patient. Including comments on equipment malfunction/failure, special care provided for the patient, or reason(s) any views could not be provided.

K. Fluoroscopic Skills

The student will:

- Assist with preparation(s) of patient(s) and equipment
- Observe radiation protection requirements to provide necessary protection for patient(s), self, and others; utilize distance as protection for technologist
- Anticipate the needs of the radiologists, patient, or procedure during the examination

L. Portable and Surgery Skills

- Safely transport the mobile radiography unit from the Radiology Department to the patient's bedside or operating room
- Position the mobile x-ray equipment accurately for the procedure requisitioned
- Utilize rules of body mechanics
- Observe radiation protection requirements to provide necessary protection for patient(s), self, and others as well as utilizing distance as protection for the technologist
- Choose exposure factors specific for the examination and patient measurements

- Utilize proper safety techniques and precautions against electrical hazards
- Follow established infection control procedures to prevent spread of infection and disease.
- Perform the procedures requisitioned.

II. Professional Behavior Traits

The student radiographer should exhibit professional traits and characteristics most often cited as needed by the professional radiographer. These include:

compassion	cooperation	interest
motivation	dependability	poise
self-discipline	loyalty	promptness

Specific responses are considered indicators of these traits and characteristics. These performance objectives have to do with the development of these traits and the determination of their presence

A. Compassion:

To demonstrate this trait, the student will:

- Assist patient(s) allowing him/her as much comfort as possible
- Assist patient(s) who waits for long periods of time in the Radiology Department (talking with patient(s), checking needs, etc.).
- Take care not to move patient(s) in any way that might be harmful, painful, or needlessly uncomfortable; select alternative position(s) when appropriate
- Never leave a patient unattended, especially when he/she might fall off the radiographic table or has had an injection of contrast medium.
- Always explain to a patient if a request can not be granted in the Department of imaging services.

B. Interest and Preparation:

To demonstrate these traits, the student will:

- Ask necessary questions (technical) to be able to perform the radiographic procedures requisitioned
- Possess and use items of the professional uniform; i.e., lead markers, pen with the appropriate color ink, identification nameplates, radiation monitoring devices, etc.
- Be familiar with routine procedure in assigned area as outlined in the Department's procedure manual.

C. Cooperation:

To demonstrate this trait, the student will:

- Respect each person's (patient(s) and personnel) dignity and privacy
- Establish good rapport with clerical personnel, aides, attendants, receptionists, technologists-staff and supervisory, Department

Administrators, medical staff-residents and radiologists, and classmates

- Accept guidance, suggestions, and constructive criticism from the technical staff and Department personnel without overt resentment
- Exhibit pleasant, amiable behavior with patient(s) and personnel (e.g., smiling, courtesy, etc.)
- Adhere to the rules and regulations of the Radiography Program, the Department of Radiology, and the Medical Center

D. Motivation:

To demonstrate this trait, the student will:

- Ask necessary technical questions to enable them to perform requisitioned radiographic procedures, even those with which they are unfamiliar
- Practice previously learned skills voluntarily
- Ask for assistance in attempting new or more complex procedures
- Perform tasks that are unassigned but necessary for the efficient function of the Radiology Department

E. Dependability:

To demonstrate this trait, the student will:

- Be prompt in:
 - ✓ Arriving at the clinical area sufficiently early to be in the assigned radiographic room at the appointed time (hour as appropriate)
 - ✓ Energetically and efficiently approaching radiographic procedures to be performed
 - ✓ Returning to the department from lunch or breaks at the allotted time
 - ✓ Proceeding with assignments given; completing them within the allotted time period
- Complete assignments promptly, thoroughly, and accurately
- Be in attendance in the radiography room or with the technologist to whom assigned
- Function as prescribed by the clinical education objectives at the direction of the clinical instructor or staff radiographer in the radiography room
- Recognize and acknowledge limitations of knowledge and experience
- Be honest and truthful

F. Poise and Self-Discipline:

To demonstrate these traits, the student will:

- Exhibit a pleasant, amiable behavior with patients and personnel
- Maintain composure and professional decorum in all situations, particularly those which are unusual

- Exhibit adaptability in “new” or unusual situations
- Exercise self-discipline in emotional or sensitive situations, i.e., not displaying anger, disgust, repulsion, excessive glee, nor disrespect
- Accept criticism positively and benefit as a result
- Exercise self-discipline when studying or performing radiography; i.e., keep mind on what is being done and stay with the responsibility until it is accomplished

G. Maturity and Judgment:

To demonstrate these traits, the student will:

- Exercise self-discipline in all of its aspects
- Recognize and acknowledge limitations of knowledge and experience
- Conclude what information to convey to the patient based on the patient’s condition/behavior and Institutional policy
- Answer questions from patient or patient’s family appropriately
- Select non-controversial topics to discuss with patients or in the patient’s hearing
- Eating, drinking, or smoking are prohibited in a patient care area or where the patient can see you; any of these activities should occur only in designated area(s)
- Refrain from discussing patient cases when in a public area or conveyance. (Anywhere patient(s), patient family member(s), or friend(s) of the patient may overhear)

H. Appearance:

To demonstrate the mean and appearance of a professional person, the student will:

- Wear the appropriate uniform designated for student radiographers
- Practice good personal hygiene-both mouth and body
- Refrain from infractions of the rules regarding the uniform for the student radiographer
- Refrain from the use of chewing gum, food, drinks, and smoking while in the radiographic room(s)/hallway of the department of imaging services.

e. Student Responsibilities- clinical

- Report promptly at assigned time of duty
- Report fit for clinical assignments
- Report in proper attire
- Report promptly to area of clinical assignment
- Remain in assigned area during all procedures
- Attend and assist clinical staff with each procedure; remain until procedure is complete
- Forfeit all activities in the provision of excellent patient care
- Perform procedures which have been practically demonstrated in class as assigned/requested under direct supervision of qualified staff.
- Attend to patients at all time while on examination table.
- Demonstrate adequate respect for patients, physicians, staff, peers
- Maintain at least an 85% average in clinical and competency evaluation
- Report all complaints to school official on a timely basis

f. Clinical Grade

The student radiographer's clinical grade is based on the following areas. The clinical grade will also include the percent worth of that area.

1. ATTENDANCE	10%
2. DRESS CODE (uniform, markers, technicards, film badge and name badge)	10%
3. ROOM ROTATION OBJECTIVES	10% (semester 1 only)
4. EVALUATION OF CLINICAL PERFORMANCE (minimum of 10 per quarter)	20%
5. STAFF TECHNOLOGISTS EVALUATION (minimum of 10 per quarter)	10%
6. COMPETENCY-BASED EVALUATIONS (semester II III IV - 50%)	40%

g. Competency Based Evaluation System

The student radiographer must complete the following sequence of events, in order, before achieving Final Clearance in any specific exam.

Step 1: Didactic instruction and demonstration in the energized lab (observation)

Step 2: Observation of procedures by a staff technologist in the clinical area (observation)

Step 3: Laboratory test on a mock patient

Step 4: Performance of the required number of exams under the direct supervision and instruction of the clinical instructor or technologist within specified semester (direct supervision)

Step 5: Exhibition of one set of images from each exam (done under direct supervision) by a clinical instructor or staff technologist and is evaluated by the clinical instructor. A grade of 85% or above must be achieved on the image evaluation to perform under indirect supervision. If grade is below an 85%, the student must remain under direct supervision for that procedure until competency has been achieved. If the student has not achieved passing score on the next attempt, the student must return to step 1.

Step 6: Performance of the required number of exams under indirect supervision.

Step 7: Re-competency evaluations at a rate of ten per quarter by staff technologist or clinical instructor(s).

COMPETENCY-BASED/CLINICAL PROCEDURE/IMAGE EVALUATION

Each phase of the Evaluation System must be completed at the end of each Semester.

Phase I- Semester I July-Dec

1. Chest routine-M
2. Chest decubitus-E
3. Abdomen/KUB-M
4. Obstruction series-M
5. Thumb/Finger-M
6. Hand-M
7. Wrist-M
8. Forearm-M
9. Elbow-M
10. Humerus-M
11. Shoulder-M
12. A-C joints-E
13. Toe -E
14. Foot-M
15. Calcaneous-E
16. Ankle-M
17. Lower leg-M

Phase II-Semester II Jan-June

1. Gallbladder-E
2. IVP-E
3. UGI-M
4. Barium Swallow-E
5. Clavicle-E
6. Scapula-E
7. Knee-M
8. Femur-M
9. Hip-M
10. Pelvis-M
11. Patella-E
12. Trauma extremity U/L-M
13. Trauma shoulder-M
14. Trauma hip-M
15. WC/Stretcher chest-M
16. Cystogram-E
17. Small bowel Series-E

Phase III- Semester III July-Dec

1. Barium Enema-E
2. BE with air -E
3. Skull-E
4. Unilateral ribs-M
5. Sternum-E
6. Cervical spine-M
7. Thoracic spine-M
8. Lumbar spine-M
9. Sacrum/Coccyx-E
10. Soft-tissue neck-E
11. Nasal bones-E
12. Orbits-E
13. Facial-E
14. Zygomatic Arches-E
15. SI joints-E
16. Scoliosis series-E

Phase IV- Semester IV Jan-June

1. Sinuses-M
2. Mandible-E
3. OR extremity
4. Myelogram-E
5. Sialogram-E
6. Arthrogram-E
7. Pediatric chest-M
8. Pediatric Fluoro-E
9. Pediatric extremity-E
10. Mobile Pediatric-E
11. C-arm-E
12. ERCP-E
13. Trauma c-spine-M
14. Port Chest-M
15. Port Abdomen-M
16. Port extremity-M

h. Clinical Prerequisites

- Must complete Program Orientation prior to rotation in clinical area and have CPR certification.
- Students must complete Radiation Protection Inservice Program prior to clinical rotations.
- Junior objectives must be completed prior to Special rotations.
- Instructional In-services must be given prior to Special rotations.
- Students must complete the Medical Center Orientation within the first month of the program. (This includes fire/tornado; infection control; disaster plan and hazardous waste inservices)

i. Clinical Evaluations

- Ten evaluations are required to be turned in by each quarter deadline. For each evaluation not turned in, one (1) point will be deducted from the clinical grade.
- The student radiographer is responsible for submitting ten evaluations, each from a different staff technologist that can effectively and fully evaluate the student radiographer.
- Each evaluation must be signed and dated by the evaluating staff technologist and the student technologist and the student radiographer. The completed evaluations will be kept on file in the School Office.
- Grading for the staff evaluation portion of the final grade is as follows:
Average score of 3 = 100% 2 = 85% 1 = 75%
- The clinical evaluations will be 20% of the clinical grade.

j. Monthly Clinical Progress Report

Mercy Hospital St. Louis
School of Radiologic Technology

Monthly Clinical Progress Report

Name: _____ Month: _____

Evaluations

Clinical Exam Performance _____ (10/quarter)
Weekly Review _____ (10/quarter)

Monthly Tally sheets (12/year)

July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June

Room Objectives

1	2	4	5	6	7	8	ED	Port	Trans	MDB 1/2	MDB 6	MDB Ofc	Front Ofc/file	Rounds

Special Rotations

OR	CT	Spine center	Venip center	Cancer center	Trauma	Ortho

Comments:

k. Clinical Competency Record

Mercy Hospital St. Louis-School of Radiologic Technology

NAME:

MONTH:

Radiographic Procedure	M/E	O	D	I	R	Radiographic Procedure	M/E	O	D	I	R
<i>CHEST AND THORAX</i>						<i>SPINE AND PELVIS</i>					
Chest routine	5	M				Cervical Spine	3	M			
Chest AP (wc/cart)	3	M				Trauma C-spine (x-table lat)	1	E			
Ribs	2	M				Thoracic Spine	2	M			
Chest Lateral Decub	2	E				Lumbosacral Spine	5	M			
Sternum	1	E				Pelvis	5	M			
Upper airway (ST neck)	1	E				Hip	5	M			
<i>UPPER EXTREMITY</i>						x-table lateral hip	1	M			
Thumb or Finger	1	M				Sacrum and/or Coccyx	1	E			
Hand	3	M				Scoliosis Series	1	E			
Wrist	3	M				Sacroiliac Joints	1	E			
Forearm	3	M				<i>ABDOMEN</i>					
Elbow	3	M				Abdomen Supine (KUB)	5	M			
Humerus	2	M				Abdomen Upright	5	M			
Shoulder	3	M				Abdomen Decubitus	2	E			
Trauma Shoulder (Y-view, Transthoracic, axillary)	3	M				Intravenous Urography	3	E			
Clavicle	1	E				<i>FLUOROSCOPY STUDIES</i>					
Scapula	1	E				Upper GI Series (Single or Double contrast)	4	E			
AC Joints	1	E				Barium Enema (S or D)	3	E			
Trauma: Upper Extremity (non-shoulder)	1	M				Small Bowel Series	3	E			
<i>LOWER EXTREMITY</i>						Esophagus	2	E			
Toes	1	E				Cystography/ Cystourethrography	2	E			
Foot	3	M				ERCP	1	E			
Ankle	3	M				Myelography	4	E			
Knee	3	M				Arthrography	3	E			
Tibia-Fibula	2	M				<i>SURGICAL STUDIES</i>					
Femur	2	M				C-arm Procedure (Orthopedic)	3	M			
Trauma: Lower Extr	1	M				C-arm Procedure (Non-ortho)	3	E			
Patella	3	E									
Calcaneous (Os Calsis)	1	E				<i>MOBILE STUDIES</i>					
<i>CRANIUM</i>						Chest	5	M			
Skull	1	E				Abdomen	5	M			
Paranasal Sinuses	1	E				Orthopedic	2	M			
Facial Bones	1	E				<i>PEDIATRICS (6 or under)</i>					
Orbits	1	E				Chest Routine	5	M			
Zygomatic Arches	1	E				Upper Extremity	2	E			
Nasal Bones	1	E				Lower Extremity	2	E			
Mandible (Panorex acceptable)	1	E				Abdomen	2	E			
						Mobile Study	2	E			

IV. DIDACTIC EDUCATION

a. Prerequisites for didactic courses

**Mercy Hospital St. Louis
School of Radiologic Technology
Prerequisites for Didactic Courses**

Orientation: Entry level prerequisites

A & P: High School level Biology

Introduction to Radiologic Technology: Entry level prerequisites

General Mathematics: College Algebra

Medical Terminology: entry level prerequisites

Patient Care and Management: Entry level prerequisites

Radiation Protection: Entry level prerequ and attendance at Radiation Safety Lecture

Skeletal Positioning and Procedures: Orientation and entry level prerequisites

Visceral Positioning and Procedures: Orientation and entry level prerequisites

Radiation Biology: Radiation Protection

Principles of Radiographic Exposure: General Mathematics

Skull Positioning and Procedures: Skeletal and Visceral Positioning and Procedures

Special Procedures: Skeletal and Visceral Positioning and Procedures

Evaluating Radiographs: Visceral, Skeletal and Skull Positioning and Procedures

Radiation Physics: Radiation Biology

Radiographic Pathology: A & P, Medical Terminology

Pharmacology: Patient Care and Management

Ethics: Patient Care and Management, Introduction to Radiologic Technology

Introduction to Computer Literacy: General Math, POE

Quality Assurance: Radiation Protection, Principles of Exposure

b. Didactic Courses

Year I

**Mercy Hospital St. Louis
School of Radiologic Technology
Didactic Courses**

Year I

Semester I July - December

Course	Instructor	Text
Medical Terminology	James Ibaviosa	Medical Terminology: A word building approach- Rice
Patient Care Management	Erik Ringwald	Patient Care in Imaging Technology- Torres
Anatomy and Physiology	Erik Ringwald	Essential of Anatomy and Physiology- Scanlon/Sanders
Radiation Protection	James Ibaviosa	Radiographic Science for Technologist –Bushong
Principles of Radiographic Exposure	James Ibaviosa	Radiographic Imaging and Exposure- Fauber
Radiographic Procedures- Skeletal/Visceral	Jim Fletcher	Merrill’s Atlas of Radiographic Positions and Procedures- Ballinger
Introduction to Radiologic Technology	James Ibaviosa	Introduction to Radiologic Technology- Gurley

Semester II January - May

Course	Instructor	Text
Anatomy and Physiology	Erik Ringwald	Essentials of Anatomy and Physiology- Scanlon/Sanders
Medical Terminology	James Ibaviosa	Medical Terminology with Human Anatomy- Rice
Patient Care and Management	Erik Ringwald	Basic Medical Techniques and Patient Care in Imaging Technology- Torres
Radiation Biology	James Ibaviosa	Radiologic Science for Technologist- Bushong
Principles of Exposure	James Ibaviosa	Radiographic Imaging and Exposure- Fauber
Radiographic Positioning- Skeletal/Visceral	Jim Fletcher	Merill’s Atlas of Radiographic Positions and Radiologic Procedures- Ballinger

Mercy Hospital St. Louis
School of Radiologic Technology
Didactic Courses Year II

Semester III July - December

Course	Instructor	Text
Anatomy and Physiology	Erik Ringwald	Essential of Anatomy and Physiology- Scanlon/Sanders
Patient Care Management	Erik Ringwald	Basic Medical Techniques and Patient Care in Imaging Technology- Torres
Radiation Physics	Steven Freeman	Radiologic Science for Technologist- Bushong
Principles of Exposure	James Ibaviosa	Radiographic Imaging and Exposure- Fauber
Radiographic Positioning- Skeletal/Visceral	James Ibaviosa Jim Fletcher	Merrill's Atlas of Radiographic Positions and Radiologic Procedures- Ballinger
Special Procedures	James Ibaviosa	Merill's Atlas of Radiographic Positions and Radiologic Procedures- Ballinger
Radiographic Film Evaluation	Jim Fletcher	Evaluating Radiographs- Kowalczyk/Donnett Merrill's Atlas-Ballinger

Semester IV January - May

Course	Instructor	Text
Anatomy and Physiology	Erik Ringwald	Essentials of Anatomy and Physiology- Scanlon/Sanders
Radiation Physics	Steve Freeman	Radiologic Science for Technologist- Bushong
Principles of Exposure	James Ibaviosa	Radiographic Imaging and Exposure- Fauber
Radiographic Pathology	James Ibaviosa/	Radiographic Pathology for Technologists- Mace
Special Procedures	James Ibaviosa	Merill's Atlas of Radiographic Positions and Radiologic Procedures- Ballinger
Radiographic Positioning- Skull	Jim Fletcher	Merill's Atlas of Radiographic Positions and Radiologic Procedures- Ballinger
Digital Technologies	Jim Fletcher	Radiographic Imaging and Exposure- Fauber
Quality Assurance/ Departmental Administration	James Ibaviosa	Introduction to Radiologic Technolgy- Gurley Radiologic Science for Technologists-Bushong
Ethics	Erik Ringwald	Law and Ethics for Medical Careers- Judson

c. Student Responsibilities- Didactic

- ✓ Report for class at assigned time
- ✓ Report in proper attire
- ✓ Report prepared and attentive for class (written/reading) assignments
- ✓ Perform written/reading assignments at proper time/place
- ✓ Maintain at least a C average or a 2.0 GPA

d. Didactic quarterly progress report

Mercy Hospital St. Louis
School Of Radiologic Technology
Quarter Grades

Student:

Year: I Semester: II Quarter: I

Patient Care	
Anatomy and Physiology	
Visceral Positioning	
Radiation Biology	
Medical Terminology	
Skeletal Positioning	
Principles of Exposure	

Program Director

Date

e. Semester Grade Report

School of Radiologic Technology

Didactic Evaluation:
SS#

Course/Instructor	Semester I	Semester II	Semester III	Semester IV	Final Grade
Anatomy & Physiology/Ringwald					
Eval. Radiographs/Fletcher					
Intro to Rad. Tech./Ibaviosa		---	---	---	
Medical Terminology/Ibaviosa			---	---	
Patient Care/Ringwald					
Principles of Exposure/Ibaviosa	---				
Radiographic Pathology/Ibaviosa	---	---	---		
Radiation Protection/Ibaviosa		---	---	---	
Radiation Biology/Ibaviosa	---		---	---	
Radiation Physics/Freeman	---	---			
Skeletal Positioning/Fletcher					
Special Procedures /Ibaviosa	---	---	---		
Visceral Positioning/Fletcher			---	---	
Pharmacology/Ringwald	---	---	---		
Digital Technology/Fletcher	---	---	---		
Medical Ethics/Ringwald	---	---	---		
Radiography Journal					

Didactic GPA

Class Average

Practical Positioning Evaluation

Competency Evaluation

Clinical Grade

Clinical GPA

Absent/Tardy

Start Date/ Completion Date

James E. Ibaviosa, R.T., MBA
Program Director

Thomas A. Applewhite, MD
Medical Advisor

V. GRADUATION REQUIREMENTS

a. Program Completion

After successful completion of the 24 months of didactic and clinical education, the student will be awarded a certificate and school pin.

The following criteria must be met prior to graduation:

- Certification in CPR
- Terminal competencies/evaluation
- Required clinical competencies
- Didactic and clinical courses
- Clinical rotations and objectives
- Minimum number of clock hours
- Required program evaluations
- Tuition/fees paid in full
- Returned all property belonging to the program or Medical Center

An award will be presented to the student who achieved excellence in academic education and clinical education.

b. Graduation Requirements

**Mercy Hospital St. Louis
School of Radiologic Technology
Graduation Requirements**

Student Name:

To be eligible for graduation, the student must successfully complete the following:

Requirement

1. Patient Care requirements (CPR, Vital signs, sterile technique, venipuncture, patient transfers, care of patient medical equipment).
2. Terminal Competencies/Evaluation (average score of 2)
3. Required Clinical Competencies (> 85% average)
4. Clinical Courses with an accumulative of 85% or better
5. Clinical rotations and objectives
6. Program Completion requirements
7. Didactic Objectives with an accumulative GPA of 2.0 or better
8. Minimum number of Clock Hours
9. Required Program Evaluations
10. Tuition and Fees Paid in Full
11. Returned all property belonging to program or Medical Center (lead markers, film badge, library books, Name ID, Parking tag, Electronic security badge, etc.)

Program Director Signature/Date

c. Exit evaluation

**Mercy Hospital St. Louis
School of Radiologic Technology**

Terminal/Exit Evaluation

Student _____ S.S. Number _____

Graduation Date: _____

The graduate shall be able to:

- | | | | |
|--|--------------------------|---|---|
| 1. provide basic patient care and comfort and anticipate patient needs | <input type="checkbox"/> | | |
| 2. provide appropriate patient education | 3 | 2 | 1 |
| 3. practice radiation protection | 3 | 2 | 1 |
| 4. understand basic x-ray production and interactions | 3 | 2 | 1 |
| 5. operate medical imaging equipment and accessory devices | 3 | 2 | 1 |
| 6. position the patient and medical imaging system to perform examinations and procedures | 3 | 2 | 1 |
| 7. exercise independent judgment and discretion in the technical performance of medical imaging procedures | 3 | 2 | 1 |
| 8. demonstrate knowledge of human structure, function and pathology | 3 | 2 | 1 |
| 9. demonstrate knowledge and skill relating to quality assurance activities | 3 | 2 | 1 |
| 10. evaluate the performance of medical imaging systems | 3 | 2 | 1 |
| 11. evaluate medical images for technical quality | 3 | 2 | 1 |
| 12. demonstrate knowledge and skill relating to medical image processing | 3 | 2 | 1 |

- | | | | |
|---|---|---|---|
| 13. understand the safe limits of equipment operation | 3 | 2 | 1 |
| 14. recognize equipment malfunctions and report them to the proper authority | 3 | 2 | 1 |
| 15. demonstrate knowledge and skills relating to verbal, nonverbal, and written medical communication in patient care intervention and professional relationships | 3 | 2 | 1 |
| 16. support the profession's code of ethics and comply with profession's scope of practice | 3 | 2 | 1 |
| 17. recognize emergency patient conditions and initiate first aid and basic life support procedures | 3 | 2 | 1 |
| 18. exercise independent judgment and discretion in the technical performance of medical imaging procedures | 3 | 2 | 1 |
| 19. apply principles of body mechanics | 3 | 2 | 1 |
| 20. completely perform a full range of Radiologic procedures on children and adults in the following categories: | | | |

Head/Neck	yes _____	no _____
Abdominal/GI/GU	yes _____	no _____
Musculoskeletal	yes _____	no _____
Chest and Breast	yes _____	no _____
Trauma	yes _____	no _____
Bedside	yes _____	no _____
Surgical	yes _____	no _____

C.P.R. Certification Date Received _____ Date Expired _____

Program Director _____

Student _____

Date _____

VI. ADMINISTRATIVE POLICIES

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POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.01

Title: Program Administration

Medical Director: The Medical Director is responsible for the advisement of the operation of the School of Radiologic Technology.

Program Director: Reports to the Medical Director and the Director of Imaging Services. Works to provide the administrative and educational functions for the operation of the School of Radiologic Technology.

Admissions Committee: Program Director, Clinical Instructor, Radiologist, Administrative support, Imaging Services Manager, and a Faculty member.

Grievance Committee: Director of Imaging Services, Medical Director, Human Resource representative, Imaging Services Manager

Scholarship Committee: Medical Director, Director of Imaging Services, Program director, Family representative optional.

Advisory Committee: Medical Director, Director of Imaging Services, Administration representative, Program Director, Clinical Instructor, Imaging Services Manager, Human Resource representative, faculty member.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.02

Title: Obligations

The Medical Center and School of Radiologic Technology have an obligation to you, our student, to:

- Conduct classes regularly and cover the complete Program in Radiologic Technology according to the prescribed standards.
- Tell you what is expected of you in the way of performance.
- Advise you whether you are performing satisfactorily.
- Treat you, our student, fairly and impartially.
- Measure your performance using facts rather than opinion and record such performance based upon objective judgment.

You as a student, have an obligation to:

- Treat all patients, visitors, co-workers, peers and physicians with courtesy and respect.
- Perform your assigned duties efficiently and effectively.
- Follow the Medical Center's rules, regulations and policies.
- Constantly bear in mind that the success or failure of the Medical Center depends collectively on the individual contributions from everyone here.
- Give your full cooperation and demonstrate an eagerness to learn.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.03

Title: American's with Disabilities Act

Mercy Hospital engages in the interactive process for co-workers who have a disability (as that term is defined in the Americans with Disabilities Act). Any student who has a disability and believes that a reasonable accommodation would better enable them to perform the essential functions of a student position should let the program director know and/or contact Human Resources. The matter will be discussed and, if the student has a disability as defined in the Americans with Disabilities Act, and a reasonable accommodation exists that would better enable the student to perform the essential functions of a student, a reasonable accommodation will be granted to the extent it would not be an undue hardship. However, students should remember that the accommodation granted will not in all cases be the particular accommodation desired by the student.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.04

Title: Courtesy/Conduct

Mercy Hospital St. Louis is known as a friendly place to be when you are sick. You represent the Medical Center to the public. Your personal appearance, friendly attitude and eagerness to be of service are necessary to maintain the Medical Center's long-standing reputation. The patient, visitors, family members, and friends are the most important people in the Medical Center. Your courtesy and friendly attitude goes a long way in conveying our interest in them.

All students are required to conduct themselves while at the Medical Center property, according to generally accepted Medical Center and business principles and standards. This applies to dress, behavior, attitude and personal fitness for duty. Students should report for duty in a clean, neat and well-groomed manner, ready and able to carry out assigned tasks.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.05

Title: Confidentiality

It is Mercy policy (and in most cases a legal requirement) that all students must safeguard information regarding patients, employees and students. No medical information, including the fact that a person has been treated in a Mercy Health facility (or elsewhere), may be released except by authorized persons as appropriate. Any information available to students about Mercy Health patients, including employees and students who are patients, must be kept confidential and not discussed with others, including other student and employees, as needed for medical treatment or to comply with legal processes or legal requirements.

Student will sign a Confidentiality statement when enrolled in the program and will be kept in the student's file. Students will also receive mandatory HIPPA education.

Violations of this policy will result in disciplinary actions up to and including termination of the student.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.06

Title: Absence/Sick

As an allied health professional you will be expected to be dependable in your job and assignments.

As a student in the program, your sick days are recorded to make you aware of your strengths or weakness in this area as well as to provide an overall recommendation to future employers a record of your attendance in the program.

If a student has excessive absences from the clinical assignments, this could affect the chances of getting valuable clinical experience, possibly prolong training, as well as affect the student's chances of future employment.

Rules:

1. If sick/absent, the student must call their assigned clinical area prior to the time they are to report for clinical duty. A message on the school office phone must also be left giving time called, reason for absence and expected return to clinical duty.
2. Excused absences are defined by which a student provides written verification from a physician or documentation of a death in the family which includes parents, siblings, grandparents and offspring.
3. All student radiographers will abide by the Mercy Hospital St. Louis employee policy on absenteeism.
(see attached policy)
4. The student must meet the minimal number of clinical hours necessary for graduation.
5. Unless hospitalized or upon doctor's orders, the student is to report progress to the School Office each day.
6. If the student is sick/absent for more than two(2) consecutive days, the student should report to their family physician for a release to return to clinical duty.

7. Should a student be sick/absent from class time, a doctor's excuse must be presented to the Program Director to be able to make up any test or classroom assignment without a 20 percent deduction from the total score. Worksheets and/or homework given that day of the absence are the responsibility of the student. If a student fails to report for class it will be considered an unexcused absence.
8. If the student is on any prescribed medication that may compromise physical and/or mental capabilities should not report to clinical area. Other clinical objectives may be assigned as appropriate.
9. Time missed for prolonged illness or injury must be made up at the end of the Program to complete all requirements for graduation.
10. Each student is allowed 56 hours sick/absent time for the 24 months whether it be excused or unexcused absence. These hours are part of the PTO bank. All time off scheduled or unscheduled will be taken from the PTO bank. If hours exceed the PTO bank they will be made up in the areas missed to complete graduation requirements.
11. Counseling will follow employee absenteeism policy. (see attached policy)
12. If student is counseled for absences, points will be deducted from the clinical grade at a rate of 5 percentage points per absence/counseling. If the student's clinical grade falls below an 85% because of points deducted, the student may be dismissed from the program.

Procedure:	Action:
Student missed total	<ol style="list-style-type: none"> 1. Notifies assigned clinical area as soon as possible. Leaves message on School Office phone. 2. Makes all time over PTO hours given in clinical areas 3. Keeps School Office informed of progress 4. Notifies School Office if taking medication that will alter performance.
Clinical Instructor	<ol style="list-style-type: none"> 1. Documents all absences 2. Keeps Program Director informed of absenteeism's
Program Director	<ol style="list-style-type: none"> 1. Reviews all records 2. Counsels and advises students 3. Reviews missed assignments 4. Grades student accordingly 5. Assigns students to non-critical rotations if necessary

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.07

Title: Academic Advisement/Counseling

The School of Radiologic Technology has an obligation to insure proper performance and conduct by students, and to take steps in the form of positive and constructive counseling to correct any student who deviates from that standard. The program officials have an open door policy to all students for guidance/counseling. The program director/clinical instructor will meet with each student individually on a semester basis or as deemed necessary to review the didactic and clinical components of the program.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.08

Title: Advanced Placement

College credits or any related didactic course(s) taken prior to admission, or in conjunction with this training program cannot be used to negate or shorten the courses offered in this program. They will be used to meet the prerequisite requirements of the program.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.09

Title: Change of Address

Students are required to report immediately, any change in name, address, or telephone number to the school office.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.10

Title: Classroom

The Department of Imaging Services provides a classroom for sessions held by the School of Radiologic Technology. The classroom has the following features:

- Space to comfortably accommodate total class
- Adequate tables and chairs
- Bright fluorescent lighting
- Individual thermostatic temperature control
- Space for demonstrations
- Audio-visual equipment
- Computer access with printer

The Radiology Classroom is located on the ground level of the medical center. The Radiology Classroom will be opened from 8:00 am to 4:00 p.m., Monday through Friday.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.11

Title: Clinical Application

The rotation through the various clinical areas of the Medical Center has been designed to provide the student with optimum exposure to the required as well as optional vocational fields available to them through this Program. All students are given equitable opportunities to perform all procedures incorporated in the clinical curriculum. The Clinical rotation component of this program requires each student to accrue a minimum of 2880 hours over the two years in clinical applications.

Students will be assigned to radiographic rooms in the Imaging Services Department on a rotational basis. Room assignments will be noted on the schedules and also on the staff assignment list located in the work area by the charge tech area.

Students will be assigned to transport patients during initial rotations as means of evaluating student patient rapport and to observe patient clinical status and transportation safety.

Student performance during scheduled rotations will be evaluated by the supervisors, staff technologists, staff radiologists, and clinical instructors in a written evaluation form.

During the second year of training, the student will be assigned to clinical rotation in Operating room, CT Scanner, Ultrasound, MRI, Cardiac Cath Lab (optional), Interventional Radiography (optional), Radiation Therapy (optional), Nuclear Medicine (optional), Spine Center, Mammography (optional), and GI Lab (optional). Operating room and CT rotations will be ongoing through the entire senior year.

CPR classes will be scheduled for all students during the week of orientation.

While on clinical rotation in the Imaging Services Department, the student will also be assigned to the office and file room for a period of one to two weeks to successively complete the rotational objectives for those areas. The student will assist with any duties as determined by the clinical instructor/supervisor on duty to complete all necessary objectives.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.12

Title: Communicable Disease

When students come to, are reported to, or noticed by the program director or clinical instructor with symptoms or findings of a contagious condition, including exposure to such condition where pertinent, the student will be sent immediately to Mercy Corporate Health Services. In the event that Mercy Corporate Health Services is not open and a decision is needed, the student will be sent to the emergency department. The program director or clinical instructor/supervisor will send a written note with the student requesting an opinion from the supervising physician in the emergency department as to the student's availability for didactic/clinical assignment. In the event the student is considered unfit or contagious, the student will be sent home with appropriate instructions.

Cost of medical care will be at the student's expense, unless the illness is related to a clinical exposure.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.13

Title: Dress Code

General Information

All Medical Center employees and students are expected to present a professional appearance to maintain a positive public image and /or a professional work/clinical environment as appropriate. It is expected that students will follow this policy whenever they are on the Medical Center campus or on Medical Center business. This also includes an expectation of demonstrating good judgment coming to and going from clinical.

The overall appearance is expected to be functional, conservative, and conducive to safety in the performance of clinical objectives. This includes garments that are clean, neat, pressed, tidy and fit appropriately. Undergarments are expected to be of a neutral color and should not show through outer garments. Jewelry, makeup and nail appearance are expected to be clean and well groomed. Beards and mustaches are expected to be neatly groomed and in clinical areas should not interfere with any protective devices. No tight fitting outer garments are to be worn. Dress/skirt length are expected to be no more than 2 inches above the knee length to lower calf length. Slacks are expected to be ankle length. Tops are expected to have sleeves and conservative necklines.

VISIBLE HOSPITAL IDENTIFICATION BADGE IS MANDATORY. This must be worn above waist level.

Program Director may approve exceptions for attire on or around holidays or other special occasions with the knowledge of the Director of Imaging Services. Students are expected to exercise good judgment to ensure attire remains reasonable and conducive to appropriate clinical outcomes on these occasions.

In accordance with OSHA blood borne pathogen standards, eating drinking, smoking, applying cosmetics or lip balm, handling of contact lenses and similar activities are prohibited in areas where there is specimen handling or where soiled or contaminated items are handled.

Carry communication devices such as beepers, cellular phones, recording devices, etc., are considered a violation of this policy if their use is not pre-approved by the program director as operationally necessary.

The students enrolled in the School of Radiologic Technology will follow the dress code of the Department of Imaging Services. This policy shall be communicated to students in writing and during orientation and reinforced over time. Violations of this policy shall be handled in accordance with the disciplinary procedure.

II. Scrub Clothing

Mercy Hospital St. Louis School of Radiologic Technology, in accordance with infection control standards of care, requires students enrolled in the program to wear scrub attire while in the clinical area. The scrub clothing designated for Mercy Hospital and the School of Radiologic Technology consist of the following colors: Scrub pants- Black. Scrub tops- Black with Mercy Logo. White lab coats/black scrub jackets are permitted, but must include the Mercy logo. More specific information will be provided during orientation.

In accordance with the Medical Center policy for utilization of Standard Precautions and in compliance with the OSHA Blood-borne Pathogen Standards, Mercy Hospital St. Louis shall provide personal protective equipment in the form of either a fluid resistant or impervious gown. Such equipment is available in each department. Scrub clothes are not considered to be personal protective equipment either by the Medical Center or the OSHA standard.

III. Specific Information

- The outermost layer of M-Wear apparel must always be a Mercy logo item. *I.e. Mercy logo dress shirt, polo, cardigan, scrub jacket, scrub vest, scrub top or lab coat.*
- Department names or job titles should not be embroidered on any tops.
- Mercy badges are to be worn on the right side affixed to a badge tab, the collar of a collared shirt/blouse or the right neckline of a top (if no badge tab is available) and worn on the outermost layer of apparel at all times. Lanyards are not permitted.
- Footwear should be clean, in good condition and appropriate for safety and job function. For a cohesive, professional look a black shoe is recommended. Check with your manager for specific shoe requirements.

Guidelines for Scrub Apparel

SCRUB TOPS

- Must be Landau™, Urbane™, or Scrub Zone™ brand scrubs.
- Must be worn with matching scrub pants at all times and may not be worn with any other pants, i.e., work pants or dress pants.

- May be worn with a Mercy logo scrub jacket or scrub vest as outerwear. Mercy logo cardigan sweaters and sweater vests are not permitted over scrubs.
- May be worn with any of the Mercy color T-shirts (short sleeve, 3/4 sleeve or long sleeve T-shirts).
- Scrub tops with colored trim may only be worn with the T-shirt of matching color.

SCRUB PANTS

- Must be Landau™, Urbane™, or Scrub Zone™ brand scrubs.
- Mercy designated black scrub pants must be worn with a matching Mercy logo scrub top, scrub jacket or vest, or polo shirt.

T-SHIRTS

- Must be worn under a Mercy logo scrub top, vest or jacket at all times and may not be worn by itself at any time.
- When Mercy color T-shirts are worn under scrub tops with colored trim, the Mercy color T-shirt must match the trim color of the scrub.
- To keep M-Wear vibrant, when you wear a layering shirt wear the shirts offered through the M-Wear line in one of the four colors (red, blue, green and yellow). No other colored layering shirts may be worn. For example, no other hues of green or red and no other colors like orange or purple. The M-Wear layering shirts are offered in various sleeve lengths and fabric styles to meet many needs. If a white or black undershirt is worn it must be worn under a scrub top and be clean and in good condition.

SCRUB JACKETS AND VESTS

Must be Landau™, Urbane™, or Scrub Zone™ brand scrubs.

Must be worn with a Mercy color T-shirt, Mercy logo scrub top or polo.

LAB COATS

- White lab coats must have the Mercy logo embroidered on the left chest.
Embroidered logo must be done by an approved Mercy vendor.
- Any licensed clinician has the option of wearing the white Mercy logo lab coat as outerwear.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.14

Title: Drug and Alcohol-Free Workplace

Mercy has a strong commitment to provide a safe work environment for all of its co-workers, patients, and visitors. It is Mercy's Policy to maintain an environment that is free of impairment related to alcohol and drug use by co-workers/students. In that regard, the unlawful manufacture, sale, or use of any substance subject to abuse while on Mercy's property, or while participating in Mercy related business is strictly prohibited. Individuals who engage in such conduct or who fail to cooperate with any action deemed appropriate to enforce this policy will be subject to disciplinary action up to an including discharge and possible legal action.

See HR policy/procedure number MW-10/019

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.15

Title: Early Release

This program does not offer early release to any student. Clinical education is in effect until graduation to reinforce and improve clinical skills and expertise of radiographic procedures.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.16

Title: Mercy Corporate Health

Students who are injured during program hours are sent to the Mercy Corporate Health Services during the hours of 07:00 and 17:00, Monday through Friday. If the student becomes ill during program hours, the program director or the clinical instructor will determine whether the student should be seen by a physician immediately (see Contagious Disease Policy). Students must receive authorization from the Program Director or the clinical instructor/supervisor in the absence of the program director prior to proceeding to the Mercy Corporate Health Services or the Emergency Department.

Should a student be injured in the Medical Center or on the premises, an Incident Report must be completed and signed by the program director or the clinical instructor/supervisor in the absence of the program director. This report must be submitted to Mercy Corporate Health Services or the Emergency Department at the time of treatment. If no treatment is required, an incident report must be completed by the clinical instructor or clinical supervisor and submit to the school office.

Any incident involving exposure to blood/body fluids will be managed through the Exposure hotline at 314-989-9199 or the Mercy Corporate Health Services Department. Student must report to Unity Corporate Health Services immediately after exposure.

If the student receives a serious injury, the student will be sent immediately to the Emergency Department.

The Mercy physical form will be kept on file in the Mercy Corporate Health Services Department.

Mercy Corporate Health Services

Before the beginning of orientation, each student must have a baseline physical exam by Mercy Corporate Health Services.

In an effort to make admission requirements uniform for all students in the School of Radiologic Technology Program, the following guidelines have been formulated.

1. All students will be required to have a PPD skin test for tuberculosis exposure. This is a two step process. If the student has received a PPD within the last year and has appropriate documentation from their physician, this may be considered the second step. Students must receive a PPD through Unity Corporate Health. If the student has a history of a positive reaction, a chest x-ray must be done unless the student has received a chest x-ray within the last year and has appropriate documentation. Any positive results must have documented follow up by their physician or the City/County Health Department.
2. If the student has not had a chest x ray in the last year Mercy Corporate Health will order the chest x ray. If, at the time of the physical in the Mercy Corporate Health Services, a student shows a positive reaction to the PPD, they must see their own physician or the City/County Health Department for follow-up. Annual PPD testing is done on all students. If an individual converts to a positive after being at Mercy Hospital St. Louis, this is considered a worker's compensation issue and they will be treated by a physician at Mercy Hospital St. Louis free of charge.
3. All students who are candidates for a measles re-vaccination must have the vaccine before entrance in the program. If you were born prior to 1957, the student will not require a MMR re-vaccination. If you born between 1957 and 1999 a MMR re-vaccination will be required unless you were born in 1980 or later and have appropriate documentation that you have received a MMR vaccine. If a vaccination is needed, Mercy Corporate Health Services will provide the MMR vaccine at the time of the physical exam.
4. Any requirements specific to the school must be achieved, E.g. (Technical and Physical Standards)
5. Immunization records will be reviewed. Blood-work to determine immunity to chickenpox will be done on an individual basis.
6. Hepatitis B vaccine is available to all students free of charge at the time of the second step PPD. Students who have already received the Hepatitis B vaccine should bring appropriate documentation to the physical exam.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.17

Title: Fire/Safety

Students must learn the location and use of fire extinguishers in the Imaging Services Department. All students will be instructed about the Medical Center Fire and Disaster plans. The enrolled student must complete the mandatory fire and tornado safety, hazard communication, infection control and emergency preparedness video/test on an annual basis.

Students will also be fitted for respirator and TB masks.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.18

Title: Grading

A	Required objectives and depth of objectives	A+	99 – 100%
	Have been well accomplished	A	95 – 98%
		A-	93 – 94%
B	Required objectives have been well accomplished;	B+	91 – 92%
	Some depth of objectives have been accomplished	B	87 – 90%
		B-	85 – 87%
C	Required objectives have been satisfactorily	C+	83 – 84%
	accomplished	C	79 – 82%
		C-	75 – 78%
F	Required objectives have not been accomplished	F	Below 75%
P/F	Pass/ Fail		
I	Incomplete		

- Grades are based on tests, quizzes, assignments, and class participation.
- Class attendance is mandatory. Missing 3 classes in a semester will result in a 3% deduction in semester grade. An additional 1% deduction for each class missed thereafter.
- Students must be present for scheduled tests/quizzes, otherwise a 20% deduction will be applied. Tests/quizzes must be made up within 3 scheduled days or a zero will be recorded. Written verification from a physician or documentation of death in the family will override the 20% deduction.
- Students must maintain a C average or a 2.0 accumulative GPA to continue in the program. Any student receiving below a C average or a 2.0 accumulative GPA at semester will be dismissed from the program.
- Failure of a Major course at each semester, the student will be dismissed from the program. Students that are failing at quarter will be placed on academic probation until the end of the semester.
- Students must also maintain a B average or an 85% in the clinical education. Any grade below a B average or a 85% is considered a failing grade.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.19

Title: Graduation Requirements

To be eligible for graduation, the student must successfully complete the following:

Requirement

1. Certification in CPR
2. Terminal Competencies/Evaluation (average score of 2)
3. Required Clinical Competencies (> 85% average)
4. Clinical Courses with an accumulative of 85% or better
5. Clinical rotations and objectives
6. Program Completion Requirements
7. Didactic Objectives with an accumulative GPA of 2.0 or better
8. Minimum number of Clock Hours
9. Required Program Evaluations
10. Tuition and Fees Paid in Full
11. Returned all property belonging to program or Medical Center (lead markers, film badge, Library books, Name ID, Parking tag, Electronic security badge, etc.)

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.20

Title: Grievance/Due Process

The student radiographer may grieve any action taken by the Program to the Grievance Committee. Grievances must be made in writing and directed to the Director of Imaging Services within two (2) clinical days of the action. Depending on the violation, the student will assume normal duties or be suspended from the Program pending the review of the grievance. The Committee will render a decision within five (5) clinical days from the receipt of the written grievance. If the grievance has not been satisfactorily resolved, the student shall submit the written grievance to an employee relations coordinator of the Human Resource Department within three (3) clinical days of the meeting. The employee relations coordinator will make the final decision within five student clinical days.

Complaints or grievances that the program is not in compliance with JRCERT standards may be directed to the accrediting agency at:

JRCERT
20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
Phone (312)704-5300
www.jrcert.org

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.21

Title: Grounds for Dismissal

1. Use abusive or threatening language to patients, visitors, family members, or co-workers.
2. Is careless in the performance of assigned tasks, in dealing with patients, visitors, family members, co-workers, or Medical Center property.
3. Deliberately destroy or deface Medical Center property or the property of others.
4. Falsify any medical, business or personnel records either written or verbal.
5. Fight or provokes a fight. Gamble on premises.
6. Interfere or disrupt the normal operations of the Medical Center.
7. Report to duty/class in an unfit condition due to alcohol, illegal drugs, etc.
8. The conviction and/or known use of, distribution of, or possession of illegal drugs or controlled substances.
9. Steal or defraud (whether actual or attempted) from the Medical Center, patients, or fellow workers.
10. Is dishonest or cheats.
11. Have in possession, while on Medical Center property, any weapons, illegal drugs or alcohol.
12. Failing grades in Radiologic Technology courses or failure to complete clinical objectives or assignments. (see Grading Policy)
13. Participate in horseplay, practical jokes or pranks.
14. Is disrespectful or insubordinate to a supervisor.
15. Excessive abuse of meal or break periods.
16. Is in an unauthorized area.
17. Is consistently abusing the dress code. (see dress code policy)
18. Unauthorized leave of the premises during scheduled clinical hours.
19. Violation of any Medical Center's health or safety rules.
20. Excessive tardiness or absence from clinical assignments/duty and/or failure to report the tardy or absence. (see late and absent policies)

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.22

Title: No Harassment

Mercy is committed to maintaining a working environment that is free from all forms of harassment and discrimination. Accordingly, harassment based on an individual's gender, marital status, pregnancy, race, color, ethnicity, national origin, age, disability, religion, veteran status, sexual orientation, gender identity or other legally protected characteristic is prohibited. Mercy will not tolerate harassment, sexual harassment or retaliation in the workplace environment whether committed by co-workers, students, individuals conducting business with or visitors to Mercy. Violation of this policy is grounds for disciplinary action up to and including termination and may constitute a violation of federal and/or state law. Each co-worker/student is responsible for fostering civility and right relationships, for being familiar with this policy, and for refraining from conduct that violates this policy in the work place.

See HR Policy/Procedure Number F-8.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.23

Title: Identification/Name Badges

All students will be issued a permanent photo ID name badge that is to be worn at all time while on the medical center property. The photo must be visible at all times and must be worn above waist level. If ID badge is lost or misplaced, the student is responsible to purchase another badge. If the student forgets their badge, they will be expected to either purchase another badge for the day, or leave to get their badge.

Upon completion of the two-year program, termination, or resignation, the student is required to surrender his/her ID card to the Safety Department. The student will be able to gain access to the Emergency Department by using the back of the ID badge.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.24

Title: Late/Tardy

As an allied health professional, one is expected to be dependable in all clinical assignments. Punctuality is one of the most important assets to a Radiographer in the medical field. Therefore, punctuality is strictly enforced to help the graduate better adjust to the work force. Since punctuality is a vital part of dependable performance. Records of tardiness are kept in the student's file located in the School Office. Excessive tardiness from the clinical assignments is considered to be more than three tardies during the program, and could affect the student's chances of gaining valuable knowledge and their continuance in the program. A student is considered tardy if they are not in their assigned area at the designated time posted on the student's schedule. The student has three(3) excused tardies per year no matter what the reason. Any more than this will be considered excessive and points will be deducted from the clinical grade at a rate of 1 percentage point per tardy. If the student's clinical grade falls below an 85% because of point deducted the student may be dismissed from the program.

1. The student must notify the clinical instructor/supervisor on duty as soon as possible if the student expects to be late.
2. If late due to unavoidable circumstances on the way to clinical assignments, the student is to report to the clinical instructor/supervisor on duty immediately upon arrival in the clinical area.
3. No student is expected to be tardy more than three times regardless of the reason. Counseling for excessive tardiness will follow the Employee Policy.

Procedure/Responsibility:

Action:

Student

1. Notifies clinical instructor/charge tech.
2. Reports to clinical instructor immediately upon arrival

arrival

Clinical Instructor

1. Documents all tardies
2. Keeps Program Director informed of tardies

Program Director

1. Reviews all records
2. Keeps students informed of their status
3. Makes final decision concerning disciplinary actions

actions

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.25

Title: Library

The School Library will be opened from 8:00 am to 4:00 p.m., Monday through Friday.

The library is located in the classroom and in the School offices.

There are reference materials and publications available for student use.

On-line resources and publications are emailed to enrolled students.

The students may also use the Department Library.

The Thomas F. Frawley Medical Library is available to all students. There are computer stations, reference books, and publications. Most resources can also be accessed on-line.

Library web page:

<http://mercy.net/stl-library>

Athens (universal access to electronic resources, password required)

<http://www.openathens.net/> then select Login to MyAthens

Access to:

All Resources

- [AccessMedicine](#) (electronic books)
- [DynaMed](#) (evidence-based point-of-service references tool)
- [EBSCOhost databases](#) (nursing and allied health databases)
- [JamaEvidence](#) (resources to Evidence-based medicine)
- [JAMA Network Journals](#) (full text access to JAMA)
- [MD Consult](#) (full text books and journals)
- [New England Journal of Medicine](#) (full text access to New England Journal of Medicine)
- [Ovid Online](#) (access to MEDLINE, Cochrane Systematic Reviews and Clinical Trials)
- [STAT!Ref](#) (electronic books)

A-Z Journals:

<http://zp7nm7ar8m.search.serialssolutions.com/>

CyberTools (library catalog for books and print journals)

<http://cybertoolsforlibraries.com/cgi-bin/CyberHTML?SMSLJHO>

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.26

Title: Meals

Students that are scheduled for classes are allotted one (1) hour for lunch, which includes two fifteen minute breaks. Students who do not have class during the day are scheduled for a 45 minute lunch and one 15 minute break.

Assignment for lunch will be posted on the board in the “work area”. Students who have class will automatically be assigned at 11:00 a.m.

Students are expected to eat their meals in the cafeteria or designated areas. Should it be necessary to bring food to the Imaging Services Department meals must be eaten in the department lounge. Disposable dishes and utensils must be used and properly disposed of after use.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.27

Title: **Parking**

Ample parking space is provided free of charge to students. Student will be issued parking permits and must park in the designated “employee lots” during clinical rotations. There will be no exceptions. Violations of this policy will follow the “employee policy” on parking.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology
Mercy Hospital St. Louis

Category Number– 600
Policy Number 600.28

Title: Pregnant Student Policy

It is the policy of Mercy Hospital St. Louis School of Radiologic Technology to provide students with an environment safe from harmful effects of ionizing radiation. This policy addresses specific conditions arising in the event of a radiology student's pregnancy and the resultant exposure of the embryo/fetus due to the exposure of the mother. The student will be asked to sign the "New Student Notification Letter of Understanding Radiation Exposure During Pregnancy" to attest the said policy and her responsibilities as well as Medical Center's responsibilities and efforts to maintain safe clinical conditions for herself and her unborn fetus.

1. Federal regulations require that exposure to ionizing radiation of an embryo/fetus must not exceed 500 mrem during the gestation period, not exceed a rate of 50 mrem/month.
2. The Privacy Act does not allow management to approach a pregnant student to recommend implementation of this policy.
3. Declaration of either pregnancy or an attempt to become pregnant is strictly voluntary, however, students are encouraged to advise their Program Director or the Radiation Safety Officer in writing as soon as pregnancy is suspected or confirmed.
4. Announced Pregnancy: Steps to be taken upon written declaration of pregnancy:
 - a. Exposure history of the student is reviewed.
 - b. Student is given background/risk analysis information outlined in the Pregnant Students Policy. (See Program Director or Radiation Safety Officer.)
 - c. Radiation safety practices are reviewed with the student.
 - d. Analysis of duties is discussed including any possible restrictions.
 - e. A second film badge is issued to the student to be worn under protective lead apron.
 - f. Specific guidelines are given in the Pregnant Student's Policy if exposure of the student is expected to exceed 500 mrem or if exposure history exceeds 500 mrem at the time of declaration.
 - g. At any time a student may retract their declaration of pregnancy by providing written documentation to the Program Director.
5. Radiation Safety Officer monitors monthly exposures to student and fetus to assure safe practices and compliance with regulations.
6. Unannounced Pregnancy: Steps outlined in 4, cannot be implemented unless student signs Declaration of Pregnancy form. (see Pregnant Student's Policy). It is the intent of this policy to incorporate the philosophy that no significant changes will occur in a student's educational experiences or responsibilities so as to put her future career opportunities in jeopardy. Therefore, no student should find it advantageous to maintain her pregnancy as "unannounced".

Policy for Exposure of Fertile and Pregnant Students to Ionizing Radiation

Policy:

This policy establishes Radiation Safety guidelines for the protection of the embryo/fetus from ionizing radiation incurred by a pregnant student during the course of her educational program in Radiologic Technology, while protecting the rights of the student to complete that program.

Introduction:

Section 10.12, "Instructions to Workers", of Title 10 Code of Federal Regulations, Part 19, (10 CFR 19). "Notices, Instructions, and Reports to Workers: Inspections," requires that all individuals working in or frequenting and portion of a restricted area be instructed in the health protection problems associated with exposure to radioactive materials or radiation, in precautions or procedures to minimize exposure, and in the regulations that they are expected to observe. Regulations in 10 CFR 20, "Standards for Protection Against Radiation," defines specific limits of exposure of the embryo/fetus incorporating the guidelines presented here as addressed in the Presidential Document of January 20, 1990 entitled "Federal Radiation Protection Guidance for Occupational Exposure" (Ref. B).

Students in this program, while not employed, are expected to perform tasks in the course of their educational experience which will result in exposure to ionizing radiation. These exposures are similar to the occupational exposures addresses throughout this policy.

Background:

Since 1896 when physicist Emil H. Grubbe sought medical treatment for x-ray induced dermatitis and eventually lost his left hand to amputation, it has been known that there are biological effects from x-ray irradiation. Days later, Mrs. Rose Lee was treated with x-rays for carcinoma of the breast; the beginnings of radiotherapy. During the procedure, Grubbe used thin sheets of lead stripped from Chinese tea cabinets to protect healthy tissue around the tumor: The beginnings of radiation protection.

Much has been learned in the past 90 years about the effects of radiation on living systems, using plant and animal research, patients treated with various radiations, and thousands survivors of the atomic bombs of Hiroshima and Nagasaki. Most of these data deal with measurable effects at very high doses, orders of magnitude higher than occupational exposure incurred by employees in the medical field. In 1906, the Law of Bergonie and Tribondeau was presented which associates increased cells and long dividing future. The zygote and embryo are the extreme case for these factors, therefore are highly radiosensitive.

The time post-conception that an exposure is experienced will affect the outcome of the exposure. An exposure in the first two weeks will result in an all-or-nothing response. If the dose is low, nothing will happen, the development will continue normally. If the dose is large enough the embryo will be destroyed and reabsorbed by the system. The natural occurrence rate of embryonic reabsorption in the absence of radiation is 25-50%. A dose of 10 rad will increase this rate by 0.1%. During the

second to eighth week of gestation major organogenesis is taking place. Irradiation during this time would expect to produce congenital abnormalities of major systems. In animal studies, an exposure of 200 rad produced 100% congenital abnormalities. A dose of 10 rad is estimated to increase the natural incidence of 10-15% by 1% in humans. (Ref. D)

The period from eight weeks to fifteen weeks is actually more sensitive to radiation than earlier periods for the production of mental retardation and small head size. Severe mental retardation is defined as inability to form simple sentences, perform simple calculations or care for oneself. This period in development is when cortical neurons migrate from areas near ventricles to the cortex. Cells killed before eight weeks cause small head size without mental retardation because neurons that lead to formation of cerebrum are at a stage not yet susceptible to impairments by radiation. Recent BEIR V (1990) states that analysis of a linear model suggested "that a threshold may exist at 0.2-0.4 Gy (20-40 rad)". The bar graph in the report shows little increase (of mental retardation) among persons who received less than 0.5-0.99 Gy. (50-99 rad). Small head size with normal intelligence was three times more common than severe mental retardation among pregnant "A" bomb survivors. The lowest dose at which small head size was found (less than eighteen weeks gestation) was 0.10-0.19 Gy (10-19 rad). The incidence at this dose level was 11%. The incidence rose to 30% at 20-49 rad. "A" bomb survivors exposed during this 8-15 week period given IQ test in the first grade showed a decrease in test scores proportional to dose at a rate of 21-29 points per Gy. At the level of a diagnostic exposure to the abdomen of less than 0.01 Gy (1 rad) the IQ loss would be 0.2-0.3 IQ points which is not detectable. (Ref. E)

The UNSCEAR report of 1986 sets the natural occurrence rate of mental retardation at less than 0.2%. The risk of retardation if exposed during the 8-15 week period is given as 0.4 per Gy. If an embryo were to receive the adult maximum permissible exposure of 0.05 Gy (5 rem) the risk would be $0.4 \times 0.05 = 0.02$ or 2% which is 10 times the natural occurrence. At the fetal exposure limit of 500 mrem/gestation period, the risk would be 0.2%, equal to the natural occurrence rate. (Ref. F)

Other types of possible radiation effects include cataract formation, cancers, in particular childhood cancers under age of 10, and life span shortening. Induction of cataracts is known to occur at doses greater than 60-150 rad depending on the dose rate and type of radiation. However, cataracts have not been found in persons exposed in-utero (BEIR V). Life span shortening has been estimated to occur at a rate of 1-5 days per rad. (Ref. E) Childhood cancers can result from exposures at any time during gestation. The natural occurrence of childhood cancers is 4/100,000. A dose of 1 rad during the 2nd and 3rd trimester yields a risk of 6/100,000, and during the 1st trimester 15/100,000, while radiation to 1 rad increased the risk by 5/100,000. (Ref. D)

The pregnant woman must also bear in mind a multitude of risks exist at surprisingly high rates just from the natural development of pregnancy. Table 1: "Complications Arising During Pregnancy in the Absence of Occupational Exposure to Radiation", (Ref. G) list a few of these.

Table 1. Complications Arising During Pregnancy in the Absence of Occupational Exposure to Radiation

Condition Pregnancies	Occurrence Rate in All in percentages
Unspecified abnormal condition	40
Abnormal placenta	30
Anemia	26
Toxemia	24
Vaginal Bleeding	4
Fetal Death (After 8th week of gestation)	10
Fetal Death during labor and delivery	0.4
Stillbirths	1-4
Malformations	2-4
Breech Deliveries	3-6
Premature rupture of fetal membrane	5
Neonatal Death	12

These common complications are often ignored or simply accepted by the pregnant woman. The risks associated with very low radiation exposures (average <200 mrem/gestation) received from occupational exposure have been shown to add a very small additional risk. It is the purpose of this policy and the Department of Radiation Safety to give the woman the information she needs to come to this understanding and hopefully, acceptance that her educational experience will not adversely affect her children.

Discussion

Section 20.1208 of 10 CFR Part 20 establishes dose limits specifically for the embryo/fetus of a declared pregnant woman as 500 mrem/gestation.

Presidential Guidance (ref.) states that “When a woman has declared her pregnancy, this guidance recommends not only that the total exposure of the unborn be limited than that of the adult workers, but that the monthly rate of exposure be further limited in order to provide additional protection”. That is to say that the exposure should not exceed 50 mrem/month throughout the pregnancy without any large peaks in exposure rate. The guidance goes on to say “Workers should be informed of current knowledge of risks of the unborn from radiation and of the responsibility of both employers and workers to minimize exposure of the unborn. The dose equivalent of the unborn as a result of the occupational exposure of a woman who has declared that she is pregnant should be maintained as low as reasonably achievable, and in any case should not exceed 0.5 rem during the entire gestation period. Efforts should be made to

avoid substantial variation above the uniform monthly exposure rate that would satisfy this limiting value. The limiting value for the unborn does not create a basis for discrimination and should be achieved in conformance with the provision of the Civil Rights Act of 1964, as amended.”

The Civil Rights Act of 1964, as amended, provides that “It shall be an unlawful employment practice for an employer (1) to fail or refuse to hire or to discharge by individual, or otherwise to discriminate against any individual with respect to his compensation, terms, conditions or privileges of employment because of such individual’s ...sex... or (2) limit, segregate, or classify his employees or applicants for employment in any way which would deprive or tend to deprive any individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual’ssex...” (42 U.S.C. 2000e-2 (a)). The Pregnancy Discrimination Act of 1978 defines “because of sex” to include because of or on the basis of pregnancy, childbirth, or related medical conditions (42 U.S.C. 2000e (k)).

The Guidance applies only to situations in which the student has voluntarily made her pregnancy known to her Program Director. Protection of the unborn may be achieved through such measures as temporary assignment rotation, student self-selection, or use of protective equipment. The Guidance recognizes that protection of the unborn is a joint responsibility of the school and student. Students should be informed of the risks involved and encouraged to voluntarily make pregnancies known as early as possible so that any temporary arrangements necessary to modify exposures can be made. Conversely, the school should make such arrangements in a manner that minimizes the impact on the student. Care must be taken in arranging temporary assignments that significant loss of technical expertise does not jeopardize the woman’s future.

Policy of Action: Announced Pregnancy

Upon notification of a radiology student’s pregnancy:

1. The cumulative exposure history of the student will be reviewed by the RSO, the pregnant student and the Program Director.
2. Risks to the fetus will be discussed with the pregnant student by the Program Director or the RSO following Regulatory Guide 8.13 (Ref. A) Appendix A “Instructor’s Guide, Effects on the Embryo/Fetus of Exposure to Radiation and Other Environmental Hazards”. Student will be given a copy of Table I “Effects of Risk Factors on Pregnancy Outcome “ and Appendix B “Pregnant Workers Guide: Possible Health Risks to Children of Women Who are Exposed to Radiation During Pregnancy”. Sufficient time should be allowed for questions.
3. Radiation safety practices will be reviewed including the concept of reducing exposure by using the cardinal principles of time, distance and shielding.
4. Analysis of duties may be performed by the Program Director with the student.
5. A second film badge will be issued to be worn at waist level under the lead apron.

If the fetal dose is anticipated to be less than 500mrem over the gestation period. the student may continue the program without restriction.

If the fetal dose is expected to exceed 500mrem, the student:

a. May voluntarily elect to continue the program without restrictions, but the Program Director will evaluate monthly the student's exposure levels.

b. May continue the program with certain restriction listed in Table 2: General Guidelines For the Pregnant Radiology Student", and encouraged to utilize time, distance, and shielding to reduce exposure as low as possible.

c. May choose to take a leave of absence with the understanding that she may return to the program at the beginning of the semester of the year following that in which she is currently enrolled. (see Personal Leave policy 600.29)

If the fetal dose exceeds 500mrem at the time the pregnancy is declared, options b and c above will apply and the exposure for the remainder of the gestation period must be kept below 50mrem.

At any time, a student may retract their declaration of pregnancy by providing written documentation to the Program Director or RSO.

Policy of Action: Unannounced Pregnancy

As previously stated, the Presidential guidelines apply only when a women has announced her pregnancy. Recent adjudication has declared women responsible for the protection of the health of the unborn fetus with respect to the use of narcotics during pregnancy. Evaluation of past records suggest Laboratory, Nuclear Medicine, Radiation Therapy, and most Radiology employee's radiation exposures at such a level that an unannounced pregnancy would not be at risk of exceeding 500mrem/9 months. It is hoped that students at St. John's Mercy Medical Center would not find any advantage in keeping a pregnancy "unannounced". This policy has been written to incorporate the philosophy of no significant assignment changes so as not to put a student's educational experience and future career opportunities in jeopardy. Further, it is the intent of the St. John's Mercy Medical Center's ALARA program to maintain exposures below the level of 500mrem/year when at all possible. Therefore, the ALARA program in effect treats all radiologic technology students as though the fetus were always present.

Table 2: General Guidelines For The Pregnant Radiology Student

Department	Restrictions	Allowed Tasks
Diagnostic Radiology	No Restrictions	General Radiography Portable Radiography Fluoroscopy Special Procedures
Laboratory	Iodination of Proteins	RIA In-vitro laboratory tests
Radiation Oncology	Handling of brachytherapy Sources P-32 therapy	External Beam treatments Simulations
Nuclear Medicine	Treatment of Thyroid Carcinoma with I-131	Preparations of Radiopharmaceuticals Injection of Patients Imaging Quality control procedures

References

- A. U.S. Nuclear Regulatory Commission, Regulatory Guide 8.13
(Task OP 031-4) Revision 2. Dec. 1987
- B. "Federal Radiation Protection Guidance for Occupational Exposure," Federal Register, January 27, 1987.
- C. National Council on Radiation Protection and Measurements "Recommendations on Limits for Exposure to Ionizing Radiation", NCRP Report 91, 1987.
- D. "Management of Pregnant Employee and Pregnant Patient". Contemporary Diagnostic Radiology, Vol. 5, NO. 21, 1983. Stuart Bushong.
- E. "Effects of Prenatal Exposure to Ionizing Radiation". Health Physics, Vol. 59, No. 1 July 1990 John J. Kelly
- F. "Employment in Nuclear Medicine During Pregnancy". Journal of Nuclear Medicine Technology Vol., 14, 1986, A.R. Benedetto.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.29

Title: Personal Leave

A student who decides to take a personal leave from the program must submit a request in writing to the program director within one week of the personal leave date. Failure to do so may result in a resignation/termination from the program.

Students who decide to take a personal leave may return at the beginning of the didactic semester in which the student had left the program. If the student does not return within one year from the date of the leave, the student would need to re-apply to re-enter the program. Re-entrance into the program would follow the program's admission policy.

Tuition for the semesters in which the student attended including the semester in which the student had left the program is due within thirty days of the personal leave date.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.30

Title: Personal Time/PTO Hours

Students are provided 7 weeks (280 hours) of personal time during the 24 month program. This includes 4 weeks of vacation, 8 personal days and 7 sick/absent days.

Students will also be scheduled off for 6 national holidays each year. Students may request personal days during the allotted vacation periods. Personal hours must be scheduled at least two days in advance with the Program/School Office.

Students will be provided with a monthly PTO report.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.31

Title: Radiation Monitoring

Radiation monitoring badges must be worn at the collar level at all times while in the Department of Imaging Services. Radiation monitoring badges must be changed by the 5th day of every month. New exposure badges will be available in the imaging services work area. Exposure reports will be available to students each month and students will receive an annual report. All exposure reports will be maintained by the program director and by the Radiation Safety Officer. The student must initial exposure reading on a monthly basis.

The established guidelines for ALARA imposes a limit of 500 mRem per year for radiation workers, including Radiology students. Any student receiving 125 mRem exposure in one quarter as detected by film or TLD badges will receive personal letters of notification stating that their quarterly exposure was above acceptable limits as established by the Radiation Safety Committee. The program director will also receive notification, at which time a one on one meeting will occur. If necessary, the Radiation Safety officer will be involved. This 125 mRem per quarter is the ALARA Investigational Level I. Level II exposure is 375 mRem per quarter. Exceeding this level will initiate an investigation by the Radiation Safety Officer and a formal report to the Radiation Safety Committee on causes and steps taken to prevent recurrence.

500 mRem/year

125 mRem/quarter- Level I investigation

375 mRem/quarter- Level II investigation

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.32

Title: Student Records

Records are maintained for all didactic and clinical courses attempted and/or completed by the student.

- In accordance with the Family Education Rights and Privacy Act of 1974, all records are available to students upon request.
- A report of good health and immunization is retained in Mercy Corporate Health Services
- Radiation monitoring records are maintained, as required by state and/or federal safety regulations by the radiation safety officer and program director.
- Transcripts of didactic, and clinical achievements are retained permanently and are located in the program office.
- Records of attendance, clinical rotation and grades for all courses are maintained.
- The clinical records will include documented evidence of student competency.

All student files are kept locked and secure at all times in the program offices except for health records which are kept locked and secure in Unity Health Services.

POLICY & PROCEDURE MANUAL
School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.33

Title: Repeat Exposures

All unsatisfactory radiographs that are repeated by a student must be under the direct supervision of a qualified radiographer regardless of the level of achievement.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.34

Title: Schedule/Schedule Changes

Students spend a total of no more than 40 hours per week (Monday through Friday days) in the Department of Imaging Services, including class and clinical time. Class schedules and all other notices will be posted on the bulletin board in the Radiology Classroom. It is the responsibility of the student to arrive promptly for each class session. Should there be any changes in the class schedule, notification of these changes will be posted on the bulletin board.

Clinical application schedules will be posted in the “work area”. Students are expected to be in the clinical area on time, as scheduled and remain in clinical area until the end of the scheduled time. Students are required to return to the clinical area after class to complete clinical assignment for that day.

Schedules will be posted at least 3 months in advance. Students will not be permitted to change clinical rotations. Clinical rotations are sequenced and each student will participate in the same number of rotations to correlate with the clinical plan.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.35

Title: Security of Student Records

Records are maintained for all didactic and clinical courses attempted and/or completed by the student.

- In accordance with the Family Education Rights and Privacy Act of 1974, all records are available to students upon request.

All student files are kept locked and secure at all times in the program offices except for health records are kept locked and secure in Unity Health Services.

Student's files with the exception of transcripts, will be kept for two years. Transcripts will be kept permanently.

Students requesting transcripts be forwarded to other institutions must fill out a student request form and the form must be signed by the student. There will be a \$3.00 charge for an official copy of the transcript.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.36

Title: Semester and Program Completion

To advance to the semester II of the program, all students must complete the following requirements:

- Completion of semester I didactic courses with a passing grade.
- Maintain a didactic GPA of 2.0
- Completion of all room objectives
- A minimum of 18 clinical evaluations signed by a staff radiographer
- A minimum of 9 re-competency procedures
- A clinical grade of 85% or better
- Comprehensive semester I final with a 75% or better

To advance to the semester III of the program, all students must complete the following requirements:

- Completion of semester II didactic courses with a passing grade.
- Maintain a didactic GPA of 2.0
- A minimum of 18 clinical evaluations signed by a staff radiographer
- A minimum of 18 re-competency procedures
- Maintain a clinical grade of 85% or better
- Comprehensive semester II final with a 75% or better

To advance to semester IV of the program, all students must complete the following requirements:

- Completion of semester III didactic courses with a passing grade.
- Maintain a didactic GPA of 2.0
- A minimum of 18 clinical evaluations signed by a staff radiographer
- A minimum of 18 re-competency procedures
- Maintain a clinical grade of 85% or better
- Comprehensive semester III final with a 75% or better

Program Completion

To graduate from the program, all students must complete the following requirements:

- All graduation requirements
- Comprehensive final with a 75% or better

Semester I Comprehensive Final

All program students must pass the comprehensive final exam with a grade of 75% or better to advance to semester II of the program. Students have three attempts to pass the exam. If the student fails in all three attempts to pass the exam, the student will be dismissed from the program.

The comprehensive semester final will include questions from courses completed in semester I. The semester final exam contains 100 multiple-choice questions. Must meet requirement within 14 days from the completion of Semester I.

Content Specifications:

Area Questions	Number of
Anatomy and Physiology	20
Medical Terminology	10
Patient Care and Management	10
Radiation Protection	30
Radiographic Positioning and Procedures	30

Semester II Comprehensive Final

All program students must pass the comprehensive final exam with a grade of 75% or better to advance to semester III of the program. Students have three attempts to pass the exam. If the student fails in all three attempts to pass the exam, the student will be dismissed from the program.

The comprehensive semester final will include questions from courses completed in semester I and II. The semester final exam contains 125 multiple-choice questions. Must meet requirement within 14 days from the completion of Semester II

Content Specifications:

Area Questions	Number of
Anatomy and Physiology	20
Medical Terminology	10
Patient Care and Management	10
Radiation Biology	25
Radiographic Positioning and Procedures	20
Radiographic Principles of Exposure	20
Radiation Protection	20

Semester III Comprehensive Final

All program students must pass the comprehensive final exam with a grade of 75% or better to advance to semester IV of the program. Students have three attempts to pass the exam. If the student fails in all three attempts to pass the exam, the student will be dismissed from the program.

The comprehensive semester final will include questions from courses completed in semester I, II and III. The semester final exam contains 150 multiple-choice questions. Must meet requirement within 14 days from the completion of Semester III

Content Specifications:

Area Questions	Number of
Anatomy and Physiology	20
Patient Care and Management	10
Radiation Physics	35
Radiographic Positioning and Radiologic Procedures	20
Special Procedures I	15
Radiographic Principles of Exposure	40
Radiation Protection and Radiation Biology	10

Program Comprehensive Final

All program students must pass the comprehensive final exam with a grade of 75% or better to graduate from the program. Students have four attempts to pass the final exam. If the student fails in the first three attempts to pass the exam, the student must document 20 hours of remedial instruction from a registered radiographer to sit for the fourth attempt. If the student fails the fourth and final attempt the student must repeat semesters III and IV of the program. (with an additional year of tuition)

The comprehensive semester final will include questions from all courses completed in the program. The program final exam contains 200 multiple-choice questions. Must meet requirement within 30 days from the completion of Semester IV.

Content Specifications:

Area Questions	Number of
Radiation Protection	30
Equipment Operation and Maintenance	30
Image Production and Evaluation	50
Radiographic Procedures	60
Patient Care	30

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.37

Title: Student Services

The following services are provided by Mercy Hospital St. Louis free of charge or at discounted rates, and are offered to enrolled students in the Radiography Program:

- Parking
- Physical- required for admittance
- Criminal background check
- Employee Assistance Program
- Access to Wellness Center
- Discount for Cafeteria
- Discount for Life Uniform shops
- Flu Shots
- CPR certification

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.38

Title: Student Supervision

DIRECT SUPERVISION

Student supervision under the following parameters:

- A qualified radiographer reviews the procedure in relation to the student's achievement;
- A qualified radiographer evaluates the condition of the patient in relation to the student's knowledge.
- A qualified radiographer is present during the conduct of the procedure
- A qualified radiographer reviews and approves the procedure

****Qualified radiographer-** 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 settings

INDIRECT SUPERVISION

Supervision provided by a qualified radiographer immediately available to assist student regardless of the level of achievement. Immediately 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. All radiographs will be evaluated by a qualified radiographer.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.39

Title: Student Transfer

This program does not accept transfer students from other radiologic technology programs.

Missouri State University and the University of Missouri Columbia will accept transfer of credit from this program to complete a baccalaureate degree in radiography. The maximum number of credit hours that will transfer is 64 credit hours.

Other colleges and/or universities may accept transfer credit up to 62 credit hours.

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.40

Title: Terminal Competencies

The graduate shall be able to:

- Provide basic patient care and comfort and anticipate patient needs.
- Provide appropriate patient education.
- Practice radiation protection.
- Understand basic x-ray production and interactions.
- Operate medical imaging equipment and accessory devices.
- Position the patient and medical imaging system to perform examinations and procedures.
- Exercise independent judgment and discretion in the technical.
- Performance of medical imaging procedures.
- Demonstrate knowledge of human structure, function and pathology.
- Demonstrate knowledge and skill relating to quality assurance activities.
- Evaluate the performance of medical imaging systems.
- Evaluate medical images for technical quality.
- Demonstrate knowledge and skill relating to medical image processing.
- Understand the safe limits of equipment operation.
- Recognize equipment malfunctions and report them to the proper authority.
- Demonstrate knowledge and skills relating to verbal, nonverbal, and written medical communication in patient care intervention and professional relationships.
- Support the professions code of ethics and comply with profession's scope of practice.
- Recognize emergency patient conditions and initiate first aid and basic life support procedures.
- Exercise independent judgment and discretion in the technical performance of medical imaging procedures.
- Apply principles of body mechanics.
- Completely perform a full range of Radiologic procedures on children and adults in the following categories:

Head/Neck	Abdominal/GI/GU	Musculoskeletal	
Chest and Breast	Trauma	Bedside	Surgical
C.P.R. Certification			

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.41

Title: Termination

Termination from the School of Radiologic Technology will be divided into two types:

- **Resignation:** Students wishing to resign from the Program are required to submit a written letter of resignation to the Program Director. Tuition paid will be refunded according to the tuition refund policy. Students who resign may reapply through the normal admission procedure.
- **Dismissal:** Students failing to maintain the required grade average or otherwise indicating an inability to adapt to a hospital environment will be placed on probation. If no improvement occurs during the probationary period, the student will be dismissed from the Program. Students will also be dismissed from the program according to the grounds for dismissal policy.

Re-Entrance: To re-enter the program, the student must follow the grievance policy. The grievance committee will determine possible conditions for re-entry into the Program.

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.42

Title: Tuition

Tuition for the Mercy Hospital St. Louis School of Radiologic Technology Program is \$4,725.00 per year.

Failure to remit tuition due within twenty days of payment will provide for a \$5.00 service charge for each month that payment due is late.

Inability to pay tuition as indicated must be designated in writing and submitted to the School Office upon receipt of the tuition statement.

Tuition may be paid in one of the following manner:

- Annually (1 payment/yr)
- Semester (2 payments/yr)
- Quarterly (4 payments/yr)
- Monthly (10 payments/yr)

Student will not be able to graduate from the program until all tuition is paid in full.

The program does not participate in any Title IV financial programs.

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.43

Title: Tuition Refund

Withdrawal from the program requires written notification of that desire communicated to the School Office.

Refunds for tuition are made according to the following guidelines:

Tuition paid for a semester which has not yet begun will be refunded. Upon notification of acceptance in the program, a \$100.00 deposit of tuition becomes due. This will be credited toward tuition upon entry in the Program. If the student does not withdraw before June 1, no refund of the deposit will be made. Fees are not refundable.

- Withdrawal prior to June 1-----100% of tuition/deposit
- Withdrawal prior to December 1-----50% of tuition if the tuition was paid in full for that year.
- Monthly payments will not be refunded unless advance payments were made
- Withdrawal after December 1-----no refund for that years tuition

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.44

Title: Uniforms

Students are required to wear uniforms in accordance with the dress code established by the Imaging Services Department and Mercy Hospital St. Louis at all times while in the clinical setting. When not in the clinical setting, but in the Medical Center for class sessions, or any other reason, the student is required to dress in a clean, neat, well groomed manner and wear his/her name badge.

When rotating in specialty areas, the student is required to dress appropriately for the individual department and wear his/her name badge. ****See Dress Code Policy**

POLICY & PROCEDURE MANUAL

School of Radiologic Technology

Category Number– 600

Mercy Hospital St. Louis

Policy Number 600.45

Title: Work Related

Students may be hired by the institution as technology assistant or other positions in which they are qualified. Any paid employment of a student in clinical radiography is a separate entity from the educational phase of the program and, as such has no bearing on the structured clinical experience.

c. Assessment Plan

Mercy Hospital St. Louis Outcomes Assessment

Goal 1: Clinical Competence

Develop a Radiographer who demonstrates clinical proficiency and competence

Student Learning outcomes:

- Graduates will provide compassionate care to all patients
- Students will demonstrate proper radiation protection to self, patients and others
- Students will demonstrate proficiency in technical factors of image production

Goal 2: Communication

Develop a Radiographer who communicates effectively in the clinical setting

Student Learning outcomes:

- Students will demonstrate communication skills through patient rapport, awareness, and interaction
- Students will educate the patient about the imaging procedure
- The student effectively communicates with radiologists, radiographer and other healthcare professionals

Goal 3: Critical Thinking

Develop a Radiographer who demonstrates critical thinking and problem solving skills

Student Learning outcomes:

- Students will correctly select exposure factors for various patient conditions to produce optimal image quality
- Graduates will demonstrate the skills necessary to perform non-routine procedures
- Students can recognize trauma patient conditions and initiate appropriate treatments

Goal 4: Professionalism

Develop a Radiographer who demonstrates professional and ethical behavior

Student Learning outcomes:

- Students will provide compassionate care to all patients
- Graduates will obtain advanced level training in Imaging Modalities
- Employers will be satisfied with the educational levels of the graduates

Goal 5: Program effectiveness

Provide a quality program that meets the expectation of the graduates

Student Learning outcomes:

- Program will demonstrate a consistent program completion rate
- Graduates will express satisfaction with the training they received from this program
- Program will prepare the students to pass the ARRT
- The program will prepare the students to be employable as entry-level radiographers

d. Program Effectiveness Data

<https://portal.jrcertaccreditation.org/summary/programannualreportlist.aspx>

e. JRCERT Standards

http://jrcert.org/sites/jrcert/uploads/documents/2011_Standards/Standards_2011-Radiography.pdf